DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY ASSISTANT SECRETARY OF THE ARMY
(INFRASTRUCTURE ANALYSIS)
1400 KEY BLVD
ARLINGTON, VA 22209

REPLY TO
ATTENTION OF

SAIE-IA

22 December 2004

MEMORANDUM FOR DUSD(I&E)

SUBJECT: Updated Criterion 8 Installation Environmental Profiles for the Army

1. Enclosed (in digital format) please find an updated version of Criterion 8 Installation Environmental Profiles for the 88 Army installations from the Army study list for BRAC 2005. These profiles were generated using certified data from the TABS Data Warehouse. Data is current as of 22 Dec 2004.

2. The Army has updated numerous individual BRAC Data Call data elements since the original profiles were submitted on 9 Sep 2004. This version represents the final update to the Army's Criterion 8 Installation Environmental Profiles.

Craig E. College

Encl

Craig E. College
Deputy Assistant Secretary of the Army
Infrastructure Analysis

CF:
SAF/IEB
DASN(BRAC)

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INSTALLATION ENVIRONMENTAL PROFILE

ANNISTON ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. ANNISTON ARMY DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. It holds 2 CAA Minor Operating Permits.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on ANNISTON ARMY DEPOT. There is a programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. ANNISTON ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. ANNISTON ARMY DEPOT reports that 1445 unconstrained acres are available for development out of 15243 total acres. ANNISTON ARMY DEPOT has spent $58.100000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $26M. ANNISTON ARMY DEPOT has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. ANNISTON ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. ANNISTON ARMY DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. ANNISTON ARMY DEPOT reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. ANNISTON ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. ANNISTON ARMY DEPOT has an interim or final RCRA Part X facility that accepts off-site waste. ANNISTON ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. ANNISTON ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
ANNISTON ARMY DEPOT has 5257.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.93700000000000006 MGD of potable and non-potable water, with the capacity to produce 7.2000000000000002 MGD. It processed on average 0.51000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.62 MGD. It processed on average 0.28999999999999998 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.40000000000000002 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. ANNISTON ARMY DEPOT reported less than 1% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

REDSTONE ARSENAL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. REDSTONE ARSENAL is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on REDSTONE ARSENAL. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. REDSTONE ARSENAL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. REDSTONE ARSENAL reports that 4195 unconstrained acres are available for development out of 38100 total acres. REDSTONE ARSENAL has spent $107.8M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $226M. REDSTONE ARSENAL has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. REDSTONE ARSENAL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. REDSTONE ARSENAL has noise contours that extend off the installation's property. Of the 5032 acres that extend to off-base property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 10274 acres that extend to off-range property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. REDSTONE ARSENAL reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. REDSTONE ARSENAL has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . REDSTONE ARSENAL has an interim or final RCRA Part X facility that does not accept off-site waste. REDSTONE ARSENAL has an on-base solid waste disposal facility that is 25% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. REDSTONE ARSENAL does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
REDSTONE ARSENAL has 38917.400000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 6.3899999999999997 MGD of potable and non-potable water, with the capacity to produce 7.1299999999999999 MGD. It processed on average 3.3999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 9 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. REDSTONE ARSENAL reported 25% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT RUCKER

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT RUCKER is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on FORT RUCKER. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT RUCKER has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT RUCKER reports that 999 unconstrained acres are available for development out of 62972 total acres. FORT RUCKER has spent $8.8000000000000007M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $10M. FORT RUCKER has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT RUCKER is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT RUCKER does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It has noise contours that extend off of auxiliary airfield property. Of the 125191 acres that extend to off-auxiliary field property, 148 acres have incompatible land uses. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT RUCKER reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT RUCKER does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT RUCKER does not have an interim or final RCRA Part X facility . FORT RUCKER does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT RUCKER does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT RUCKER has 4996 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.0895329999999999 MGD of potable and non-potable water, with the capacity to produce 5.18255 MGD. It processed on average 0 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4 MGD. It processed on average 2.1000000000000001 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 4 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT RUCKER reported 5.9% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT RICHARDSON

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT RICHARDSON is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT RICHARDSON. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT RICHARDSON has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT RICHARDSON reports that 51084 unconstrained acres are available for development out of 62595 total acres. FORT RICHARDSON has spent $86.200000000000003M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $214M. FORT RICHARDSON has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with other factors.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT RICHARDSON is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT RICHARDSON does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT RICHARDSON reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT RICHARDSON has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT RICHARDSON does not have an interim or final RCRA Part X facility . FORT RICHARDSON does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT RICHARDSON discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT RICHARDSON has 5326.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 6.3499999999999996 MGD of potable and non-potable water, with the capacity to produce 7 MGD. It processed on average 0.47999999999999998 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 46 MGD. It processed on average 1.2 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT RICHARDSON reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT WAINWRIGHT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT WAINWRIGHT is in Serious Nonattainment for CO. It holds a CAA Major Operating Permit. No emission credit program available. No SIP growth allowance has been allocated for this installation. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT WAINWRIGHT. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT WAINWRIGHT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT WAINWRIGHT reports that 1033763 unconstrained acres are available for development out of 1602410 total acres. FORT WAINWRIGHT has spent $130.59999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $125M. FORT WAINWRIGHT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has operations restricted by electromagnetic radiation interference. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT WAINWRIGHT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT WAINWRIGHT has noise contours that extend off the installation's property. Of the 1 acres that extend to off-base property, 1 acres have incompatible land uses. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT WAINWRIGHT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT WAINWRIGHT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT WAINWRIGHT does not have an interim or final RCRA Part X facility . FORT WAINWRIGHT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT WAINWRIGHT discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT WAINWRIGHT has 998315.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.5029999999999999 MGD of potable and non-potable water, with the capacity to produce 2.9490000000000003 MGD. It processed on average 1.25 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 8 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT WAINWRIGHT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT HUACHUCA

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT HUACHUCA is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit. It holds a CAA Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT HUACHUCA. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT HUACHUCA has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT HUACHUCA reports that 47636 unconstrained acres are available for development out of 101347 total acres. FORT HUACHUCA has spent $7.0999999999999996M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $1M. FORT HUACHUCA has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with threatened and endangered species/habitat. It reports constraints associated with archeological resources or areas. It has restrictions due to adjacent or nearby Sensitive Resource Area. FORT HUACHUCA reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT HUACHUCA is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT HUACHUCA does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT HUACHUCA reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are present, critical habitat is present that restrict operations, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT HUACHUCA does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT HUACHUCA does not have an interim or final RCRA Part X facility . FORT HUACHUCA does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT HUACHUCA does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The installation is currently the subject of an adjudication under the McCarran amendment.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT HUACHUCA has 7463.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.7909999999999999 MGD of potable and non-potable water, with the capacity to produce 5.5300000000000002 MGD. It processed on average 1.24 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT HUACHUCA reported no wetland restricted acres on the main installation, and 1% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

YUMA PROVING GROUND

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. YUMA PROVING GROUND is in Moderate Nonattainment for PM10. It holds a CAA Major Operating Permit. It holds a CAA Synthetic Minor Operating Permit. It holds a CAA Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on YUMA PROVING GROUND. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. YUMA PROVING GROUND has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. YUMA PROVING GROUND reports that 721330 unconstrained acres are available for development out of 1009334 total acres. YUMA PROVING GROUND has spent $11.699999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $4M. YUMA PROVING GROUND has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. YUMA PROVING GROUND is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. YUMA PROVING GROUND does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 1300 acres that extend to off-range property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. YUMA PROVING GROUND reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. YUMA PROVING GROUND has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . YUMA PROVING GROUND has an interim or final RCRA Part X facility that does not accept off-site waste. YUMA PROVING GROUND has an on-base solid waste disposal facility that is 55% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. YUMA PROVING GROUND does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
YUMA PROVING GROUND has 8199.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.016 MGD of potable and non-potable water, with the capacity to produce 2.8600000000000003 MGD. It processed on average 0.17999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.25600000000000001 MGD. It processed on average 0.12 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.69350000000000001 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. YUMA PROVING GROUND reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

PINE BLUFF ARSENAL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. PINE BLUFF ARSENAL is in Attainment for all Criteria Pollutants. It holds 3 CAA Minor Operating Permits.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on PINE BLUFF ARSENAL. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. PINE BLUFF ARSENAL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. PINE BLUFF ARSENAL reports that 27 unconstrained acres are available for development out of 13493 total acres. PINE BLUFF ARSENAL has spent $7.4000000000000004M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $17M. PINE BLUFF ARSENAL has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with other factors. PINE BLUFF ARSENAL reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. PINE BLUFF ARSENAL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. PINE BLUFF ARSENAL does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. PINE BLUFF ARSENAL reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. PINE BLUFF ARSENAL has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. PINE BLUFF ARSENAL has an interim or final RCRA Part X facility that

accepts off-site waste. PINE BLUFF ARSENAL has an on-base solid waste disposal facility that is 45% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. PINE BLUFF ARSENAL does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
PINE BLUFF ARSENAL has 12192.299999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.81399999999999995 MGD of potable and non-potable water, with the capacity to produce 1.3999999999999999 MGD. It processed on average 0.70999999999999996 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3.71 MGD. It processed on average 0.20999999999999999 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.93600000000000005 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. PINE BLUFF ARSENAL reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

NTC AND FORT IRWIN CA

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. NTC AND FORT IRWIN CA is in Moderate Nonattainment for PM10. It holds a CAA Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. NTC AND FORT IRWIN CA is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on NTC AND FORT IRWIN CA. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. NTC AND FORT IRWIN CA has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. NTC AND FORT IRWIN CA reports that 1000 unconstrained acres are available for development out of 752915 total acres. NTC AND FORT IRWIN CA has spent $21M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $4M. NTC AND FORT IRWIN CA has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with threatened and endangered species/habitat. NTC AND FORT IRWIN CA reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. NTC AND FORT IRWIN CA is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. NTC AND FORT IRWIN CA does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. NTC AND FORT IRWIN CA reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is present that restrict operations, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can

accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. NTC AND FORT IRWIN CA does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . NTC AND FORT IRWIN CA does not have an interim or final RCRA Part X facility . NTC AND FORT IRWIN CA has an on-base solid waste disposal facility that is 0.5% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. NTC AND FORT IRWIN CA does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
NTC AND FORT IRWIN CA has -260.19999999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 3 MGD of potable and non-potable water, with the capacity to produce 0.14999999999999999 MGD. It processed on average 1.3 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. NTC AND FORT IRWIN CA reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

PRESIDIO OF MONTEREY

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. PRESIDIO OF MONTEREY is in Attainment for all Criteria Pollutants. PRESIDIO OF MONTEREY is proposed to be in Maintenance for Ozone (8 hour). It holds a CAA Minor Operating Permit. Emission credit programs may be available.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on PRESIDIO OF MONTEREY. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. PRESIDIO OF MONTEREY has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. PRESIDIO OF MONTEREY reports that 116 unconstrained acres are available for development out of 1188 total acres. PRESIDIO OF MONTEREY has spent $5.5999999999999996M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $2M. PRESIDIO OF MONTEREY does not have Explosive Safety Quantity Distance Arcs, and none with the potential for expansion. It reports constraints associated with threatened and endangered species/habitat. It reports constraints associated with historical/culutural facilities or areas. PRESIDIO OF MONTEREY reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. PRESIDIO OF MONTEREY is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. PRESIDIO OF MONTEREY does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. PRESIDIO OF MONTEREY reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that does not place restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. PRESIDIO OF MONTEREY does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . PRESIDIO OF MONTEREY does not have an interim or final RCRA Part X facility . PRESIDIO OF MONTEREY does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. PRESIDIO OF MONTEREY discharges to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
PRESIDIO OF MONTEREY has 1166.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.745 MGD of potable and non-potable water, with the capacity to produce 11.800000000000001 MGD. It processed on average 0.85999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 7.0899999999999999 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. PRESIDIO OF MONTEREY reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

RIVERBANK AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. RIVERBANK AAP is in Extreme Nonattainment for Ozone (1 hr). RIVERBANK AAP is in Severe Nonattainment for PM10. RIVERBANK AAP is in Severe Nonattainment for NO2. RIVERBANK AAP is proposed to be in Extreme Nonattainment for Ozone (8 hour). RIVERBANK AAP is proposed to be in Severe Nonattainment for PM 2.5. It holds a CAA Synthetic Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. RIVERBANK AAP is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on RIVERBANK AAP. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. RIVERBANK AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military

munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. RIVERBANK AAP reports that 25 unconstrained acres are available for development out of 173 total acres. RIVERBANK AAP has spent $50.200000000000003M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $10M. RIVERBANK AAP does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. RIVERBANK AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. RIVERBANK AAP does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. RIVERBANK AAP reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. RIVERBANK AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . RIVERBANK AAP does not have an interim or final RCRA Part X facility . RIVERBANK AAP does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. RIVERBANK AAP does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
RIVERBANK AAP has 5409.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.068 MGD of potable and non-potable water, with the capacity to produce 5.04 MGD. It processed on average 0.0299 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.57599999999999996 MGD. It processed on average 0.07 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 1.5 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. RIVERBANK AAP reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

SIERRA ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. SIERRA ARMY DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on SIERRA ARMY DEPOT. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. SIERRA ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. SIERRA ARMY DEPOT reports that 1649 unconstrained acres are available for development out of 37937 total acres. SIERRA ARMY DEPOT has spent $48.399999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $14M. SIERRA ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. SIERRA ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. SIERRA ARMY DEPOT does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. SIERRA ARMY DEPOT reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. SIERRA ARMY DEPOT does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . SIERRA ARMY DEPOT does not have an interim or final RCRA Part X facility . SIERRA ARMY DEPOT has an on-base solid waste disposal facility that is 25% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. SIERRA ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
SIERRA ARMY DEPOT has 4558.3000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.747 MGD of potable and non-potable water, with the capacity to produce 6612000 MGD. It processed on average 0.07 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.1000000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. SIERRA ARMY DEPOT reported 1% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT CARSON

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT CARSON is in Maintenance for CO. It holds a CAA Major Operating Permit. It holds a CAA Synthetic Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT CARSON. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT CARSON has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT CARSON reports that 23875 unconstrained acres are available for development out of 373313 total acres. FORT CARSON has spent $37.5M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $18M. FORT CARSON has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with threatened and endangered species/habitat.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT CARSON is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT CARSON has noise contours that extend off the installation's property. Of the 18008 acres that extend to off-base property, 7871 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT CARSON reported that federally-listed TES are present, candidate species are present, critical habitat is not present, and the installation has a Biological Opinion that does not place restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT CARSON has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT CARSON has an interim or final RCRA Part X facility that does not accept off-site waste. FORT CARSON does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT CARSON discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater. The installation is currently the subject of an adjudication under the McCarran amendment.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT CARSON has 2591.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 3 MGD of potable and non-potable water, with the capacity to produce 5 MGD. It processed on average 1.8600000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3.02 MGD. It processed on average 0.059 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.46000000000000002 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT CARSON reported 1.6% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

PUEBLO CHEM DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. PUEBLO CHEM DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on PUEBLO CHEM DEPOT. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. PUEBLO CHEM DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. PUEBLO CHEM DEPOT reports that 14122 unconstrained acres are available for development out of 23122 total acres. PUEBLO CHEM DEPOT has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. PUEBLO CHEM DEPOT has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. PUEBLO CHEM DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. PUEBLO CHEM DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. PUEBLO CHEM DEPOT reported that federally-listed TES are not present, candidate species are present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. PUEBLO CHEM DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . PUEBLO CHEM DEPOT does not have an interim or final RCRA Part X facility . PUEBLO CHEM DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. PUEBLO CHEM DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
PUEBLO CHEM DEPOT has 138.40000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.14430000000000001 MGD of potable and non-potable water, with the capacity to produce 0.73999999999999999 MGD. It processed on average 0.01 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.021 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. PUEBLO CHEM DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT MCNAIR

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT MCNAIR is in Severe Nonattainment for Ozone (1 hr). It holds a CAA Major Operating Permit. No emission credit program available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT MCNAIR. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT MCNAIR has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT MCNAIR reports that 0 unconstrained acres are available for development out of 98 total acres. FORT MCNAIR has spent $1.2M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT MCNAIR does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT MCNAIR is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT MCNAIR does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT MCNAIR reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT MCNAIR does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT MCNAIR does not have an interim or final RCRA Part X facility . FORT MCNAIR does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT MCNAIR does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT MCNAIR has 12007.700000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.0333 MGD of potable and non-potable water, with the capacity to produce 0.31 MGD. It processed on average 0.01 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.31 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT MCNAIR reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

WALTER REED ARMY MEDICAL CENTER

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. WALTER REED ARMY MEDICAL CENTER is in Severe Nonattainment for Ozone (1 hr). WALTER REED ARMY MEDICAL CENTER is proposed to be in Severe Nonattainment for Ozone (8 hour). It holds a CAA Major Operating Permit. It holds a CAA Synthetic Minor Operating Permit. No emission credit program available. No SIP growth allowance has been allocated for this installation. WALTER REED ARMY MEDICAL CENTER is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on WALTER REED ARMY MEDICAL CENTER. There is a programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. WALTER REED ARMY MEDICAL CENTER has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks,

sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. WALTER REED ARMY MEDICAL CENTER reports that 3 unconstrained acres are available for development out of 307 total acres. WALTER REED ARMY MEDICAL CENTER has spent $0.20000000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. WALTER REED ARMY MEDICAL CENTER does not have Explosive Safety Quantity Distance Arcs. It has restrictions due to adjacent or nearby Sensitive Resource Area.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. WALTER REED ARMY MEDICAL CENTER is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. WALTER REED ARMY MEDICAL CENTER does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. WALTER REED ARMY MEDICAL CENTER reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. WALTER REED ARMY MEDICAL CENTER does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . WALTER REED ARMY MEDICAL CENTER does not have an interim or final RCRA Part X facility . WALTER REED ARMY MEDICAL CENTER does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. WALTER REED ARMY MEDICAL CENTER does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
WALTER REED ARMY MEDICAL CENTER has 198755.60000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.111 MGD of potable and non-potable water, with the capacity to produce (No Capacity Reported) MGD. It processed on average 1563.3299999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. WALTER REED ARMY MEDICAL CENTER reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT GILLEM

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT GILLEM is in Severe Nonattainment for Ozone (1 hr). FORT GILLEM is proposed to be in Severe Nonattainment for Ozone (8 hour). It holds a CAA Synthetic Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. FORT GILLEM is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT GILLEM. There is a programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT GILLEM has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT GILLEM reports that 102 unconstrained acres are available for development out of 1531 total acres. FORT GILLEM has spent $27.100000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $18M. FORT GILLEM has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and none with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT GILLEM is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT GILLEM does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT GILLEM reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT GILLEM does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT GILLEM does not have an interim or final RCRA Part X facility . FORT GILLEM does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT GILLEM does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT GILLEM has 1216.5999999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.08 MGD of potable and non-potable water, with the capacity to produce 28.539999999999999 MGD. It processed on average 0.14999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3.1000000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT GILLEM reported 3% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT MCPHERSON

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT MCPHERSON is in Severe Nonattainment for Ozone (1 hr). FORT MCPHERSON is proposed to be in Severe Nonattainment for Ozone (8 hour). It holds a CAA Synthetic Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. FORT MCPHERSON is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT MCPHERSON. There is a programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT MCPHERSON has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT MCPHERSON reports that 14 unconstrained acres are available for development out of 572 total acres. FORT MCPHERSON has spent $11.1M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT MCPHERSON does not have Explosive Safety Quantity Distance Arcs. It reports constraints associated with other factors.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT MCPHERSON is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT MCPHERSON does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT MCPHERSON reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT MCPHERSON does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT MCPHERSON does not have an interim or final RCRA Part X facility . FORT MCPHERSON does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT MCPHERSON discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT MCPHERSON has 2955.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.11 MGD of potable and non-potable water, with the capacity to produce 93.069999999999993 MGD. It processed on average 0.14999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3.25 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT MCPHERSON reported 3% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT BENNING

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT BENNING is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. FORT BENNING is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT BENNING. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT BENNING has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT BENNING reports that 55200 unconstrained acres are available for development out of 184222 total acres. FORT BENNING has spent $31M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $7M. FORT BENNING has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and none with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with noise. It reports constraints associated with threatened and endangered species/habitat.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT BENNING is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT BENNING has noise contours that extend off the installation's property. Of the 10788 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 4483 acres that extend to off-range property, 6305 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT BENNING reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT BENNING has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. FORT BENNING does not have an interim or final RCRA Part X facility . FORT BENNING does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT BENNING discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT BENNING has -9819.7999999999993 Acre-Feet of surplus water potentially available for expansion. On average, it uses 8.8000000000000007 MGD of potable and non-potable water, with the capacity to produce 12 MGD. It processed on average 4.6399999999999997 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 8.3999999999999986 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT BENNING reported no wetland restricted acres on the main installation, and 9% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT GORDON

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT GORDON is in Attainment for all Criteria Pollutants. FORT GORDON is proposed to be in Marginal Nonattainment for PM 2.5. It holds a CAA Major Operating Permit. FORT GORDON is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on FORT GORDON. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT GORDON has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT GORDON reports that 49588 unconstrained acres are available for development out of 56391 total acres. FORT GORDON has spent $19.300000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $10M. FORT GORDON has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT GORDON is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT GORDON does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT GORDON reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT GORDON has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. FORT GORDON does not have an interim or final RCRA Part X facility . FORT GORDON has an on-base solid waste disposal facility that is 85% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT GORDON does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT GORDON has 83185.399999999994 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.7120000000000002 MGD of potable and non-potable water, with the capacity to produce 5.6639999999999997 MGD. It processed on average 1.73 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT GORDON reported 15% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT STEWART

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT STEWART is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT STEWART. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT STEWART has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT STEWART reports that 3115 unconstrained acres are available for development out of 284727 total acres. FORT STEWART has spent $16635.700000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $4149M. FORT STEWART has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. FORT STEWART reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT STEWART is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT STEWART has noise contours that extend off the installation's property. Of the 14269 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT STEWART reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT STEWART has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT STEWART has an interim or final RCRA Part X facility that does not accept off-site waste. FORT STEWART has an on-base solid waste disposal facility that is 47.9% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT STEWART discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT STEWART has 2299.3000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 3.4775031250000001 MGD of potable and non-potable water, with the capacity to produce 6.8799999999999999 MGD. It processed on average 4.0499999999999998 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 5.4417999999999997 MGD. It processed on average 0.68000000000000005 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 1.5 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT STEWART reported 32% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

SCHOFIELD BARRACKS

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. SCHOFIELD BARRACKS is in Attainment for all Criteria Pollutants. It holds 2 CAA Synthetic Minor Operating Permits.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on SCHOFIELD BARRACKS. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. SCHOFIELD BARRACKS has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. SCHOFIELD BARRACKS reports that 655 unconstrained acres are available for development out of 165663 total acres. SCHOFIELD BARRACKS has spent $37.600000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $16M. SCHOFIELD BARRACKS has Explosive Safety Quantity Distance Arcs, none of which require safety waivers. It has Military Munitions Response Areas. SCHOFIELD BARRACKS reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. SCHOFIELD BARRACKS is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. SCHOFIELD BARRACKS does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. SCHOFIELD BARRACKS reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are present, critical habitat is present that restrict operations, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. SCHOFIELD BARRACKS does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . SCHOFIELD BARRACKS does not have an interim or final RCRA Part X facility . SCHOFIELD BARRACKS does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. SCHOFIELD BARRACKS does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
SCHOFIELD BARRACKS has 408.80000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 5.9900000000000002 MGD of potable and non-potable water, with the capacity to produce 6.944 MGD. It processed on average 2.4700000000000002 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3.2400000000000002 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. SCHOFIELD BARRACKS reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT SHAFTER

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT SHAFTER is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT SHAFTER. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT SHAFTER has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT SHAFTER reports that 0 unconstrained acres are available for development out of 1203 total acres. FORT SHAFTER has spent $6.5999999999999996M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $5M. FORT SHAFTER does not have Explosive Safety Quantity Distance Arcs. It has Military Munitions Response Areas. FORT SHAFTER reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT SHAFTER is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT SHAFTER does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT SHAFTER reported that federally-listed TES are not present, candidate species are not present, critical habitat is present that do not restrict operations, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT SHAFTER does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT SHAFTER does not have an interim or final RCRA Part X facility . FORT SHAFTER does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT SHAFTER does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT SHAFTER has 1543 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.6400000000000001 MGD of potable and non-potable water, with the capacity to produce 1.0349999999999999 MGD. It processed on average 1.5900000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.3999999999999999 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT SHAFTER reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

TRIPLER ARMY MEDICAL CENTER

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. TRIPLER ARMY MEDICAL CENTER is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on TRIPLER ARMY MEDICAL CENTER. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. TRIPLER ARMY MEDICAL CENTER has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. TRIPLER ARMY MEDICAL CENTER reports that 29 unconstrained acres are available for development out of 359 total acres. TRIPLER ARMY MEDICAL CENTER has spent $7M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $2M. TRIPLER ARMY MEDICAL CENTER does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. TRIPLER ARMY MEDICAL CENTER is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. TRIPLER ARMY MEDICAL CENTER does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. TRIPLER ARMY MEDICAL CENTER reported that federally-listed TES are not present, candidate species are present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. TRIPLER ARMY MEDICAL CENTER does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . TRIPLER ARMY MEDICAL CENTER does not have an interim or final RCRA Part X facility . TRIPLER ARMY MEDICAL CENTER does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. TRIPLER ARMY MEDICAL CENTER does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
TRIPLER ARMY MEDICAL CENTER has 223.90000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.40899999999999997 MGD of potable and non-potable water, with the capacity to produce 0.60899999999999999 MGD. It processed on average 0.39000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.70999999999999996 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. TRIPLER ARMY MEDICAL CENTER reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

ROCK ISLAND ARSENAL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. ROCK ISLAND ARSENAL is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. Emission credit programs may be available.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on ROCK ISLAND ARSENAL. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. ROCK ISLAND ARSENAL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. ROCK ISLAND ARSENAL reports that 336 unconstrained acres are available for development out of 866 total acres. ROCK ISLAND ARSENAL has spent $8.5M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $16M. ROCK ISLAND ARSENAL does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. ROCK ISLAND ARSENAL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. ROCK ISLAND ARSENAL does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. ROCK ISLAND ARSENAL reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. ROCK ISLAND ARSENAL does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . ROCK ISLAND ARSENAL does not have an interim or final RCRA Part X facility . ROCK ISLAND ARSENAL does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. ROCK ISLAND ARSENAL discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
ROCK ISLAND ARSENAL has 1330.8 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.53900000000000003 MGD of potable and non-potable water, with the capacity to produce 1.728 MGD. It processed on average 1.5700000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.538 MGD. It processed on average 0.02 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.02 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. ROCK ISLAND ARSENAL reported 3.5% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

CRANE ARMY AMMUNITION ACTIVITY

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. CRANE ARMY AMMUNITION ACTIVITY is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on CRANE ARMY AMMUNITION ACTIVITY. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. CRANE ARMY AMMUNITION ACTIVITY has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. CRANE ARMY AMMUNITION ACTIVITY reports that 5999 unconstrained acres are available for development out of 62469 total acres. CRANE ARMY AMMUNITION ACTIVITY has spent $68.400000000000006M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $52M. CRANE ARMY AMMUNITION ACTIVITY has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and none with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. CRANE ARMY AMMUNITION ACTIVITY is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. CRANE ARMY AMMUNITION ACTIVITY has noise contours that extend off the installation's property. Of the 4650 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 44206 acres that extend to off-range property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. CRANE ARMY AMMUNITION ACTIVITY reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. CRANE ARMY AMMUNITION ACTIVITY has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. CRANE ARMY AMMUNITION ACTIVITY has an interim or final RCRA Part X facility that accepts off-site waste. CRANE ARMY AMMUNITION ACTIVITY has an on-base solid waste disposal facility that is 70% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. CRANE ARMY AMMUNITION ACTIVITY discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
CRANE ARMY AMMUNITION ACTIVITY has 11720.1 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.69986999999999999 MGD of potable and non-potable water, with the capacity to produce 2.2999999999999998 MGD. It processed on average 1.26 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2.1000000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 4.0538000000000007 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. CRANE ARMY AMMUNITION ACTIVITY reported 5% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

NEWPORT CHEM DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. NEWPORT CHEM DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on NEWPORT CHEM DEPOT. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. NEWPORT CHEM DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. NEWPORT CHEM DEPOT reports that 6095 unconstrained acres are available for development out of 7098 total acres. NEWPORT CHEM DEPOT has spent $16.300000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $1M. NEWPORT CHEM DEPOT does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. NEWPORT CHEM DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. NEWPORT CHEM DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. NEWPORT CHEM DEPOT reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. NEWPORT CHEM DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . NEWPORT CHEM DEPOT does not have an interim or final RCRA Part X facility . NEWPORT CHEM DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. NEWPORT CHEM DEPOT discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
NEWPORT CHEM DEPOT has 4962.1999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.078 MGD of potable and non-potable water, with the capacity to produce 0.57599999999999996 MGD. It processed on average 0 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process MGD. It processed on average 0.14000000000000001 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.19400000000000001 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. NEWPORT CHEM DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

IOWA AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. IOWA AAP is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on IOWA AAP. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. IOWA AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. IOWA AAP reports that 1403 unconstrained acres are available for development out of 19011 total acres. IOWA AAP has spent $79.700000000000003M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $67M. IOWA AAP has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. IOWA AAP reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies. IOWA AAP reports that its missions have been limited by existing or proposed activities of other military departments or other federal, tribal, state, or local agencies being located on the main installation, auxiliary airfield, or RDT&E range.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. IOWA AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. IOWA AAP does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. IOWA AAP reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. IOWA AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . IOWA AAP has an interim or final RCRA Part X facility that does not accept off-site waste. IOWA AAP has an on-base solid waste disposal facility that is 85% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. IOWA AAP does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
IOWA AAP has 3228.9000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.40900999999999998 MGD of potable and non-potable water, with the capacity to produce 3.6000000000000001 MGD. It processed on average 0.89000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.5 MGD. It processed on average 0.17000000000000001 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.028 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. IOWA AAP reported less than 1% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

KANSAS ARMY AMMUNITION PLANT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. KANSAS ARMY AMMUNITION PLANT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on KANSAS ARMY AMMUNITION PLANT. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. KANSAS ARMY AMMUNITION PLANT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. KANSAS ARMY AMMUNITION PLANT reports that 531 unconstrained acres are available for development out of 13727 total acres. KANSAS ARMY AMMUNITION PLANT has spent $30.800000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $33M. KANSAS ARMY AMMUNITION PLANT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. KANSAS ARMY AMMUNITION PLANT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. KANSAS ARMY AMMUNITION PLANT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. KANSAS ARMY AMMUNITION PLANT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. KANSAS ARMY AMMUNITION PLANT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . KANSAS ARMY AMMUNITION PLANT has an interim or final RCRA Part X facility that does not accept off-site waste. KANSAS ARMY AMMUNITION PLANT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. KANSAS ARMY AMMUNITION PLANT discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
KANSAS ARMY AMMUNITION PLANT has 1524.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.189 MGD of potable and non-potable water, with the capacity to produce 1 MGD. It processed on average 0.27000000000000002 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.92000000000000004 MGD. It processed on average 0.01 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.05769 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. KANSAS ARMY AMMUNITION PLANT reported 1.5% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT LEAVENWORTH

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT LEAVENWORTH is in Nonattainment for CO. It holds a CAA Synthetic Minor Operating Permit. No emission credit program available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT LEAVENWORTH. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes has occurred within the last two years.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT LEAVENWORTH has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT LEAVENWORTH reports that 300 unconstrained acres are available for development out of 5637 total acres. FORT LEAVENWORTH has spent $17M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $12M. FORT LEAVENWORTH has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and none with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT LEAVENWORTH is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT LEAVENWORTH does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT LEAVENWORTH reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT LEAVENWORTH does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT LEAVENWORTH does not have an interim or final RCRA Part X facility . FORT LEAVENWORTH has an on-base solid waste disposal facility that is 20% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT LEAVENWORTH does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT LEAVENWORTH has 5437.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.5529999999999999 MGD of potable and non-potable water, with the capacity to produce 5.5 MGD. It processed on average 1.2 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6.8799999999999999 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT LEAVENWORTH reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT RILEY

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT RILEY is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT RILEY. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT RILEY has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT RILEY reports that 57999 unconstrained acres are available for development out of 100656 total acres. FORT RILEY has spent $61.399999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $18M. FORT RILEY has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with noise. FORT RILEY reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT RILEY is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT RILEY has noise contours that extend off the installation's property. Of the 95 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT RILEY reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT RILEY has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT RILEY has an interim or final RCRA Part X facility that accepts off-site waste. FORT RILEY has an on-base solid waste disposal facility that is 10% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT RILEY discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT RILEY has 1117968.8 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.3999999999999999 MGD of potable and non-potable water, with the capacity to produce 10.23 MGD. It processed on average 1.6000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4.8499999999999996 MGD. It processed on average 0.23000000000000001 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 9.7999999999999997E-3 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT RILEY reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

BLUE GRASS ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. BLUE GRASS ARMY DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on BLUE GRASS ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. BLUE GRASS ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. BLUE GRASS ARMY DEPOT reports that 547 unconstrained acres are available for development out of 14596 total acres. BLUE GRASS ARMY DEPOT has spent $0.59999999999999998M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. BLUE GRASS ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and none with the potential for expansion. It reports constraints associated with threatened and endangered species/habitat. BLUE GRASS ARMY DEPOT reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. BLUE GRASS ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. BLUE GRASS ARMY DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. BLUE GRASS ARMY DEPOT reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are present, critical habitat is present that restrict operations, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. BLUE GRASS ARMY DEPOT does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . BLUE GRASS ARMY DEPOT has an interim or final RCRA Part X facility that accepts off-site waste. BLUE GRASS ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. BLUE GRASS ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
BLUE GRASS ARMY DEPOT has 1380.4000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.17999999999999999 MGD of potable and non-potable water, with the capacity to produce 0.29999999999999999 MGD. It processed on average 0.25 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.5 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. BLUE GRASS ARMY DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT CAMPBELL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT CAMPBELL is in Attainment for all Criteria Pollutants. FORT CAMPBELL is proposed to be in Marginal Nonattainment for Ozone (8 hour). It holds a CAA Major Operating Permit. FORT CAMPBELL is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT CAMPBELL. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT CAMPBELL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT CAMPBELL reports that 50624 unconstrained acres are available for development out of 104574 total acres. FORT CAMPBELL has spent $39.399999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $17M. FORT CAMPBELL has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and none with the potential for expansion. It reports constraints associated with noise. It reports constraints associated with other factors.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT CAMPBELL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT CAMPBELL has noise contours that extend off the installation's property. Of the 13933 acres that extend to off-base property, 2020 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 22423 acres that extend to off-range property, 0 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT CAMPBELL reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT CAMPBELL does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT CAMPBELL does not have an interim or final RCRA Part X facility . FORT CAMPBELL has an on-base solid waste disposal facility that is 12.6% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT CAMPBELL discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT CAMPBELL has 11660 Acre-Feet of surplus water potentially available for expansion. On average, it uses 4.8319999999999999 MGD of potable and non-potable water, with the capacity to produce 7.6200000000000001 MGD. It processed on average 2.8999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT CAMPBELL reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT KNOX

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT KNOX is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT KNOX. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT KNOX has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT KNOX reports that 5941 unconstrained acres are available for development out of 109054 total acres. FORT KNOX has spent $16.899999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $12M. FORT KNOX has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with other factors.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT KNOX is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT KNOX has noise contours that extend off the installation's property. Of the 12609 acres that extend to off-base property, 962 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 70734 acres that extend to off-range property, 30516 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT KNOX reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT KNOX has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT KNOX does not have an interim or final RCRA Part X facility . FORT KNOX has an on-base solid waste disposal facility that is 39.2% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT KNOX does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT KNOX has 7896.8999999999996 Acre-Feet of surplus water potentially available for expansion. On average, it uses 3.5499999999999998 MGD of potable and non-potable water, with the capacity to produce 10.5 MGD. It processed on average 4.04 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT KNOX reported 2.1% wetland restricted acres on the main installation, and 2.3% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

LOUISIANA AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. LOUISIANA AAP is in Attainment for all Criteria Pollutants. It holds a CAA Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on LOUISIANA AAP. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. LOUISIANA AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. LOUISIANA AAP reports that 63 unconstrained acres are available for development out of 1284 total acres. LOUISIANA AAP has spent $0.10000000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. LOUISIANA AAP has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. LOUISIANA AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. LOUISIANA AAP does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. LOUISIANA AAP reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. LOUISIANA AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. LOUISIANA AAP does not have an interim or final RCRA Part X facility . LOUISIANA AAP does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. LOUISIANA AAP does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
LOUISIANA AAP has 1138.0999999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.28000000000000003 MGD of potable and non-potable water, with the capacity to produce 1.2 MGD. It processed on average 0.10000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. LOUISIANA AAP reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT POLK

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT POLK is in Attainment for all Criteria Pollutants. It holds a CAA Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT POLK. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT POLK has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT POLK reports that 69940 unconstrained acres are available for development out of 199005 total acres. FORT POLK has spent $13.699999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $12M. FORT POLK has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It reports constraints associated with land use/zoning/commercial/urban restrictions. It has restrictions due to adjacent or nearby Sensitive Resource Area.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT POLK is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT POLK has noise contours that extend off the installation's property. Of the 5135 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 5135 acres that extend to off-range property, 0 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT POLK reported that federally-listed TES are present, candidate species are present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT POLK does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT POLK has an interim or final RCRA Part X facility that accepts off-site waste. FORT POLK has an on-base solid waste disposal facility that is 28.5% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT POLK does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT POLK has 19999996268.200001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 3.3300000000000001 MGD of potable and non-potable water, with the capacity to produce 17.329999999999998 MGD. It processed on average 3.27 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 5.1999999999999993 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT POLK reported 6.9% wetland restricted acres on the main installation, and 6.7% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

ABERDEEN PROVING GROUND

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. ABERDEEN PROVING GROUND is in Severe Nonattainment for Ozone (1 hr). It holds 2 CAA Major Operating Permits. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. ABERDEEN PROVING GROUND is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on ABERDEEN PROVING GROUND. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. ABERDEEN PROVING GROUND has impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. ABERDEEN PROVING GROUND reports that 3751 unconstrained acres are available for development out of 72406 total acres. ABERDEEN PROVING GROUND has spent $471299.90000000002M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $306564M. ABERDEEN PROVING GROUND has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with noise. It reports constraints associated with threatened and endangered species/habitat. It reports constraints associated with contamination. ABERDEEN PROVING GROUND reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. ABERDEEN PROVING GROUND is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. ABERDEEN PROVING GROUND has noise contours that extend off the installation's property. Of the 235848 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. ABERDEEN PROVING GROUND reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. ABERDEEN PROVING GROUND has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . ABERDEEN PROVING GROUND has an interim or final RCRA Part X facility that does not accept off-site waste. ABERDEEN PROVING GROUND does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. ABERDEEN PROVING GROUND discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
ABERDEEN PROVING GROUND has 6191.6999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.585 MGD of potable and non-potable water, with the capacity to produce 7 MGD. It processed on average 1.5600000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 5.7999999999999998 MGD. It processed on average 0.68999999999999995 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 3 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. ABERDEEN PROVING GROUND reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

ADELPHI LABORATORY CENTER

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. ADELPHI LABORATORY CENTER is in Severe Nonattainment for Ozone (1 hr). . No emission credit program available. No SIP growth allowance has been allocated for this installation. ADELPHI LABORATORY CENTER is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on ADELPHI LABORATORY CENTER. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. ADELPHI LABORATORY CENTER has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. ADELPHI LABORATORY CENTER reports that 9 unconstrained acres are available for development out of 1807 total acres. ADELPHI LABORATORY CENTER has spent $1.2M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. ADELPHI LABORATORY CENTER has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. ADELPHI LABORATORY CENTER is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. ADELPHI LABORATORY CENTER does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. ADELPHI LABORATORY CENTER reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. ADELPHI LABORATORY CENTER has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . ADELPHI LABORATORY CENTER does not have an interim or final RCRA Part X facility . ADELPHI LABORATORY CENTER does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. ADELPHI LABORATORY CENTER does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
ADELPHI LABORATORY CENTER has 2289 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.11700000000000001 MGD of potable and non-potable water, with the capacity to produce 0 MGD. It processed on average 0.12 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.48999999999999999 MGD. It processed on average 0.01 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. ADELPHI LABORATORY CENTER reported 19% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT DETRICK

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT DETRICK is in Severe Nonattainment for Ozone (1 hr). It holds a CAA Major Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT DETRICK. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT DETRICK has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT DETRICK reports that 90 unconstrained acres are available for development out of 1143 total acres. FORT DETRICK has spent $35.700000000000003M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $26M. FORT DETRICK does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT DETRICK is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT DETRICK does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT DETRICK reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT DETRICK does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT DETRICK does not have an interim or final RCRA Part X facility . FORT DETRICK has an on-base solid waste disposal facility that is 28% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT DETRICK does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT DETRICK has 782.70000000000005 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.302 MGD of potable and non-potable water, with the capacity to produce 2 MGD. It processed on average 1.1200000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT DETRICK reported 1.1% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT MEADE

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT MEADE is in Severe Nonattainment for Ozone (1 hr). FORT MEADE is proposed to be in Moderate Nonattainment for Ozone (8 hour). FORT MEADE is proposed to be in Nonattainment for PM 2.5. It holds a CAA Synthetic Minor Operating Permit. No emission credit program available. A SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT MEADE. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT MEADE has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT MEADE reports that 1669 unconstrained acres are available for development out of 5101 total acres. FORT MEADE has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT MEADE does not have Explosive Safety Quantity Distance Arcs. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT MEADE is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT MEADE does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT MEADE reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT MEADE does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT MEADE does not have an interim or final RCRA Part X facility . FORT MEADE does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT MEADE does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT MEADE has 11329.200000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.73 MGD of potable and non-potable water, with the capacity to produce 8.3000000000000007 MGD. It processed on average 2.8700000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4.5 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT MEADE reported 3% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

SOLDIER SYSTEMS CENTER

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. SOLDIER SYSTEMS CENTER is in Serious Nonattainment for Ozone (1 hr). SOLDIER SYSTEMS CENTER is in Serious Nonattainment for NO2. It holds a CAA Synthetic Minor Operating Permit. It holds 3 CAA Minor Operating Permits. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. SOLDIER SYSTEMS CENTER is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on SOLDIER SYSTEMS CENTER. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. SOLDIER SYSTEMS CENTER has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. SOLDIER SYSTEMS CENTER reports that 46 unconstrained acres are available for development out of 176 total acres. SOLDIER SYSTEMS CENTER has spent $32.799999999999997M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $19M. SOLDIER SYSTEMS CENTER has Explosive Safety Quantity Distance Arcs, none of which require safety waivers. It reports constraints associated with noise. SOLDIER SYSTEMS CENTER reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. SOLDIER SYSTEMS CENTER is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. SOLDIER SYSTEMS CENTER does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. SOLDIER SYSTEMS CENTER reported that federally-listed TES are present, candidate species are present, critical habitat is present that do not restrict operations, and the installation has a Biological Opinion that does not place restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. SOLDIER SYSTEMS CENTER does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . SOLDIER SYSTEMS CENTER does not have an interim or final RCRA Part X facility . SOLDIER SYSTEMS CENTER does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. SOLDIER SYSTEMS CENTER discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
SOLDIER SYSTEMS CENTER has 652.39999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.06.7 MGD of potable and non-potable water, with the capacity to produce 0.25 MGD. It processed on average 0.10000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.17999999999999999 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.17999999999999999 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. SOLDIER SYSTEMS CENTER reported 18% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

DETROIT ARSENAL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. DETROIT ARSENAL is in Attainment for all Criteria Pollutants. It holds 2 CAA Synthetic Minor Operating Permits. Emission credit programs may be available. DETROIT ARSENAL is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on DETROIT ARSENAL. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. DETROIT ARSENAL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. DETROIT ARSENAL reports that 37 unconstrained acres are available for development out of 170 total acres. DETROIT ARSENAL has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. DETROIT ARSENAL does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. DETROIT ARSENAL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. DETROIT ARSENAL does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. DETROIT ARSENAL reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. DETROIT ARSENAL does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . DETROIT ARSENAL does not have an interim or final RCRA Part X facility . DETROIT ARSENAL does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. DETROIT ARSENAL discharges to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
DETROIT ARSENAL has 6725.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.0599 MGD of potable and non-potable water, with the capacity to produce 6.0999999999999996 MGD. It processed on average 0.0899 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. DETROIT ARSENAL reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

US ARMY GARRISON SELFRIDGE

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. US ARMY GARRISON SELFRIDGE is in Attainment for all Criteria Pollutants. . Emission credit programs may be available. US ARMY GARRISON SELFRIDGE is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on US ARMY GARRISON SELFRIDGE. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. US ARMY GARRISON SELFRIDGE has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. US ARMY GARRISON SELFRIDGE reports that 109 unconstrained acres are available for development out of 623 total acres. US ARMY GARRISON SELFRIDGE has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. US ARMY GARRISON SELFRIDGE does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. US ARMY GARRISON SELFRIDGE is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. US ARMY GARRISON SELFRIDGE does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. US ARMY GARRISON SELFRIDGE reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. US ARMY GARRISON SELFRIDGE does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . US ARMY GARRISON SELFRIDGE does not have an interim or final

RCRA Part X facility . US ARMY GARRISON SELFRIDGE does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. US ARMY GARRISON SELFRIDGE discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
US ARMY GARRISON SELFRIDGE has 1024 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.21368999999999999 MGD of potable and non-potable water, with the capacity to produce 1.1279999999999999 MGD. It processed on average 0.23000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.01 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. US ARMY GARRISON SELFRIDGE reported 12.5% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

MISSISSIPPI AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. MISSISSIPPI AAP is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on MISSISSIPPI AAP. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. MISSISSIPPI AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. MISSISSIPPI AAP reports that 0 unconstrained acres are available for development out of 4214 total acres. MISSISSIPPI AAP has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $2M. MISSISSIPPI AAP does not have Explosive Safety Quantity Distance Arcs. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. MISSISSIPPI AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. MISSISSIPPI AAP does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. MISSISSIPPI AAP reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. MISSISSIPPI AAP does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . MISSISSIPPI AAP does not have an interim or final RCRA Part X facility . MISSISSIPPI AAP does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. MISSISSIPPI AAP does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
MISSISSIPPI AAP has 23.699999999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.040 MGD of potable and non-potable water, with the capacity to produce 0.40000000000000002 MGD. It processed on average 0.0299 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.14999999999999999 MGD. It processed on average 0.02 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 13 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. MISSISSIPPI AAP reported 53% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

LAKE CITY AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. LAKE CITY AAP is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. Emission credit programs may be available. LAKE CITY AAP is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on LAKE CITY AAP. There is a programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. LAKE CITY AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. LAKE CITY AAP reports that 327 unconstrained acres are available for development out of 3950 total acres. LAKE CITY AAP has spent $69.799999999999997M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $125M. LAKE CITY AAP has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. LAKE CITY AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. LAKE CITY AAP does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. LAKE CITY AAP reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. LAKE CITY AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . LAKE CITY AAP does not have an interim or final RCRA Part X facility . LAKE CITY AAP does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. LAKE CITY AAP does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
LAKE CITY AAP has 16343.9 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.3 MGD of potable and non-potable water, with the capacity to produce 3 MGD. It processed on average 0.28999999999999998 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3.5 MGD. It processed on average 0.68000000000000005 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. LAKE CITY AAP reported less than 1% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT LEONARD WOOD

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT LEONARD WOOD is in Attainment for all Criteria Pollutants. .

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT LEONARD WOOD. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT LEONARD WOOD has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT LEONARD WOOD reports that 25429 unconstrained acres are available for development out of 62911 total acres. FORT LEONARD WOOD has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT LEONARD WOOD has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT LEONARD WOOD is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT LEONARD WOOD has noise contours that extend off the installation's property. Of the 138 acres that extend to off-base property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT LEONARD WOOD reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT LEONARD WOOD does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT LEONARD WOOD does not have an interim or final RCRA Part X facility . FORT LEONARD WOOD does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT LEONARD WOOD does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT LEONARD WOOD has 19168.900000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 3.2999999999999998 MGD of potable and non-potable water, with the capacity to produce 6.7999999999999998 MGD. It processed on average 5.46 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 5 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT LEONARD WOOD reported no wetland restricted acres on the main installation, and 2.5% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

HAWTHORNE ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. HAWTHORNE ARMY DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. It holds a CAA Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on HAWTHORNE ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. HAWTHORNE ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. HAWTHORNE ARMY DEPOT reports that 17320 unconstrained acres are available for development out of 147236 total acres. HAWTHORNE ARMY DEPOT has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. HAWTHORNE ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. HAWTHORNE ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. HAWTHORNE ARMY DEPOT does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. HAWTHORNE ARMY DEPOT reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. HAWTHORNE ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. HAWTHORNE ARMY DEPOT has an interim or final RCRA Part

X facility that accepts off-site waste. HAWTHORNE ARMY DEPOT has an on-base solid waste disposal facility that is 45% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. HAWTHORNE ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
HAWTHORNE ARMY DEPOT has 5493.1999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.79700000000000004 MGD of potable and non-potable water, with the capacity to produce 2.3700000000000001 MGD. It processed on average 0.040 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.125 MGD. It processed on average 0.11 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.28000000000000003 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. HAWTHORNE ARMY DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT DIX

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT DIX is in Severe Nonattainment for Ozone (1 hr). FORT DIX is proposed to be in Severe Nonattainment for Ozone (8 hour). It holds a CAA Major Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. FORT DIX is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT DIX. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT DIX has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT DIX reports that 5276 unconstrained acres are available for development out of 61396 total acres. FORT DIX has spent $36.299999999999997M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $26M. FORT DIX has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and none with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT DIX is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT DIX has noise contours that extend off the installation's property. Of the 680 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 1140 acres that extend to off-range property, 0 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT DIX reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT DIX has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT DIX does not have an interim or final RCRA Part X facility . FORT DIX does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT DIX does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT DIX has 3993.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.53 MGD of potable and non-potable water, with the capacity to produce 5 MGD. It processed on average 0.11 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4.5999999999999996 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT DIX reported 13% wetland restricted acres on the main installation, and 32% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT MONMOUTH

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT MONMOUTH is in Severe Nonattainment for Ozone (1 hr). It holds a CAA Major Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. FORT MONMOUTH is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT MONMOUTH. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT MONMOUTH has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT MONMOUTH reports that 160 unconstrained acres are available for development out of 1126 total acres. FORT MONMOUTH has spent $11.699999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $3M. FORT MONMOUTH does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT MONMOUTH is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT MONMOUTH does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT MONMOUTH reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT MONMOUTH does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT MONMOUTH does not have an interim or final RCRA Part X facility . FORT MONMOUTH does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT MONMOUTH discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT MONMOUTH has 465.89999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.45400000000000001 MGD of potable and non-potable water, with the capacity to produce 115 MGD. It processed on average 0.71999999999999997 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2.7999999999999998 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT MONMOUTH reported 4% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

PICATINNY ARSENAL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. PICATINNY ARSENAL is in Severe Nonattainment for Ozone (1 hr). PICATINNY ARSENAL is proposed to be in Severe Nonattainment (Deferred) for Ozone (8 hour). It holds a CAA Major Operating Permit. No emission credit program available. No SIP growth allowance has been allocated for this installation. PICATINNY ARSENAL is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on PICATINNY ARSENAL. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. PICATINNY ARSENAL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. PICATINNY ARSENAL reports that 2900 unconstrained acres are available for development out of 6493 total acres. PICATINNY ARSENAL has spent $83.200000000000003M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $35M. PICATINNY ARSENAL has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. PICATINNY ARSENAL is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. PICATINNY ARSENAL does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. PICATINNY ARSENAL reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. PICATINNY ARSENAL has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . PICATINNY ARSENAL has an interim or final RCRA Part X facility that does not accept off-site waste. PICATINNY ARSENAL does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. PICATINNY ARSENAL does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
PICATINNY ARSENAL has 4480.8999999999996 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.90000000000000002 MGD of potable and non-potable water, with the capacity to produce 1 MGD. It processed on average 0.44 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 3.6829999999999998 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. PICATINNY ARSENAL reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

WHITE SANDS MISSILE RANGE

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. WHITE SANDS MISSILE RANGE is in Attainment for all Criteria Pollutants. It holds a CAA Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on WHITE SANDS MISSILE RANGE. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. WHITE SANDS MISSILE RANGE has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. WHITE SANDS MISSILE RANGE reports that 119716 unconstrained acres are available for development out of 2285334 total acres. WHITE SANDS MISSILE RANGE has spent $31.600000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $26M. WHITE SANDS MISSILE RANGE has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with contamination. It has restrictions due to adjacent or nearby Sensitive Resource Area. WHITE SANDS MISSILE RANGE reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. WHITE SANDS MISSILE RANGE is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. WHITE SANDS MISSILE RANGE does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. WHITE SANDS MISSILE RANGE reported that federally-listed TES are present, candidate species are present, critical habitat is present that do not restrict operations, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. WHITE SANDS MISSILE RANGE has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . WHITE SANDS MISSILE RANGE does not have an interim or final RCRA Part X facility . WHITE SANDS MISSILE RANGE has an on-base solid waste disposal facility that is 60% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. WHITE SANDS MISSILE RANGE does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
WHITE SANDS MISSILE RANGE has 27039.299999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.7 MGD of potable and non-potable water, with the capacity to produce 11.199999999999999 MGD. It processed on average 0.5 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.05 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. WHITE SANDS MISSILE RANGE reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT DRUM

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT DRUM is in Marginal Nonattainment for Ozone (1 hr). . No emission credit program available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT DRUM. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT DRUM has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT DRUM reports that 33617 unconstrained acres are available for development out of 107265 total acres. FORT DRUM has spent $58.899999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $28M. FORT DRUM has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT DRUM is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT DRUM has noise contours that extend off the installation's property. Of the 3511 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT DRUM reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT DRUM does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT DRUM does not have an interim or final RCRA Part X facility . FORT DRUM does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT DRUM does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT DRUM has 3743.9000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.8999999999999999 MGD of potable and non-potable water, with the capacity to produce 6 MGD. It processed on average 1.9399999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT DRUM reported less than 1% wetland restricted acres on the main installation, and less than 1% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT HAMILTON

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT HAMILTON is in Severe Nonattainment for Ozone (1 hr). FORT HAMILTON is in Moderate Nonattainment for PM10. FORT HAMILTON is proposed to be in Nonattainment for Ozone (8 hour). FORT HAMILTON is proposed to be in Nonattainment for PM 2.5. . Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. FORT HAMILTON is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT HAMILTON. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT HAMILTON has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT HAMILTON reports that 0 unconstrained acres are available for development out of 168 total acres. FORT HAMILTON has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT HAMILTON does not have Explosive Safety Quantity Distance Arcs. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT HAMILTON is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT HAMILTON does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT HAMILTON reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT HAMILTON does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT HAMILTON does not have an interim or final RCRA Part X facility . FORT HAMILTON does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT HAMILTON discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT HAMILTON has 30447.599999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.17999999999999999 MGD of potable and non-potable water, with the capacity to produce 27.359999999999999 MGD. It processed on average 0.22 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 3.6000000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT HAMILTON reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

WATERVLIET ARSENAL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. WATERVLIET ARSENAL is in Marginal Nonattainment for Ozone (1 hr). WATERVLIET ARSENAL is proposed to be in Moderate Nonattainment for PM 2.5. It holds a CAA Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. WATERVLIET ARSENAL is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on WATERVLIET ARSENAL. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. WATERVLIET ARSENAL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. WATERVLIET ARSENAL reports that 6 unconstrained acres are available for development out of 150 total acres. WATERVLIET ARSENAL has spent $17.600000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $5M. WATERVLIET ARSENAL does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. WATERVLIET ARSENAL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. WATERVLIET ARSENAL does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. WATERVLIET ARSENAL reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. WATERVLIET ARSENAL does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . WATERVLIET ARSENAL does not have an interim or final RCRA Part X facility . WATERVLIET ARSENAL does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. WATERVLIET ARSENAL does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
WATERVLIET ARSENAL has 1971.4000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.34000000000000002 MGD of potable and non-potable water, with the capacity to produce 2.1000000000000001 MGD. It processed on average 0.35999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6.2999999999999998 MGD. It processed on average 0.05 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.34599999999999997 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. WATERVLIET ARSENAL reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

WEST POINT MIL RESERVATION

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. WEST POINT MIL RESERVATION is in Severe Nonattainment for Ozone (1 hr). WEST POINT MIL RESERVATION is proposed to be in Severe Nonattainment for Ozone (8 hour). It holds 2 CAA Major Operating Permits. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on WEST POINT MIL RESERVATION. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. WEST POINT MIL RESERVATION has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. WEST POINT MIL RESERVATION reports that 300 unconstrained acres are available for development out of 16098 total acres. WEST POINT MIL RESERVATION has spent $14.300000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $8M. WEST POINT MIL RESERVATION has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with threatened and endangered species/habitat.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. WEST POINT MIL RESERVATION is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. WEST POINT MIL RESERVATION has noise contours that extend off the installation's property. Of the 8 acres that extend to off-base property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. WEST POINT MIL RESERVATION reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. WEST POINT MIL RESERVATION does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . WEST POINT MIL RESERVATION does not have an interim or final RCRA Part X facility . WEST POINT MIL RESERVATION does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. WEST POINT MIL RESERVATION does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
WEST POINT MIL RESERVATION has 1001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.29 MGD of potable and non-potable water, with the capacity to produce 6.5 MGD. It processed on average 2.3300000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2.3100000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. WEST POINT MIL RESERVATION reported 6.3% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT BRAGG

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT BRAGG is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. FORT BRAGG is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT BRAGG. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT BRAGG has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT BRAGG reports that 2816 unconstrained acres are available for development out of 160760 total acres. FORT BRAGG has spent $18.100000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $8M. FORT BRAGG does not have Explosive Safety Quantity Distance Arcs, and some with the potential for expansion. FORT BRAGG reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT BRAGG is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT BRAGG has noise contours that extend off the installation's property. Of the 482 acres that extend to off-base property, 371 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT BRAGG reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT BRAGG has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. FORT BRAGG does not have an interim or final RCRA Part X facility . FORT BRAGG has an on-base solid waste disposal facility that is 75% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT BRAGG does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT BRAGG has 2454.5999999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 7.8200000000000003 MGD of potable and non-potable water, with the capacity to produce 10 MGD. It processed on average 6.3600000000000003 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 8 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT BRAGG reported 7.6% wetland restricted acres on the main installation, and 7.4% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

MILITARY OCEAN TML SUNNY POINT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. MILITARY OCEAN TML SUNNY POINT is in Attainment for all Criteria Pollutants. .

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on MILITARY OCEAN TML SUNNY POINT. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. MILITARY OCEAN TML SUNNY POINT has no impediments to dredging. It has spoil disposal site(s) with 5000000 CY of capacity remaining.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. MILITARY OCEAN TML SUNNY POINT reports that 3000 unconstrained acres are available for development out of 11570 total acres. MILITARY OCEAN TML SUNNY POINT has spent $1.2M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. MILITARY OCEAN TML SUNNY POINT has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It reports constraints with ESQD Arcs. MILITARY OCEAN TML SUNNY POINT reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. MILITARY OCEAN TML SUNNY POINT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. MILITARY OCEAN TML SUNNY POINT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. MILITARY OCEAN TML SUNNY POINT reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are present, critical habitat is present that restrict operations, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. MILITARY OCEAN TML SUNNY POINT does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . MILITARY OCEAN TML SUNNY POINT does not have an interim or final RCRA Part X facility . MILITARY OCEAN TML SUNNY POINT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. MILITARY OCEAN TML SUNNY POINT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
MILITARY OCEAN TML SUNNY POINT has 772.20000000000005 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.0570 MGD of potable and non-potable water, with the capacity to produce 3.8199999999999998 MGD. It processed on average 0.01 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.089 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. MILITARY OCEAN TML SUNNY POINT reported 13% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

LIMA ARMY TANK PLT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. LIMA ARMY TANK PLT is in Attainment for all Criteria Pollutants. LIMA ARMY TANK PLT is proposed to be in Moderate Nonattainment for Ozone (8 hour). LIMA ARMY TANK PLT is proposed to be in Moderate Nonattainment for PM 2.5. It holds a CAA Major Operating Permit. LIMA ARMY TANK PLT is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on LIMA ARMY TANK PLT. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. LIMA ARMY TANK PLT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. LIMA ARMY TANK PLT reports that 156 unconstrained acres are available for development out of 442 total acres. LIMA ARMY TANK PLT has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. LIMA ARMY TANK PLT does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. LIMA ARMY TANK PLT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. LIMA ARMY TANK PLT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. LIMA ARMY TANK PLT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. LIMA ARMY TANK PLT does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . LIMA ARMY TANK PLT does not have an interim or final RCRA Part X facility . LIMA ARMY TANK PLT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. LIMA ARMY TANK PLT does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
LIMA ARMY TANK PLT has 4984.6000000000004 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.07 MGD of potable and non-potable water, with the capacity to produce 4.2999999999999998 MGD. It processed on average 0 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.374 MGD. It processed on average 0.07 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. LIMA ARMY TANK PLT reported 3% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

MCALESTER AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. MCALESTER AAP is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on MCALESTER AAP. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. MCALESTER AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. MCALESTER AAP reports that 29753 unconstrained acres are available for development out of 44964 total acres. MCALESTER AAP has spent $12.199999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $8M. MCALESTER AAP has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. MCALESTER AAP reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. MCALESTER AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. MCALESTER AAP does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. MCALESTER AAP reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is present that do not restrict operations, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. MCALESTER AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . MCALESTER AAP has an interim or final RCRA Part X facility that accepts off-site waste. MCALESTER AAP does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. MCALESTER AAP discharges to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
MCALESTER AAP has 172 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.65000000000000002 MGD of potable and non-potable water, with the capacity to produce 1.4399999999999999 MGD. It processed on average 0.64000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.29999999999999999 MGD. It processed on average 0.05 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.75 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. MCALESTER AAP reported 6.9% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT SILL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT SILL is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT SILL. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT SILL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT SILL reports that 28495 unconstrained acres are available for development out of 93829 total acres. FORT SILL has spent $21.899999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $2M. FORT SILL has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with threatened and endangered species/habitat. It has restrictions due to adjacent or nearby Sensitive Resource Area. FORT SILL reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT SILL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT SILL does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 1603 acres that extend to off-range property, 23 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT SILL reported that federally-listed TES are present, candidate species are present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT SILL does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT SILL does not have an interim or final RCRA Part X facility . FORT SILL has an on-base solid waste disposal facility that is 29% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT SILL discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT SILL has 9653.2999999999993 Acre-Feet of surplus water potentially available for expansion. On average, it uses 3.274 MGD of potable and non-potable water, with the capacity to produce 14.472 MGD. It processed on average 2.6899999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6.5399999999999991 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 2.2787499999999996 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT SILL reported 1.2% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

UMATILLA CHEM DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. UMATILLA CHEM DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on UMATILLA CHEM DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. UMATILLA CHEM DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. UMATILLA CHEM DEPOT reports that 0 unconstrained acres are available for development out of 17055 total acres. UMATILLA CHEM DEPOT has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. UMATILLA CHEM DEPOT does not have Explosive Safety Quantity Distance Arcs, and none with the potential for expansion. It has Military Munitions Response Areas. UMATILLA CHEM DEPOT reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. UMATILLA CHEM DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. UMATILLA CHEM DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. UMATILLA CHEM DEPOT reported that federally-listed TES are not present, candidate species are not present, critical habitat is present that do not restrict operations, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. UMATILLA CHEM DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . UMATILLA CHEM DEPOT does not have an interim or final RCRA Part X facility . UMATILLA CHEM DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. UMATILLA CHEM DEPOT discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
UMATILLA CHEM DEPOT has 3521.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.34499999999999997 MGD of potable and non-potable water, with the capacity to produce 3.8900000000000001 MGD. It processed on average 0.02 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.0568 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. UMATILLA CHEM DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

CARLISLE BARRACKS

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. CARLISLE BARRACKS is in Marginal Nonattainment for Ozone (1 hr). It holds a CAA Synthetic Minor Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. CARLISLE BARRACKS is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on CARLISLE BARRACKS. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and do not restrict operations. Formal consultation with Native Tribes has occurred within the last two years.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. CARLISLE BARRACKS has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. CARLISLE BARRACKS reports that 45 unconstrained acres are available for development out of 458 total acres. CARLISLE BARRACKS has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. CARLISLE BARRACKS does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. CARLISLE BARRACKS is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. CARLISLE BARRACKS does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. CARLISLE BARRACKS reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. CARLISLE BARRACKS does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . CARLISLE BARRACKS does not have an interim or final RCRA Part X facility . CARLISLE BARRACKS does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. CARLISLE BARRACKS does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
CARLISLE BARRACKS has 2688 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.45000000000000001 MGD of potable and non-potable water, with the capacity to produce 0.87 MGD. It processed on average 0.23999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. CARLISLE BARRACKS reported 1.3% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

LETTERKENNY ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. LETTERKENNY ARMY DEPOT is in Marginal Nonattainment for Ozone (1 hr). LETTERKENNY ARMY DEPOT is proposed to be in Marginal Nonattainment for Ozone (8 hour). It holds a CAA Major Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation. LETTERKENNY ARMY DEPOT is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on LETTERKENNY ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. LETTERKENNY ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. LETTERKENNY ARMY DEPOT reports that 2183 unconstrained acres are available for development out of 17773 total acres. LETTERKENNY ARMY DEPOT has spent $0.10000000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. LETTERKENNY ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It reports constraints associated with other factors.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. LETTERKENNY ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. LETTERKENNY ARMY DEPOT does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. LETTERKENNY ARMY DEPOT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. LETTERKENNY ARMY DEPOT does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . LETTERKENNY ARMY DEPOT has an interim or final RCRA Part X facility that accepts off-site waste. LETTERKENNY ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. LETTERKENNY ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
LETTERKENNY ARMY DEPOT has 627.20000000000005 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.19 MGD of potable and non-potable water, with the capacity to produce 1 MGD. It processed on average 0.10000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.5 MGD. It processed on average 0.05 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.216 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. LETTERKENNY ARMY DEPOT reported 2% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

CHARLES E KELLY SPT FAC

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. CHARLES E KELLY SPT FAC is in Attainment for all Criteria Pollutants. .

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on CHARLES E KELLY SPT FAC. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. CHARLES E KELLY SPT FAC has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. CHARLES E KELLY SPT FAC reports that 32 unconstrained acres are available for development out of 187 total acres. CHARLES E KELLY SPT FAC has spent $5.2000000000000002M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. CHARLES E KELLY SPT FAC does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. CHARLES E KELLY SPT FAC is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. CHARLES E KELLY SPT FAC does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. CHARLES E KELLY SPT FAC reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. CHARLES E KELLY SPT FAC does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . CHARLES E KELLY SPT FAC does not have an interim or final RCRA Part X facility . CHARLES E KELLY SPT FAC does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. CHARLES E KELLY SPT FAC does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
CHARLES E KELLY SPT FAC has 555.10000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.012 MGD of potable and non-potable water, with the capacity to produce 2.3039999999999998 MGD. It processed on average 0.05 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4.7520000000000007 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. CHARLES E KELLY SPT FAC reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

SCRANTON AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. SCRANTON AAP is in Marginal Nonattainment for Ozone (1 hr). SCRANTON AAP is proposed to be in Nonattainment for Ozone (8 hour). It holds a CAA Synthetic Minor Operating Permit. No emission credit program available. A SIP growth allowance has been allocated for this installation. SCRANTON AAP is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on SCRANTON AAP. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. SCRANTON AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. SCRANTON AAP reports that 0 unconstrained acres are available for development out of 15 total acres. SCRANTON AAP has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. SCRANTON AAP does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. SCRANTON AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. SCRANTON AAP does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. SCRANTON AAP reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. SCRANTON AAP does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . SCRANTON AAP does not have an interim or final RCRA Part X facility . SCRANTON AAP does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. SCRANTON AAP discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
SCRANTON AAP has 557.29999999999995 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.16 MGD of potable and non-potable water, with the capacity to produce 0.69999999999999996 MGD. It processed on average 0 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.69999999999999996 MGD. It processed on average 0.14999999999999999 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.69999999999999996 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. SCRANTON AAP reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

TOBYHANNA ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. TOBYHANNA ARMY DEPOT is in Moderate Nonattainment for Ozone (1 hr). It holds a CAA Major Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on TOBYHANNA ARMY DEPOT. There is a programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. TOBYHANNA ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. TOBYHANNA ARMY DEPOT reports that 721 unconstrained acres are available for development out of 1296 total acres. TOBYHANNA ARMY DEPOT has spent $12.800000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $2M. TOBYHANNA ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. TOBYHANNA ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. TOBYHANNA ARMY DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. TOBYHANNA ARMY DEPOT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. TOBYHANNA ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. TOBYHANNA ARMY DEPOT does not have an interim or final RCRA Part X facility . TOBYHANNA ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. TOBYHANNA ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
TOBYHANNA ARMY DEPOT has 355.69999999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.34000000000000002 MGD of potable and non-potable water, with the capacity to produce 0.66700000000000004 MGD. It processed on average 0.32000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.80200000000000005 MGD. It processed on average 0.0299 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.17299999999999999 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. TOBYHANNA ARMY DEPOT reported 12.4% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT JACKSON

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT JACKSON is in Attainment for all Criteria Pollutants. FORT JACKSON is proposed to be in Marginal Nonattainment for Ozone (8 hour). It holds a CAA Major Operating Permit. FORT JACKSON is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT JACKSON. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT JACKSON has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT JACKSON reports that 43951 unconstrained acres are available for development out of 52301 total acres. FORT JACKSON has spent $17.399999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $9M. FORT JACKSON does not have Explosive Safety Quantity Distance Arcs, and none with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with other factors.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT JACKSON is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT JACKSON does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT JACKSON reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT JACKSON has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT JACKSON does not have an interim or final RCRA Part X facility . FORT JACKSON does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT JACKSON does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT JACKSON has 5659 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.0099999999999998 MGD of potable and non-potable water, with the capacity to produce 7.1044 MGD. It processed on average 4.8300000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 25.050000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT JACKSON reported 10% wetland restricted acres on the main installation, and 7% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

HOLSTON AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. HOLSTON AAP is in Attainment for all Criteria Pollutants. HOLSTON AAP is proposed to be in Nonattainment (Deferred) for Ozone (8 hour). It holds 2 CAA Major Operating Permits. HOLSTON AAP is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS. Permit exceedances reported.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on HOLSTON AAP. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. HOLSTON AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. HOLSTON AAP reports that 1031 unconstrained acres are available for development out of 6117 total acres. HOLSTON AAP has spent $13.199999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $10M. HOLSTON AAP has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. HOLSTON AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. HOLSTON AAP does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. HOLSTON AAP reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. HOLSTON AAP does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . HOLSTON AAP has an interim or final RCRA Part X facility that accepts off-site waste. HOLSTON AAP has an on-base solid waste disposal facility that is 28% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. HOLSTON AAP discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
HOLSTON AAP has 347254.40000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.77 MGD of potable and non-potable water, with the capacity to produce 1.8 MGD. It processed on average 0.46000000000000002 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.71999999999999997 MGD. It processed on average 45.109999999999999 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 7.5 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. HOLSTON AAP reported 1% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

MILAN AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. MILAN AAP is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on MILAN AAP. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. MILAN AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. MILAN AAP reports that 1848 unconstrained acres are available for development out of 22436 total acres. MILAN AAP has spent $124.59999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $134M. MILAN AAP has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. MILAN AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. MILAN AAP has noise contours that extend off the installation's property. Of the 433 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 667 acres that extend to off-range property, 0 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. MILAN AAP reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. MILAN AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. MILAN AAP has an interim or final RCRA Part X facility that accepts off-site waste. MILAN AAP has an on-base solid waste disposal facility that is 0% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. MILAN AAP does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
MILAN AAP has 10713.799999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.56000000000000005 MGD of potable and non-potable water, with the capacity to produce 2.496 MGD. It processed on average 0.05 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.0307 MGD. It processed on average 0.59999999999999998 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.97899999999999998 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. MILAN AAP reported 1.6% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT BLISS

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT BLISS is in Serious Nonattainment for Ozone (1 hr). FORT BLISS is in Marginal Nonattainment for CO. FORT BLISS is in Marginal Nonattainment for PM10. FORT BLISS is proposed to be in Nonattainment for Ozone (8 hour). FORT BLISS is proposed to be in Nonattainment for PM 2.5. No emission credit program available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT BLISS. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT BLISS has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT BLISS reports that 882682 unconstrained acres are available for development out of 1118734 total acres. FORT BLISS has spent $19.800000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $2M. FORT BLISS has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT BLISS is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT BLISS does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT BLISS reported that federally-listed TES are present, candidate species are present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT BLISS has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. FORT BLISS has an interim or final RCRA Part X facility that accepts off-site waste. FORT BLISS has an on-base solid waste disposal facility that is 93.7% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT BLISS does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT BLISS has 9400974.9000000004 Acre-Feet of surplus water potentially available for expansion. On average, it uses 4.7400000000000002 MGD of potable and non-potable water, with the capacity to produce 12.5 MGD. It processed on average 3.4100000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 58.75 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT BLISS reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

CORPUS CHRISTI ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. CORPUS CHRISTI ARMY DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on CORPUS CHRISTI ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. CORPUS CHRISTI ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. CORPUS CHRISTI ARMY DEPOT reports that 11 unconstrained acres are available for development out of 146 total acres. CORPUS CHRISTI ARMY DEPOT has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. CORPUS CHRISTI ARMY DEPOT does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. CORPUS CHRISTI ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. CORPUS CHRISTI ARMY DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. CORPUS CHRISTI ARMY DEPOT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. CORPUS CHRISTI ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . CORPUS CHRISTI ARMY DEPOT does not have an interim or final RCRA Part X facility . CORPUS CHRISTI ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. CORPUS CHRISTI ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
CORPUS CHRISTI ARMY DEPOT has 2476.4000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.44600000000000001 MGD of potable and non-potable water, with the capacity to produce (No Capacity Reported) MGD. It processed on average 0.13 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process MGD. It processed on average 0.33000000000000002 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. CORPUS CHRISTI ARMY DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT HOOD

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT HOOD is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on FORT HOOD. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT HOOD has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT HOOD reports that 8592 unconstrained acres are available for development out of 214570 total acres. FORT HOOD has spent $4.7000000000000002M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT HOOD has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with threatened and endangered species/habitat. It reports constraints associated with other factors. It reports constraints associated with archeological resources or areas. It reports constraints associated with historical/culutural facilities or areas. FORT HOOD reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT HOOD is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT HOOD does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT HOOD reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT HOOD has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT HOOD has an interim or final RCRA Part X facility that accepts off-site waste. FORT HOOD has an on-base solid waste disposal facility that is 32% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT HOOD discharges to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT HOOD has 4457.6999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 6.7859999999999996 MGD of potable and non-potable water, with the capacity to produce 19.09 MGD. It processed on average 7.1100000000000003 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 7.7800000000000002 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT HOOD reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT SAM HOUSTON

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT SAM HOUSTON is in Attainment for all Criteria Pollutants. It holds a CAA Minor Operating Permit. FORT SAM HOUSTON is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT SAM HOUSTON. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes has occurred within the last two years.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT SAM HOUSTON has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT SAM HOUSTON reports that 2497 unconstrained acres are available for development out of 31100 total acres. FORT SAM HOUSTON has spent $13.6M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $12M. FORT SAM HOUSTON has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It reports constraints associated with noise. It reports constraints associated with threatened and endangered species/habitat.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT SAM HOUSTON is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT SAM HOUSTON does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT SAM HOUSTON reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT SAM HOUSTON has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. FORT SAM HOUSTON has an interim or final RCRA Part X facility that accepts off-site waste. FORT SAM HOUSTON does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT SAM HOUSTON discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT SAM HOUSTON has 995.89999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 2.6669999999999998 MGD of potable and non-potable water, with the capacity to produce 15.56888 MGD. It processed on average 1.71 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 9.7024999999999988 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT SAM HOUSTON reported 1% wetland restricted acres on the main installation, and 1% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

LONE STAR AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. LONE STAR AAP is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on LONE STAR AAP. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. LONE STAR AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. LONE STAR AAP reports that 3787 unconstrained acres are available for development out of 15699 total acres. LONE STAR AAP has spent $21.399999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $3M. LONE STAR AAP has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. LONE STAR AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. LONE STAR AAP does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. LONE STAR AAP reported that federally-listed TES are present, candidate species are present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. LONE STAR AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. LONE STAR AAP has an interim or final RCRA Part X facility that accepts off-site waste. LONE STAR AAP has an on-base solid waste disposal facility that is 0.1% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. LONE STAR AAP does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
LONE STAR AAP has 719 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.35799999999999998 MGD of potable and non-potable water, with the capacity to produce 1 MGD. It processed on average 0.56000000000000005 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.14400000000000002 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. LONE STAR AAP reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

RED RIVER ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. RED RIVER ARMY DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on RED RIVER ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. RED RIVER ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. RED RIVER ARMY DEPOT reports that 1214 unconstrained acres are available for development out of 18316 total acres. RED RIVER ARMY DEPOT has spent $17.899999999999999M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $49M. RED RIVER ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. RED RIVER ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. RED RIVER ARMY DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 282 acres that extend to off-range property, 0 acres have incompatible land uses.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. RED RIVER ARMY DEPOT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. RED RIVER ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. RED RIVER ARMY DEPOT has an interim or final RCRA Part X facility

that accepts off-site waste. RED RIVER ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. RED RIVER ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
RED RIVER ARMY DEPOT has 2414 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.76600000000000001 MGD of potable and non-potable water, with the capacity to produce 3 MGD. It processed on average 1.3200000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.5 MGD. It processed on average 0.33000000000000002 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 1.25 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. RED RIVER ARMY DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

DESERET CHEMICAL DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. DESERET CHEMICAL DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on DESERET CHEMICAL DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. DESERET CHEMICAL DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. DESERET CHEMICAL DEPOT reports that 8084 unconstrained acres are available for development out of 19364 total acres. DESERET CHEMICAL DEPOT has spent $23.300000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $7M. DESERET CHEMICAL DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. DESERET CHEMICAL DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. DESERET CHEMICAL DEPOT does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. DESERET CHEMICAL DEPOT reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. DESERET CHEMICAL DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. DESERET CHEMICAL DEPOT has an interim or final RCRA Part X facility that accepts off-site waste. DESERET CHEMICAL DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. DESERET CHEMICAL DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
DESERET CHEMICAL DEPOT has 4339.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.193 MGD of potable and non-potable water, with the capacity to produce 1.8 MGD. It processed on average 0.02 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.0438749 MGD. It processed on average 444.27999999999997 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. DESERET CHEMICAL DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

DUGWAY PROVING GROUND

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. DUGWAY PROVING GROUND is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on DUGWAY PROVING GROUND. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. DUGWAY PROVING GROUND has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. DUGWAY PROVING GROUND reports that 747014 unconstrained acres are available for development out of 798214 total acres. DUGWAY PROVING GROUND has spent $116M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $125M. DUGWAY PROVING GROUND has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. DUGWAY PROVING GROUND is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. DUGWAY PROVING GROUND does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. DUGWAY PROVING GROUND reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. DUGWAY PROVING GROUND has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . DUGWAY PROVING GROUND has an interim or final RCRA Part X facility that does not

accept off-site waste. DUGWAY PROVING GROUND has an on-base solid waste disposal facility that is 60% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. DUGWAY PROVING GROUND does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
DUGWAY PROVING GROUND has 9340.2999999999993 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.0600000000000001 MGD of potable and non-potable water, with the capacity to produce 3.8970000000000002 MGD. It processed on average 0.20999999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.671 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. DUGWAY PROVING GROUND reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

TOOELE ARMY DEPOT

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. TOOELE ARMY DEPOT is in Attainment for all Criteria Pollutants. .

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on TOOELE ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. TOOELE ARMY DEPOT has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. TOOELE ARMY DEPOT reports that 13460 unconstrained acres are available for development out of 23063 total acres. TOOELE ARMY DEPOT has spent $82.299999999999997M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $19M. TOOELE ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. TOOELE ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. TOOELE ARMY DEPOT has noise contours that extend off the installation's property. Of the 19 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. TOOELE ARMY DEPOT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. TOOELE ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. TOOELE ARMY DEPOT has an interim or final RCRA Part X facility that accepts off-site waste. TOOELE ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. TOOELE ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
TOOELE ARMY DEPOT has 1594.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.71999999999999997 MGD of potable and non-potable water, with the capacity to produce 1.7869999999999999 MGD. It processed on average 0.05 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.27100000000000002 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. TOOELE ARMY DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT BELVOIR

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT BELVOIR is in Moderate Nonattainment for Ozone (1 hr). FORT BELVOIR is proposed to be in Nonattainment for Ozone (8 hour). It holds a CAA Major Operating Permit. It holds 2 CAA Minor Operating Permits. No emission credit program available. No SIP growth allowance has been allocated for this installation. FORT BELVOIR is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT BELVOIR. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT BELVOIR has impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT BELVOIR reports that 6411 unconstrained acres are available for development out of 9059 total acres. FORT BELVOIR has spent $2063M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $689M. FORT BELVOIR has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and none with the potential for expansion. It has restrictions due to adjacent or nearby Sensitive Resource Area.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT BELVOIR is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT BELVOIR does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT BELVOIR reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT BELVOIR has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT BELVOIR does not have an interim or final RCRA Part X facility . FORT BELVOIR does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT BELVOIR does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT BELVOIR has -1792.2 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.73 MGD of potable and non-potable water, with the capacity to produce 4.4000000000000004 MGD. It processed on average 1.8500000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT BELVOIR reported 10.2% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT EUSTIS

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT EUSTIS is in Marginal Maintenance for Ozone (1 hr). FORT EUSTIS is proposed to be in Nonattainment for Ozone (8 hour). It holds 2 CAA Synthetic Minor Operating Permits. No emission credit program available. No SIP growth allowance has been allocated for this installation. FORT EUSTIS is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT EUSTIS. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Contact with Native Tribes has rarely occurred.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT EUSTIS has no impediments to dredging. It has spoil disposal site(s) with 1300000 CY of capacity remaining.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military

munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT EUSTIS reports that 675 unconstrained acres are available for development out of 9679 total acres. FORT EUSTIS has spent $42.199999999999996M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $7M. FORT EUSTIS has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with other factors.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT EUSTIS is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT EUSTIS does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation. It does not have published noise abatement procedures for the training and/or RDT&E range. It does not have published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT EUSTIS reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is present that do not restrict operations, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment,

Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT EUSTIS does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT EUSTIS does not have an interim or final RCRA Part X facility . FORT EUSTIS does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT EUSTIS discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT EUSTIS has 11037.4 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.7436 MGD of potable and non-potable water, with the capacity to produce 11.332799999999999 MGD. It processed on average 1.46 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6.0999999999999996 MGD. It processed on average 0.08 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 6.0999999999999996 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT EUSTIS reported 25% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT A P HILL

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT A P HILL is in Attainment for all Criteria Pollutants. FORT A P HILL is proposed to be in Marginal Nonattainment for Ozone (8 hour). It holds a CAA Synthetic Minor Operating Permit. FORT A P HILL is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT A P HILL. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT A P HILL has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife

that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT A P HILL reports that 41698 unconstrained acres are available for development out of 75794 total acres. FORT A P HILL has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT A P HILL does not have Explosive Safety Quantity Distance Arcs.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT A P HILL is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT A P HILL does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT A P HILL reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT A P HILL does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT A P HILL does not have an interim or final RCRA Part X facility . FORT A P HILL does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT A P HILL discharges to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT A P HILL has 4994 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.26000000000000001 MGD of potable and non-potable water, with the capacity to produce 4.0599999999999996 MGD. It processed on average 0.26000000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.60045999999999999 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT A P HILL reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT LEE

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT LEE is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit. FORT LEE is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT LEE. There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict operations and do not restrict construction.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT LEE has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT LEE reports that 2924 unconstrained acres are available for development out of 5574 total acres. FORT LEE has spent $19.300000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $7M. FORT LEE has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and none with the potential for expansion. It reports constraints associated with threatened and endangered species/habitat. It reports constraints associated with Sensitive Resource Areas. It reports constraints associated with contamination. It reports constraints associated with archeological resources or areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT LEE is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT LEE has noise contours that extend off the installation's property. Of the 15 acres that extend to off-base property, 14 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 15 acres that extend to off-range property, 14 acres have incompatible land uses.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT LEE reported that federally-listed TES are not present, candidate species are not present, critical habitat is present that restrict operations, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT LEE does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT LEE does not have an interim or final RCRA Part X facility . FORT LEE does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT LEE does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT LEE has 3456.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 1.3 MGD of potable and non-potable water, with the capacity to produce 4.4000000000000004 MGD. It processed on average 1.3200000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2.5 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT LEE reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT MONROE

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT MONROE is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit. Emission credit programs may be available. FORT MONROE is in an area projected or proposed to be designated nonattainment for the 8-hour Ozone or the PM2.5 NAAQS.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT MONROE. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT MONROE has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT MONROE reports that 93 unconstrained acres are available for development out of 570 total acres. FORT MONROE has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT MONROE does not have Explosive Safety Quantity Distance Arcs, some of which require safety waivers. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT MONROE is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT MONROE does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT MONROE reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT MONROE does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT MONROE does not have an interim or final RCRA Part X facility . FORT MONROE does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT MONROE does not discharge to an impaired waterway. Groundwater contamination is not reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater. The installation reported restrictions or controls that limited the production or distribution of potable water.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT MONROE has 3863.4000000000001 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.23999999999999999 MGD of potable and non-potable water, with the capacity to produce 6.0999999999999996 MGD. It processed on average 0.47999999999999998 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.20000000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT MONROE reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT MYER

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT MYER is in Severe Nonattainment for Ozone (1 hr). It holds a CAA Synthetic Minor Operating Permit. No emission credit program available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT MYER. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT MYER has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT MYER reports that 0 unconstrained acres are available for development out of 256 total acres. FORT MYER has spent $3.2000000000000002M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT MYER has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and none with the potential for expansion. It has restrictions due to adjacent or nearby Sensitive Resource Area.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT MYER is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT MYER does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT MYER reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT MYER does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT MYER does not have an interim or final RCRA Part X facility . FORT MYER does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT MYER does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT MYER has 29672.099999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.88200000000000001 MGD of potable and non-potable water, with the capacity to produce 3.456 MGD. It processed on average 0.87 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 15.699999999999999 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT MYER reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

RADFORD AAP

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. RADFORD AAP is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. It holds a CAA Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. No historic property has been identified on RADFORD AAP. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes has occurred within the last two years.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. RADFORD AAP has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. RADFORD AAP reports that 341 unconstrained acres are available for development out of 6901 total acres. RADFORD AAP has spent $24.300000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $51M. RADFORD AAP does not have Explosive Safety Quantity Distance Arcs, some of which require safety waivers.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. RADFORD AAP is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. RADFORD AAP has noise contours that extend off the installation's property. Of the 6 acres that extend to off-base property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. RADFORD AAP reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. RADFORD AAP has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . RADFORD AAP has an interim or final RCRA Part X facility that does not accept off-site waste. RADFORD AAP does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. RADFORD AAP does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
RADFORD AAP has 43504.800000000003 Acre-Feet of surplus water potentially available for expansion. On average, it uses 12.66 MGD of potable and non-potable water, with the capacity to produce 3.5 MGD. It processed on average 0.34000000000000002 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 2 MGD. It processed on average 21.469999999999999 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 2 MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. RADFORD AAP reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT LEWIS

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT LEWIS is in Moderate Maintenance for Ozone (1 hr). FORT LEWIS is in Moderate Maintenance for CO. FORT LEWIS is in Moderate Maintenance for PM10. It holds a CAA Major Operating Permit. Emission credit programs may be available. No SIP growth allowance has been allocated for this installation.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT LEWIS. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT LEWIS has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state,

tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT LEWIS reports that 6190 unconstrained acres are available for development out of 413407 total acres. FORT LEWIS has spent $67.299999999999997M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $42M. FORT LEWIS has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas. FORT LEWIS reports being constrained by the laws, regulations, policies, or activities of non-DoD federal, tribal, state, or local agencies. FORT LEWIS reports that its missions have been limited by existing or proposed activities of other military departments or other federal, tribal, state, or local agencies being located on the main installation, auxiliary airfield, or RDT&E range.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT LEWIS is impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT LEWIS does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 953 acres that extend to off-range property, 0 acres have incompatible land uses. It has published noise abatement procedures for the training and/or RDT&E range.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT LEWIS reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are present, critical habitat is present that do not restrict operations, and the installation has a Biological Opinion that does not place restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT LEWIS has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. FORT LEWIS does not have an interim or final RCRA Part X facility . FORT LEWIS has an on-base solid waste disposal facility that is 96% filled.

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT LEWIS does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT LEWIS has 35907.099999999999 Acre-Feet of surplus water potentially available for expansion. On average, it uses 6.468 MGD of potable and non-potable water, with the capacity to produce 17.856000000000002 MGD. It processed on average 4.3300000000000001 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 7.4539999999999997 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT LEWIS reported no wetland restricted acres on the main installation, and 14% wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT MCCOY

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT MCCOY is in Attainment for all Criteria Pollutants. It holds a CAA Synthetic Minor Operating Permit.

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT MCCOY. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which restrict construction and operations. Formal consultation with Native Tribes is currently occurring.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT MCCOY has no impediments to dredging. It has spoil disposal site(s) with 16000 CY of capacity remaining.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT MCCOY reports that 34530 unconstrained acres are available for development out of 127799 total acres. FORT MCCOY has spent $6.7000000000000002M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $1M. FORT MCCOY has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and some with the potential for expansion. It has restrictions due to adjacent or nearby Sensitive Resource Area.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT MCCOY is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT MCCOY has noise contours that extend off the installation's property. Of the 3247 acres that extend to off-base property, 1656 acres have incompatible land uses. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT MCCOY reported that federally-listed TES are present that have delayed or diverted operations/training/testing, candidate species are not present, critical habitat is not present, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT MCCOY does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT MCCOY does not have an interim or final RCRA Part X facility . FORT MCCOY does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT MCCOY does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT MCCOY has 6460.6999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.51400000000000001 MGD of potable and non-potable water, with the capacity to produce 4.5019999999999998 MGD. It processed on average 0.77000000000000002 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 1.3200000000000001 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT MCCOY reported 16.4% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

FORT BUCHANAN

1. **Air Quality (DoD Question #210-225)**:

   a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O3 (1 hour & 8 Hour), and PM (PM10, and PM2.5). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O3, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.

   b. FORT BUCHANAN is in Attainment for all Criteria Pollutants. .

2. **Cultural/Archeological/Tribal Resources (DoD Question #229-237)**:

   a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.

   b. Historic property has been identified on FORT BUCHANAN. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations.

3. **Dredging (DoD Question # 226-228)**:

   a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.

   b. FORT BUCHANAN has no impediments to dredging.

4. **Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273)**:

   a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

b. FORT BUCHANAN reports that 148 unconstrained acres are available for development out of 746 total acres. FORT BUCHANAN has spent $0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at $0M. FORT BUCHANAN has Explosive Safety Quantity Distance Arcs, some of which require safety waivers, and none with the potential for expansion. It has Military Munitions Response Areas. It reports constraints associated with threatened and endangered species/habitat. It has restrictions due to adjacent or nearby Sensitive Resource Area.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.

b. FORT BUCHANAN is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.

b. FORT BUCHANAN does not have noise contours that extend off the installation's property. It does not have published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.

b. FORT BUCHANAN reported that federally-listed TES are present, candidate species are present, critical habitat is present that restrict operations, and the installation has a Biological Opinion that places restrictions on operations.

8. Waste Management (DoD Question # 265-272):

a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.

b. FORT BUCHANAN does not have a permitted RCRA Treatment Storage and Disposal Facility (TSDF) . FORT BUCHANAN does not have an interim or final RCRA Part X facility . FORT BUCHANAN does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.

b. FORT BUCHANAN does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported.
(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):
FORT BUCHANAN has 466 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.35620000000000002 MGD of potable and non-potable water, with the capacity to produce 1.1499999999999999 MGD. It processed on average 0.28999999999999998 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 6.5 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.

b. FORT BUCHANAN reported 2.8% wetland restricted acres on the main installation, and no wetland restricted acres on ranges.