

Summary of Scenario Environmental Impacts - Criterion 8

Scenario ID#: USAF 0113V3 (126.3c1)

Brief Description: Realign Hill AFB, UT

<u>General Environmental Impacts</u>	
Environmental Resource Area	Hill
Air Quality	Hill is in a maintenance area for ozone. A preliminary analysis indicates that a conformity determination may not be necessary. A significant air permit revision may be needed.
Cultural/ Archeological/ Tribal Resources	No impact
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	No impact
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	No increase in off-base noise is expected.
Threatened & Endangered Species/ Critical Habitat	No impact
Waste Management	Modification of the hazardous waste program may be needed.
Water Resources	No impact
Wetlands	No impact

<u>Impacts of Costs</u>	
	Hill
Environmental Restoration	DERA money spent through FY03 (\$K): 182,010 Estimated CTC (\$K): 275,408 DO NOT ENTER IN COBRA
Waste Management	FY07 Modify Waste Program cost: Scenario \$100K / Cumulative \$100K
Environmental Compliance	FY06 NEPA cost: Scenario \$48K / Cumulative \$48K FY07 Conformity Analysis cost: Scenario \$5K / Cumulative \$50K FY07 Significant Air Permit Revision cost: Scenario \$150K /

	Cumulative \$150K
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<u>General Environmental Impacts</u>	
Environmental Resource Area	Carswell (Gaining)
Air Quality	A preliminary assessment shows that a conformity determination is not required. An air permit revision may be needed.
Cultural/ Archeological/ Tribal Resources	The base has two historic properties that are not in historic districts.
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	The scenario may require building on constrained acreage. Operations are restricted by no supersonic flight and no live fire in three military operating areas.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	Less than a 3dB general increase in contours can be expected. The AICUZ and JLUS reflect the current mission, local land use, current noise levels. 6,947 acres off-base within the noise contours are zoned by the local community. 2,187.6 of these acres are residentially zoned. The community has not purchased easements for area surrounding the installation.
Threatened& Endangered Species/ Critical Habitat	No T&E species or critical habitats exist. No impact to T&E species is expected.
Waste Management	Hazardous waste program modification is needed.
Water Resources	No impact
Wetlands	Wetlands restrict 0.0008% of the base. Wetlands do not currently restrict operations. Additional operations may impact wetlands, which may restrict operations.

<u>Impacts of Costs</u>	
	Carswell (Gaining)
Environmental Restoration	DERA money spent through FY03 (\$K): 26,137 Estimated CTC (\$K): 6,019 DO NOT ENTER IN COBRA
Waste Management	FY07 Hazardous Waste Program cost: Scenario \$69K / Cumulative \$100K
Environmental	FY06 NEPA cost: Scenario \$194K / Cumulative \$281K

Compliance	FY07 Air Conformity Analysis cost: Scenario \$35K / Cumulative \$50K FY07 Air Permit Revision cost: Scenario \$69K / Cumulative \$100K
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<u>General Environmental Impacts</u>	
Environmental Resource Area	Homestead (Gaining)
Air Quality	The base is located within 100 miles of Everglades National Park, a critical air quality region. This does not impact operations.
Cultural/ Archeological/ Tribal Resources	No impact
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	Military Munitions Response Program sites exist on the installation and may represent a safety hazard for future development.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	Less than a 3dB general increase in contours can be expected. The AICUZ reflects the current mission and current noise levels, but not the local land use. 2,883 acres off-base within the noise contours are zoned by the local community. 26 of these acres are residentially zoned. The community has not purchased easements for area surrounding the installation.
Threatened& Endangered Species/ Critical Habitat	No T&E species or critical habitats exist. No impact to T&E species is expected.
Waste Management	No impact
Water Resources	No impact
Wetlands	Wetlands make up 13% of the base. Wetlands already restrict operations. Additional operations may impact wetlands, which may restrict operations.

<u>Impacts of Costs</u>	
Homestead (Gaining)	

Environmental Restoration	DERA money spent through FY03 (\$K): 1,894 Estimated CTC (\$K): 0 DO NOT ENTER IN COBRA
Waste Management	No impact
Environmental Compliance	FY06 NEPA cost: Scenario \$186K / Cumulative \$281K

<u>General Environmental Impacts</u>	
Environmental Resource Area	Dannelly (Losing)
Air Quality	No impact
Cultural/ Archeological/ Tribal Resources	No impact
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	The installation reported 4.9 acres of unconstrained acreage available for development; construction may require building on constrained acreage. The Training Range is constrained by Land Use / Zoning / Commercial /Urban Restrictions. The type of constraint is limited ability to accept new or different missions due to availability of unconstrained land. The restriction affects 500 acres. The Main Base is constrained by Weather. The type of constraint is altered, modified, or re-routed flight operations and/or flight patterns. Two hundred acres of a Training, Testing, or Operational Area is restricted by a Sensitive Resource Area. The restriction is that operations must stay above 4,000 feet in part of the military operating area.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	Less than a 3dB general increase in contours can be expected. The FAA Part 150 reflects the current mission, local land use, and current noise levels. 623.1 acres off-base within the noise contours are zoned by the local community. 10.7 of these acres are residentially zoned. The community has purchased easements for area surrounding the installation.
Threatened& Endangered Species/ Critical Habitat	No T&E species or critical habitats exist. No impact to T&E species is expected.
Waste Management	No impact

Water Resources	No impact
Wetlands	Wetlands Survey may need to be conducted to determine impact. Wetlands do not currently restrict operations. Additional operations may impact wetlands, which may restrict operations.

<u>Impacts of Costs</u>	
	Dannelly (Losing)
Environmental Restoration	DERA money spent through FY03 (\$K): 1079 Estimated CTC (\$K): N/A DO NOT ENTER IN COBRA
Waste Management	No impact
Environmental Compliance	No impact

<u>General Environmental Impacts</u>	
Environmental Resource Area	Shaw AFB (Gaining)
Air Quality	The Francis Marion & Sumter National Forest, a critical air quality region, is within 100 miles of the installation but does not constrain operations. A significant air permit revision may be required.
Cultural/ Archeological/ Tribal Resources	Archaeological resources are present and the installation has a high potential for having archaeological sites, but these do not constrain operations. The installation has a historic property, but it does not constrain operations. Additional operations could affect this site, which may impact operations.
Dredging	No Impact
Land Use Constraints/ Sensitive Resource Areas	The scenario may require construction on property whose planned land use is other than administrative.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	No increase in off-base noise is expected.

Threatened& Endangered Species/ Critical Habitat	T&E species and/or critical habitats exist but don't impact operations. Additional operations may impact T&E species and/or critical habitats.
Waste Management	Modification of hazardous waste program may be necessary.
Water Resources	No impact
Wetlands	Wetlands restrict 2% of the base and 10% of the range. Wetlands do not currently restrict operations. Additional operations may impact wetlands, which may restrict operations.

<u>Impacts of Costs</u>	
	Shaw AFB (Gaining)
Environmental Restoration	DERA money spent through FY03 (\$K): 53598 Estimated CTC (\$K): 27143 DO NOT ENTER IN COBRA
Waste Management	FY07 Modify Waste Program cost: Scenario \$50K / Cumulative \$100K
Environmental Compliance	FY06 NEPA cost: Scenario \$2K / Cumulative \$192K FY07 Significant Air Permit Revision cost: Scenario \$50K/Cumulative \$100K

<u>General Environmental Impacts</u>	
Environmental Resource Area	Nellis (Losing)
Air Quality	A preliminary conformity analysis shows that a conformity determination may be required. A more in-depth review is required. The inability to achieve a positive conformity determination may be a constraint to this scenario. Air emission offsets may be required. The installation is located within 100 miles of the Grand Canyon, a critical air quality region. This causes no air quality restrictions. A significant air permit revision may be necessary.

Cultural/ Archeological/ Tribal Resources	Sites or areas with high potential for archeological sites were identified. The base is currently in formal consultation with 16 Native American Tribes that have asserted an interest in the military installation for the purposes of the National Historic Preservation Act or other required consultation activities. The sacred, archeological, and burial sites are local to the installation.
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	The Desert National Wildlife Range restricts range operations ground activities above 4,000 ft MSL via MOU with US Fish and Wildlife Service. This restricts 20% of the rangeland. Four factors were identified at the Nevada Test and Training Range that constrain operations. Three of the operational constraints last two weeks per year, and the fourth constraint lasts one week per year. The four constraints are of the following type: Unable to complete training requirements at home installation and must go TDY. One factor was identified at Nellis that constrains operations for two weeks per year. The constraint is of the following type: Unable to complete training requirements at home installation and must go TDY. Military Munitions Response Program sites exist on the installation and may represent a safety hazard for future development.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	Noise contours will need to be re-evaluated as a result of the change in mission. The AICUZ reflects the current mission, local land use, and current noise levels. 11,920 acres off-base within the noise contours are zoned by the local community. 1,060 of these acres are residentially zoned. The community has not purchased easements for area surrounding the installation.
Threatened& Endangered Species/ Critical Habitat	T&E species and/or critical habitats already restrict operations with a Biological Opinion. Additional operations may impact T&E species and/or critical habitats. In addition, the Biological Opinion will need to be evaluated to ensure the scenario conforms to it.
Waste Management	Modification of hazardous waste program is needed.
Water Resources	No impact
Wetlands	Wetlands do not currently restrict operations. Additional operations may impact wetlands, which may restrict operations.

<u>Impacts of Costs</u>	
	Nellis (Losing)
Environmental Restoration	DERA money spent through FY03 (\$K): 43,187 Estimated CTC (\$K): 29,177 DO NOT ENTER IN COBRA
Waste Management	FY07 Waste Program Modification cost: Scenario \$0K/Cumulative \$100K
Environmental Compliance	FY06 NEPA cost: Scenario \$0K / Cumulative \$318K FY07 Air Conformity Analysis cost: Scenario \$0K / Cumulative \$50K FY07 Air Conformity Determination cost: Scenario \$0K / Cumulative \$100K FY07 Significant Air Permit Revision cost: Scenario \$0K / Cumulative \$300K FY07 Air Emission offsets cost: Scenario \$0K / Cumulative \$3,691K

<u>General Environmental Impacts</u>	
Environmental Resource Area	Edwards (Losing)
Air Quality	The base is in non-attainment for ozone (maintenance). An initial conformity analysis indicated that a conformity determination is not required. No air permit revision is necessary. A critical air quality region is located within 100 miles of the installation, but it does not restrict operations.
Cultural/ Archeological/ Tribal Resources	There are 2989 archaeological sites, and there is a native American tribe interested in burial sites on the installation but they do not impact operations. There are also 7 historic properties and 4 historic districts making up 8,461 acres. Additional operations may impact these areas, which may restrict operations.
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	No impact
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	No increase in noise going off base is expected.

Threatened& Endangered Species/ Critical Habitat	T&E species and critical habitats already restrict operations (use of high explosives on the range) with a Biological Opinion. Additional operations may impact T&E species and/or critical habitats. In addition, the Biological Opinion will need to be evaluated to ensure the scenario conforms to it.
Waste Management	No impact
Water Resources	No impact
Wetlands	No impact

<u>Impacts of Costs</u>	
	Edwards (Losing)
Environmental Restoration	DERA money spent through FY03 (\$K): 277868 Estimated CTC (\$K): 645215 DO NOT ENTER IN COBRA
Waste Management	No impact
Environmental Compliance	FY07 Air Conformity Analysis cost: Scenario \$0K / Cumulative \$50K FY06 NEPA Documentation cost: Scenario \$0K / Cumulative \$48K

<u>General Environmental Impacts</u>	
Environmental Resource Area	Mountain Home
Air Quality	A minor air permit revision may be needed. The installation is located within 100 miles of Sawtooth Wilderness Area, a critical air quality region. This does not restrict operations.
Cultural/ Archeological/ Tribal Resources	Sites or areas with high potential for archeological sites were identified. The base is currently in formal consultation with two Native American Tribes that have asserted an interest in the

	military installation for the purposes of the National Historic Preservation Act or other required consultation activities. The sites are local to the installation. The base has nine historic properties on the installation and four historic properties on a range that are not in historic districts.
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	Training and/or RDT&E Ranges are constrained by the laws, regulations, or policies enforced by, or the activities of non-DoD federal, tribal, state or local agencies (Dept of Interior, Dept of Conservation, etc.) or their land. The training range is impacted by three operational constraints because of T&E species. This constraint has resulted in altered, modified, or re-routed flight operations and/or flight patterns. The limitation lasts from May to November, is effective 24 hours per day, and affects 246.49 square miles of air space and 12,000 acres of land. The base has three training/testing/operational areas restricted by Sensitive Resource Areas. For the first, a 246 square mile area is closed to USAF use 60 days a year for cattle grazing, range maintenance, and environmental/cultural work. For the second, a 500 square mile area is restricted below 1000' AGL or 5000' AGL from April to June. For the third, a 300 square mile area is restricted below 1000' or 5000' AGL from April to June. Additional operations may further impact these constraints and therefore further constrain operations.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	Noise contours will need to be re-evaluated as a result of the change in mission. The AICUZ reflects the current mission, local land use, and current noise levels. 11,725 acres off-base within the noise contours are zoned by the local community. Noise contours do not affect off-base residential zoning in the local community. The community has not purchased easements for area surrounding the installation.
Threatened& Endangered Species/ Critical Habitat	No T&E species or critical habitats exist. No impact to T&E species is expected.
Waste Management	Modification of hazardous waste program is needed.
Water Resources	No impact
Wetlands	Wetlands restrict 0.005% of the military installation and 0.04% of the range. Wetlands do not currently restrict operations. Additional operations may impact wetlands, which may restrict operations.

<u>Impacts of Costs</u>	
Mountain Home (Losing)	
Environmental Restoration	DERA money spent through FY03 (\$K): 10,165 Estimated CTC (\$K): 15,902 DO NOT ENTER IN COBRA
Waste Management	FY07 Hazardous Waste Program cost: Scenario \$0K / Cumulative \$100K
Environmental Compliance	FY06 NEPA cost: Scenario \$0K / Cumulative \$318K FY07 Air Permit Revision cost: Scenario \$0K / Cumulative \$50K

<u>General Environmental Impacts</u>	
Environmental Resource Area	Luke (Losing)
Air Quality	Luke is in an area in nonattainment for ozone (1 and 8 hr, serious) and PM10 (serious). The base is within 100 mi of the Class I Federal Area, a critical air quality region. It does not restrict operations. An initial conformity analysis shows that a conformity determination is not required for this scenario.
Cultural/ Archeological/ Tribal Resources	There are 1137 archeological sites on the training range where all new actions (construction, training, and testing) must be reviewed. Consultations are being conducted currently. Luke has 8 historic properties (1 on the installation, 7 on the range). Additional operations may impact these areas, which may impact operations.
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	No impact to land use from scenario.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact
Noise	Less than a 3dB general increase in contours can be expected. The AICUZ reflects the current mission/local land use/current noise levels. 9971 acres off-base within the noise contours are zoned by the local community. 1286 of these acres are residentially zoned. Local community has purchased easements. No increase in off-base noise is expected.
Threatened& Endangered Species/ Critical Habitat	T&E species exist but don't impact operations. Additional operations may impact T&E species.

Waste Management	No impact
Water Resources	No impact
Wetlands	Wetlands Survey may need to be conducted to determine impact.

<u>Impacts of Costs</u>	
	Luke (Losing)
Environmental Restoration	DERA money spent through FY03 (\$K): 20,269 Estimated CTC (\$K): 428 DO NOT ENTER IN COBRA
Waste Management	No impact
Environmental Compliance	No impact

<u>General Environmental Impacts</u>	
Environmental Resource Area	Langley (Gaining)
Air Quality	A preliminary assessment shows that a conformity determination is required for this scenario. A more in-depth review is required. The inability to achieve a positive conformity determination may be a constraint to this scenario. Air emission offsets may be required. A significant air permit revision may be needed.
Cultural/ Archeological/ Tribal Resources	Sites or areas with high potential for archeological sites were identified. The base has an 837.824-acre historic district with 282 contributing resources. There is one historic property that is not in a historic district.
Dredging	No impact
Land Use Constraints/ Sensitive Resource Areas	Military Munitions Response Program sites exist on the installation and may represent a safety hazard for future development. The base uses safety waivers and exemptions to accomplish the mission. Additional operations may compound the need for safety waivers.
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact

Noise	Less than a 3dB general increase in contours can be expected. Noise abatement procedures are already in place for the main installation and range. The AICUZ reflects the current mission/local land use/current noise levels. 17,287 acres off-base within the noise contours are zoned by the local community. 2,774 of these acres are residentially zoned. The community has not purchased easements for the area surrounding the installation.
Threatened & Endangered Species/ Critical Habitat	No T&E species or critical habitats exist. No impact to T&E species is expected.
Waste Management	Modification of hazardous waste program may be required.
Water Resources	The state requires a permit for withdrawal of groundwater.
Wetlands	Wetlands restrict 7% of the base. Wetlands do not currently restrict operations. Additional operations may impact wetlands, which may restrict operations.

<u>Impacts of Costs</u>	
	Langley (Gaining)
Environmental Restoration	DERA money spent through FY03 (\$K): 52,000 Estimated CTC (\$K): 27,000 DO NOT ENTER IN COBRA
Waste Management	FY07 Hazardous Waste Program Modification cost: Scenario \$0K/Cumulative \$100K
Environmental Compliance	FY06 NEPA cost: Scenario \$0K / Cumulative \$318K FY07 Air Conformity Analysis cost: Scenario \$0K / Cumulative \$50K FY07 Conformity Determination cost: Scenario \$0K / Cumulative \$100K FY07 Air Emissions Credits cost: Scenario \$0K / Cumulative \$655K FY07 Significant Air Permit Revision cost: Scenario \$0K / Cumulative \$200K