

# **Chapter Six**

## ***Environmental Overview***



# **Colorado City Municipal Airport**

## ***Airport Master Plan***

# Chapter Six

## Environmental Overview

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### INTRODUCTION

This environmental overview examines the potential environmental impacts associated with the proposed airport improvements listed in the Financial Plan in the following Chapter. The proposed improvements most likely to result in environmental impacts include the extension of Runway 11/29 and the landside development. All other improvements occur on existing airport property. This Chapter is intended to provide an overview of the potential impacts and identify additional environmental documentation that may be required as a prerequisite to development.

### AIR QUALITY

The Clean Air Act of 1970 was enacted to reduce emissions of specific pollutants via uniform Federal standards. These standards include the National Ambient Air Quality Standards (NAAQS) which set maximum allowable ambient concentrations of ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), lead (Pb) and particulate matter 10 microns or smaller (PM<sub>10</sub>). Section 176(c) of the Act, in part, states that no Federal agency shall engage in, support in any way or provide financial assistance for, license or permit or approve any activity that does not conform to the State Implementation Plan.

Federal Aviation Administration Orders 5050.4B and 1050.1E require air quality analysis for projects in areas not in compliance with the Environmental Protection Agency (EPA) approved State Implementation Plan (SIP). Because the entire area is considered in attainment with the SIP, no further air quality analysis is required.

Construction emissions, specifically dust, are not a long-term factor. These emissions are described in the “Construction Impacts” section of this Chapter. The necessary permits will be obtained before construction begins and construction projects will conform to FAA Advisory Circular (AC) 150/5370-10C, Standards for Specifying Construction of Airports.

The following best management practices are recommended to minimize construction emissions:

- I. Site Preparation
  - A. Minimize land disturbance;
  - B. Use watering trucks to minimize dust;
  - C. Cover trucks when hauling dirt or debris;
  - D. Stabilize the surface of dirt piles and any disturbed areas;
  - E. Use windbreaks to prevent any accidental dust pollution; and
  - F. Segregate storm water drainage from construction sites and material piles.
- II. Construction Phase
  - A. Cover trucks when transferring materials; and
  - B. Minimize unnecessary vehicular and machinery activities.
- III. Completion Phase
  - A. Revegetate any disturbed land not used;
  - B. Remove unused material and dirt piles; and

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Temporary air pollution may occur as a result of the proposed action. The design and construction of the proposed improvements will incorporate Best Management Practices (BMP) to reduce air quality impacts, including minimizing land disturbance, wetting down, using water trucks, dust suppressant, covering trucks when hauling soil and the use of wind breaks. These practices will be selected based on the site's characteristics. No significant air quality impacts are anticipated as a result of the proposed development.

## **COASTAL RESOURCES**

There are no coastal zones associated with the proposed development. Therefore, compliance with the Coastal Zone Management Act of 1972 and the Coastal Barriers Resources Act of 1982 is not a factor.

## **COMPATIBLE LAND USE**

Land use compatibility considerations include safety, height hazards and noise exposure. Although extremely rare, most aircraft accidents occur within 5,000 feet of a runway. Therefore, the ability of the pilot to bring the aircraft down in a manner that minimizes the severity of an accident is dependent upon the type of land uses within the vicinity of the airport. Land uses are reviewed in three zones surrounding the airport: the Runway Protection Zone (RPZ), the Approach Zone, Airport Influence Zone and the Traffic Pattern Zone. The RPZ is a trapezoidal area extending 1,200 feet beyond the ends of the runway and is typically included within the airport property boundary. Residential and other uses that result in congregations of people are not recommended within the runway protection zone. The approach zone generally falls within the FAR Part 77 Approach Surface area. Within the approach zone, public land uses, such as schools, libraries, hospitals and churches should be avoided. New residential developments should include aviation easements and disclosure statements. The Traffic Pattern Zone is generally the area within one mile of the airport. Within the Traffic Pattern Zone, aviation easements should be considered for residential and public uses within this area and disclosure statements should be included. The Airport Influence Zone is the area where aircraft are transitioning to or from enroute altitude or airport over-flight altitude to or from the standard traffic pattern altitude of 800 to 1,000 feet above airport elevation.

The closest populated areas to the Colorado City Municipal Airport are located east and north of the airport. The airport has implemented a nonstandard right hand traffic pattern to Runway 11, which reduces the amount of traffic flying over the Town of Colorado City.

Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace, provides imaginary surfaces surrounding an airport that should be protected from penetration by objects. These include the approach surface, horizontal surface and conical surface. These surfaces were described in Chapter 4. Proposed structures in the vicinity of the airport should be reviewed against the Part 77 criteria to ensure hazards to air navigation are not created. Because the terrain off the end of the runways is lower than the runway elevation, no penetrations to the approach surface currently exist. Objects penetrating these surfaces could result in a hazard to air navigation.

The Town of Colorado City has implemented an Airport Overlay Zoning Ordinance, including Compatible Land Use Overlay and Height Restriction drawings. If enforced, this ordinance and drawings will protect the airport from future incompatible land uses and any objects that may be considered hazards to air navigation. An updated ordinance and drawings have been included

as part of this Master Plan to coincide with the planned airport configuration airspace and design standards and should be adopted by the Town of Colorado City. A copy of the proposed ordinance and zoning maps are included in Appendix F.

## **CONSTRUCTION IMPACTS**

Local, State and Federal ordinances and regulations address the impacts of construction activities, including dust and noise from heavy equipment traffic, disposal of construction debris and air and water pollution.

Construction operations for the proposed development will cause specific impacts resulting solely from and limited exclusively to the construction project. Construction impacts are distinct in that they are temporary in duration and the degree of adverse impacts decreases as work is concluded. The following construction impacts can be expected:

- A temporary increase in particulate and gaseous air pollution levels as a result of dust generated by construction activity and by vehicle emissions from equipment and worker's automobiles;
- Increases in solid and sanitary wastes from the workers at the site;
- Traffic volumes that would increase in the airport vicinity due to construction activity (workers arriving and departing, delivery of materials, etc.);
- Increase in noise levels at the airport during operation of heavy equipment; and
- Temporary erosion, scarring of land surfaces and loss of vegetation in areas that are excavated or otherwise disturbed to carry out future developments.

Construction projects will comply with guidelines set forth in FAA Advisory Circular 150/5370-10C, Standards for Specifying the Construction of Airports. The contractor will obtain the required construction permits. The contractor will also prepare Storm Water Pollution Prevention and Fugitive Dust Control Plans for construction. These requirements will be specified in the contract documents for the construction of the proposed improvements.

## **DOT ACT – SECTION 4(F)**

Section 303c of Title 49, U.S.C., formerly Section 4(f) of DOT Act of 1966, provides that the Secretary of Transportation shall not approve any program or project that requires the use of any publicly owned land from a public park, recreation area or wildlife or waterfowl refuge of National, State or Local significance or land from an historic site of National, State or Local significance, as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land and such project includes all possible planning to minimize impacts. The proposed improvements will not require land from any public park, recreation area or wildlife or waterfowl refuge.

The Colorado City Municipal Airport is located in the vicinity of several noise sensitive national parks and wilderness areas. The Cottonwood Point Wilderness area is located approximately 3 nautical miles northeast, the Zion National Park is approximately 11 nautical miles north and the Kanab Creek Wilderness Area is approximately 30 nautical miles southeast. Pilots are requested to remain at least 2,000 feet Above Ground Level (AGL) over all wilderness areas. Figure 6-1 shows the airport in proximity to the designated wilderness/national parks. Prior to any runway extension noise and flight track analysis will be needed as part of the Environmental Assessment for the runway extension.



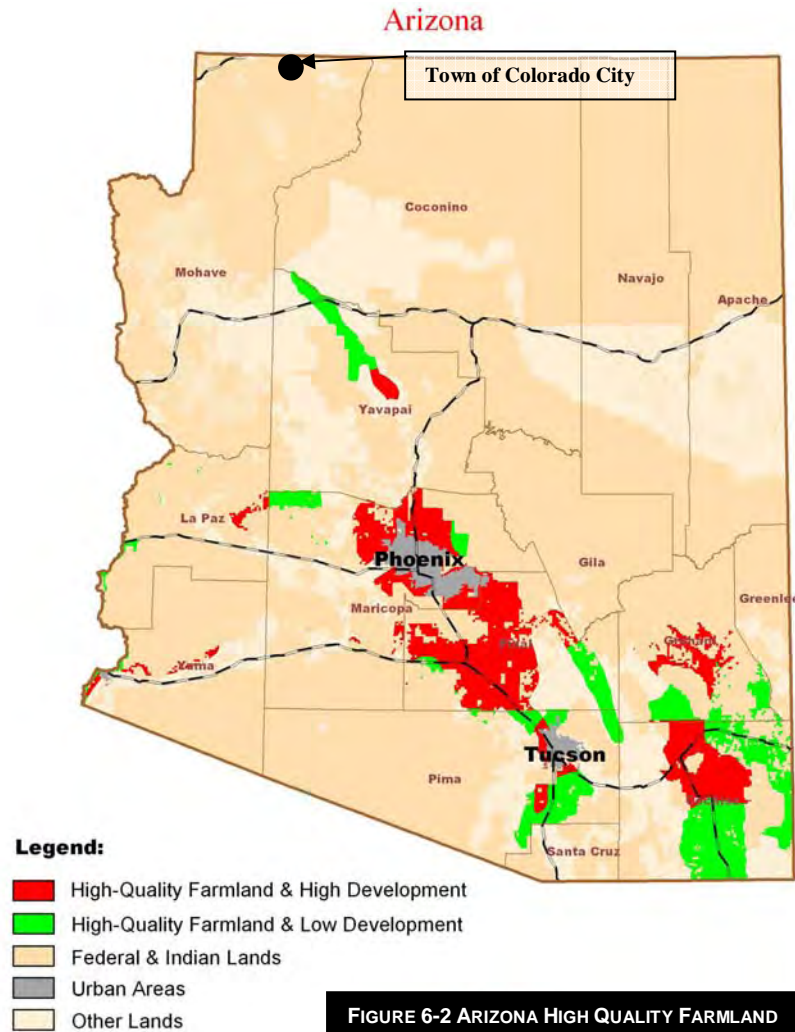
**FIGURE 6-1 WILDERNESS AND NATIONAL PARKS**

**FARMLANDS**

The Farmland Protection Policy Act (FPPA) authorizes the Department of Agriculture to develop criteria for identifying the effects of Federal programs upon the conversion of farmland to uses other than agriculture.

Conversion of “Prime or Unique” farmland may be considered a significant impact. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed or fiber without intolerable soil erosion as determined by the Secretary of Agriculture. Unique farmland is land other than prime farmland which is used to produce specific high value food and fiber crops, such as citrus, tree nuts, olives, cranberries, fruits and vegetables.

Figure 6-2 shows the high quality farmland in the State of Arizona in Red and Green. As shown, there is no high quality farmland in Mohave County.



## FISH, WILDLIFE AND PLANTS

This category concerns potential impacts to existing wildlife habitat and threatened and endangered species. Examining both the area of land to be altered or removed and its relationship to surrounding habitat quantify the significance of the impacts in this category. For example, removal of a few acres of habitat which represents a small percentage of the area's total similar habitat or which supports a limited variety of common species would not be considered significant. However, removal of a sizeable percentage of the area's similar habitat or habitat which is known to support rare species would be considered significant impact. Improvements to the Colorado City Municipal Airport would remove approximately 21 acres of habitat. The surrounding area offers an abundance of similar habitat and the proposed improvements are not considered to be a significant habitat loss.

Section 7 of the Endangered Species Act, as amended, requires each Federal agency to insure that "any action authorized, funded or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat of such species . . .".

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An Endangered Species is defined as any member of the animal or plant kingdoms determined to be in danger of extinction throughout all or a significant portion of its range. A Threatened Species is defined as any member of the plant or animal kingdoms that is likely to become endangered in the foreseeable future.

The following species are currently listed for Mohave County, but do not necessarily occur in the vicinity of Colorado City or within the project areas.

Endangered

Arizona cliff-rose, *Purshia subintegra*  
Bonytail chub, *Gila elegans*  
Brown pelican, *Pelecanus occidentalis*  
California condor, *Gymnogyps californianus*  
Holmgren milk vetch, *Astragalus holmgreniorum*  
Hualapai mexican vole, *Microtus mexicanus hualpaiensis*  
Humpback chub, *Gila cypha*  
Razorback sucker, *Xrauchen texanus*  
Southwestern willow flycatcher, *Empidonax traillii*  
Virgin river chub, *Gila seminuda*  
Yuma clapper rail, *Rallus longirostris yumanensis*

Threatened

Bald eagle, *Haliaeetus leucocephalus*  
Desert tortoise, *Gopherus agassizii*  
Jones cycladenia, *Cycladenia jonesii*  
Mexican spotted owl, *Strix occidentalis lucida*  
Siler pincushion cactus, *Echinocactus Utahia sileri*

Candidate

Fickeisen plains cactus, *Pediocactus peeblesianus fickeiseniae*  
Relict leopard frog, *Rana onca*  
Yellow-billed cuckoo, *Coccyzus americanus*

A biological assessment was conducted for the airport during an environmental assessment in March of 2006. The biological assessment/threatened and endangered species survey should be updated for previously undisturbed areas underlying the runway extension footprint. This is typically accomplished as part of an Environmental Assessment process.

**FLOODPLAINS**

Floodplains are defined by Executive Order 11988, Floodplain Management, as the lowland and relatively flat areas adjoining coastal water . . . including at a minimum, that area subject to a one percent or greater chance of flooding in any given year . . . ", that is, an area which would be inundated by a 100-year flood. If a proposed action involves a 100-year floodplain, mitigating measures must be investigated in order to avoid significant changes to the drainage system.

As described in FAA Order 5050.4B, an airport development project would be a significant impact pursuant to NEPA if it results in notable adverse impacts on natural and beneficial floodplain values. Mitigation measures for base floodplain encroachments may include committing to special flood related design criteria, elevating facilities above base flood level,

locating nonconforming structures and facilities out of the floodplain or minimizing fill placed in floodplains. The area has not been mapped by FEMA however the Town of Colorado City has indicated that the airport is not located within any designated floodplains and is considered to be a non risk area. Therefore the proposed action would not result in any impacts on floodplains.

## **HAZARDOUS MATERIALS, POLLUTION PREVENTION AND SOLID WASTE**

Four primary laws have been passed governing the handling and disposal of hazardous materials, chemicals, substances and wastes. The two statutes of most importance to the FAA in proposing actions to construct and operate facilities and navigational aids are the Resource Conservation and Recovery Act (RCRA) (as amended by the Federal Facilities Compliance Act of 1992) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA or Superfund) and the Community Environmental Response Facilitation Act of 1992. RCRA governs the generation, treatment, storage and disposal of hazardous wastes. CERCLA provides for consultation with natural resources trustees and cleanup of any release of a hazardous substance (excluding petroleum) into the environment.

The area surrounding the Colorado City Municipal Airport is currently used for ranching purposes. There is no reason to believe that the proposed improvements will be constructed in an area that contains hazardous waste.

Airport development actions that relate only to construction or expansion of runways, taxiways and related facilities do not normally include any direct relationship to solid waste collection, control or disposal other than that associated with the construction itself. The nature of the proposed airport meets these criteria and will not significantly increase net waste output for the Town.

Any solid waste disposal facility (i.e. sanitary landfill) which is located within 5,000 feet of all runways planned to be used by piston-powered aircraft or within 10,000 feet of all runways planned to be used by turbine aircraft, is considered by the FAA to be an incompatible land use because of the potential for conflicts between birds and low-flying aircraft. This determination is found in FAA Advisory Circular 150/5200-33, Hazardous Wildlife Attractants On or Near Airports. There are no solid waste disposal facilities within 10,000 feet of the airport. Any planned solid waste disposal facilities should be located at least 10,000 feet from the runway.

## **HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES**

The National Historic Preservation Act of 1966 requires that an initial review be made in order to determine if any properties in or eligible for inclusion in the National Register of Historic Places are within the area of a proposed action's potential environmental impact (the area within which direct and indirect impacts could occur and thus cause a change in historic, architectural, archaeological or cultural properties).

The Archaeological and Historic Preservation Act of 1974 provides for the survey, recovery and preservation of significant scientific, prehistorical, historical, archaeological or paleontological data when such data may be destroyed or irreparably lost due to a federal, federally funded or federally licensed project.

A Cultural Resource Survey of the project area was accomplished by Aztlan Archaeology, Inc. in 2001. As a result of the survey several sites were identified containing cultural resources.



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The future development projects included in this Airport Master Plan will avoid the sites. Any other development affecting the sites will require State Historic Preservation Office (SHPO) consultation.

## **LIGHT EMISSIONS AND VISUAL IMPACTS**

Airfield lighting is the main source of light emissions from an airport. Rotating airport beacons are provided so pilots can identify the location of an airport at night or in reduced visibility conditions. Rotating beacons consist of alternating white and green lights rotating at six rotations per minute. Beacons are typically mounted on a tower or on top of a hangar or other building. Specifications for spotting airport beacons allow the beam to be angled from 2° to 12° above the horizon. The standard setting is 6°. If necessary, the beacon can be shielded to reduce visibility of the beacon from below the horizon line. Medium Intensity Runway Edge Lights (MIRLs) are single white or yellow lights mounted on 14-30 inch posts spaced at 200 foot intervals along both edges of the runway. They define the boundaries of the runway surface usable for takeoff and landing. Precision Approach Path Indicators (PAPIs) are used for visual descent guidance and consist of two or four light units located to the left of the runway and perpendicular to the runway centerline. The lights are directed at a glide path angle of 3° above the runway. If the aircraft is above the glide path, the pilot will see all white lights. If the pilot is on the proper glide path, the light unit closest to the runway will be red and the unit farthest from the runway will be white. When the pilot is below the glide path the light units will be red. PAPIs have an effective visual range from the air of approximately five miles during the day and up to twenty miles at night. These visual aids are extremely useful and enhance safety in situations where there are few visual references surrounding the airport. Runway End Identifier Lights (REILs) are synchronized flashing lights located laterally on each side of the runway threshold. They are angled upward and outward from the runway and provide rapid and positive identification of the threshold of a runway. This is especially useful in metropolitan and densely developed areas where lights in the vicinity of the airport make it difficult to identify the runway. Proposed improvements will primarily replace existing lighting and will not substantially increase light emission impacts at the Colorado City Municipal Airport.

## **NATURAL RESOURCES, ENERGY SUPPLY AND SUSTAINABLE DESIGN**

Executive Order 13123, Greening the Government Through Efficient Energy Management (64FR 30851, June 8, 1999), encourages each Federal agency to expand the use of renewable energy within its facilities and in its activities. E.O. 13123 also requires each Federal agency to reduce petroleum use, total energy use and associated air emissions and water consumption in its facilities.

It is also the policy of the FAA, consistent with NEPA and the CEQ regulations, to encourage the development of sustainability. All elements of the transportation system should be designed with a view to their aesthetic impact, conservation of resources such as energy, pollution prevention, harmonization with the community environment and sensitivity to the concerns of the traveling public.

Energy requirements associated with airport improvements generally fall into two categories: 1) changed demand for stationary facilities (i.e. airfield lighting and terminal building heating) and 2) those that involve the movement of air and ground vehicles (i.e. fuel consumption). The use of natural resources includes primarily construction materials and water.

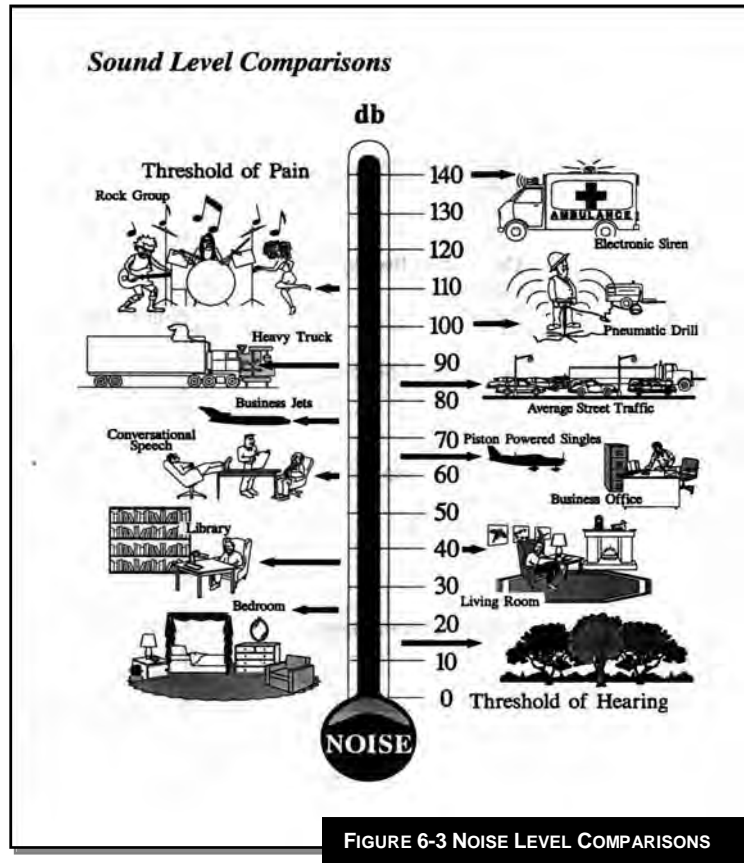
Energy requirements are not expected to significantly increase as a result of the proposed improvements.

Demand for aircraft fuel is expected to increase. Aircraft fuel should be stored in above ground tanks at the airport that conform to EPA regulations. Significant increases in ground vehicle fuel consumption are not anticipated.

## NOISE

Noise analysis considerations include whether the Federal thresholds of noise exposure are exceeded, whether the 65 day-night level (DNL) noise contour extends beyond airport property and if there are any residences, churches, schools or hospitals within the 65 DNL noise contour.

The basic measure of noise is the sound pressure level that is recorded in decibels (dBA). The important point to understand when considering the impact of noise on communities is that equal levels of sound pressure can be measured for both high and low frequency sounds. Generally, people are less sensitive to sounds of low frequency than they are to high frequencies. An example of this might be the difference between the rumble of automobile traffic on a nearby highway and the high-pitched whine of jet aircraft passing overhead. At any location, over a period of time, sound pressure fluctuates considerably between high and low frequencies. Figure 6-3 depicts a Sound Level Comparison of different noise sources.



The identification of airport generated noise impacts and implementation of noise abatement measures is a joint responsibility of airport operators and users. FAA Order 5050.4B states that “no noise analysis is needed for proposals involving Design Group I and II airplanes operating at airports whose forecast operations in the period covered by the EA do not exceed 90,000 annual adjusted propeller operations or 700 annual adjusted jet operations . . .”. Noise analysis is not required for the Colorado City Municipal Airport since operations are forecasted to be 7,716 in 2026. Noise contours were generated for the existing and future operations at the airport. The future noise contour is shown in Figure 6-4.

### VOLUNTARY NOISE ABATEMENT PROGRAM

Although the noise exposure levels will not exceed 65 DNL over any noise sensitive area, several voluntary measures can be applied to minimize noise exposure to surrounding areas. Several of these measures are listed below. It is recommended that a voluntary noise abatement program be implemented for the airport and publicized to all based and transient pilots.

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***Pilots:***

- Be aware of noise sensitive areas, particularly residential areas near the airport and avoid low flight over these areas.
- Fly traffic patterns tight and high, keeping the aircraft as close to the field as possible.
- In constant-speed-propeller aircraft, do not use high RPM settings in the pattern. Propeller noise from high-performance singles and twins increases drastically at high RPM settings.
- On takeoff, reduce to climb power as soon as safe and practical.
- Climb after liftoff at best-angle-of-climb speed until crossing the airport boundary, then climb at best rate.
- Depart from the start of the runway rather than intersections, for the highest possible altitude when leaving the airport vicinity.
- Avoid prolonged run-ups and do them inside the airport area, rather than at its perimeter.
- Try low-power approaches and always avoid the low, dragged-in approach.

***Instructors:***

- Teach noise abatement procedures to all students, including pilots you take up for flight reviews.
- Know noise-sensitive areas and point them out to students.
- Assure students fly at or above the recommended pattern altitude.
- Practice maneuvers over unpopulated areas and vary practice areas so that the same locale is not constantly subjected to aircraft operations.
- During practice of ground-reference maneuvers, be particularly aware of houses or businesses in your flight path.
- Stress that high RPM propeller settings are reserved for takeoff and for short final but not for flying in the pattern. Pushing the propeller to high RPM results in significantly higher levels of noise.

***Fixed Base Operators (FBOs):***

- Identify noise-sensitive areas and work with customers to create voluntary noise abatement procedures.
- Post any noise abatement procedures in a prominently visible area and remind pilots of the importance of adhering to them.
- Call for the use of the least noise sensitive runway whenever wind conditions permit.
- Initiate pilot education programs to teach and explain the rationale for noise abatement procedures and positive community relations.

***Airport Owner and Surrounding Jurisdictions:***

- Maintain appropriate zoning in the vicinity of the airport and see that noise sensitive land uses are not authorized within pattern, approach and departure paths.
- Disclose the existence of the airport and the airport influence area to real estate purchasers.
- Publish voluntary noise procedures on the Internet.
- Publish voluntary calm runway use procedures.

Source: Aircraft Owners and Pilots Association (AOPA)

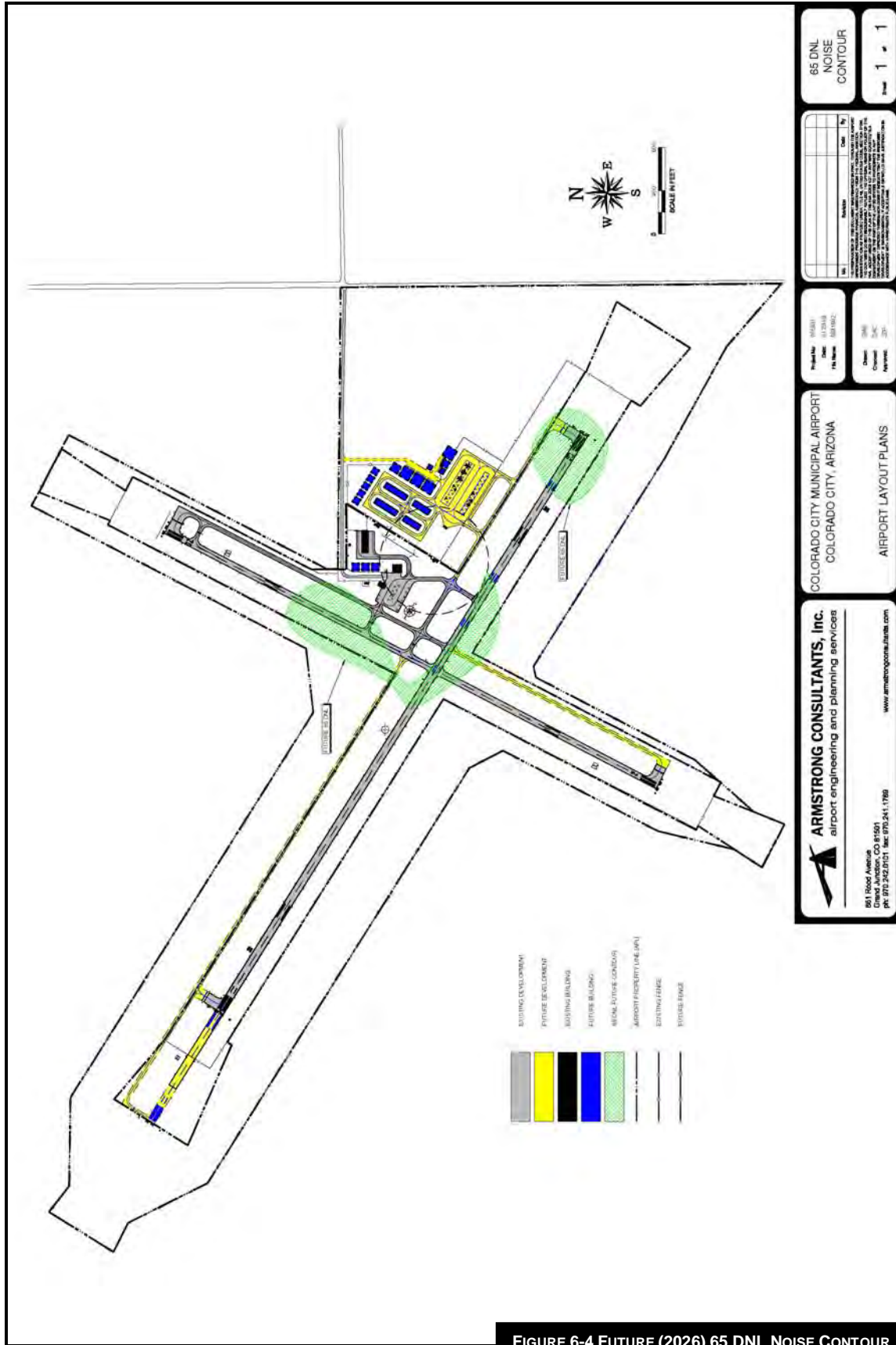


FIGURE 6-4 FUTURE (2026) 65 DNL NOISE CONTOUR

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## **SECONDARY (INDUCED) IMPACTS**

These secondary or induced impacts involve major shifts in population, changes in economic climate or shifts in levels of public service demand. The effects are directly proportional to the scope of the project under consideration. Assessment of induced socioeconomic impacts is usually only associated with major development at large air carrier airports, which involve major terminal building development or roadway alignments and similar work. The extent of the indirect socioeconomic impacts of the proposed development is not of the magnitude that would normally be considered significant; however, positive impacts can be foreseen in the form of direct, indirect and induced economic benefits generated from the airport.

## **SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS**

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, the accompanying Presidential Memorandum and Order DOT 5610.2, Environmental Justice, require the FAA to provide for meaningful public involvement by minority and low-income populations and analysis, including demographic analysis that identifies and addresses potential impacts on these populations that may be disproportionately high and adverse. Included in this process is the disclosure of the effects on subsistence patterns of consumption of fish, vegetation or wildlife and effective public participation and access to this information. The Presidential Memorandum that accompanied E.O. 12898, as well as the CEQ and EPA Guidance, encourage consideration of environmental justice impacts in EA's especially to determine whether a disproportionately high and adverse impact may occur. Environmental Justice is examined during evaluation of other impact categories, such as noise, air quality, water, hazardous materials and cultural resources.

### **SOCIOECONOMIC IMPACTS**

Induced socioeconomic impacts are usually only associated with major development at large air carrier airports. The socioeconomic impacts produced as a result of the proposed improvements to the Colorado City Municipal Airport are expected to be positive in nature and would include direct, indirect and induced economic benefits to the local area. These airport improvements are expected to attract additional users and in turn to encourage tourism, industry and to enhance the future growth and expansion of the community's economic base.

If acquisition of real property or displacement of persons is involved, 49 CFR part 24 (implementing the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970), as amended must be met for Federal projects and projects involving Federal funding. Otherwise, the FAA, to the fullest extent possible, observes all local and State laws, regulations and ordinances concerning zoning, transportation, economic development, housing, etc. when planning, assessing or implementing the proposed action.

### **ENVIRONMENTAL JUSTICE**

The focus of the Environmental Justice evaluation is to determine whether the proposed action results in an inequitable distribution of negative effects to special population groups, as compared to negative effects on other population groups. These special population groups include minority or otherwise special ethnicity or low-income neighborhoods.

The proposed action is not expected to result in any significant negative impacts to any population groups and therefore, would not result in disproportionate negative impacts to any

special population group. Socioeconomic and induced economic impacts are expected to be positive in nature and are expected to benefit all population groups in the area.

### **CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS**

Pursuant to Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, Federal agencies are directed, as appropriate and consistent with the agency's mission, to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. Agencies are encouraged to participate in implementation of the Order by ensuring that their policies, programs, activities and standards address disproportionate risks to children that result from environmental health risks or safety risks. The proposed improvements are not expected to result in any environmental health risks or safety risks on children.

### **WATER QUALITY**

Water quality considerations related to airport development often include increased surface runoff and erosion and pollution from fuel, oil, solvents and deicing fluids. Potential pollution could come from petroleum products spilled on the surface and carried through drainage channels off of the airport. State and Federal laws and regulations have been established to safeguard these facilities. These regulations include standards for above ground and underground storage tanks, leak detection and overflow protection. An effective Storm Water Pollution Prevention Plan (SWPPP) identifies storm water discharge points on the airport, describes measures and controls to minimize discharges and details spill prevention and response procedures. The Town of Colorado City maintains a SWPPP that identifies the direction of flow for a fuel spill and outlining procedures for responding to such an incident. In July of 2002, the EPA amended the Oil Pollution Prevention Regulation at Title 40 of the Code of Federal Regulations, Part 112 (40 CFR Part 112). Subparts A through C of this regulation are often referred to as the "SPCC rule" because they describe requirements for certain facilities (including airports) to prepare and implement Spill Prevention Control and Countermeasure (SPCC) Plans.

In accordance with Section 402(p) of the Clean Water Act, a National Pollution Discharge Elimination System (NPDES) General Permit is required from the Environmental Protection Agency for construction projects that disturb one or more acres of land. Applicable contractors will be required to comply with the requirement and procedures of the NPDES General Permit, including the preparation of a Notice of Intent and a Storm Water Pollution Prevention Plan, prior to the initiation of construction activities.

Recommendations established in FAA Advisory Circular 150/5370-10C, Standards for Specifying Construction of Airports, Item P-156, Temporary Air and Water Pollution, Soil Erosion and Siltation Control, will be incorporated into the project design and specifications. The design and construction of the proposed improvements will incorporate Best Management Practices (BMP) to reduce erosion, minimize sedimentation, control non-storm water discharges and to protect the quality of surface water features potentially effected. These practices will be selected based on the site's characteristics and those factors within the contractor's control and may include: construction scheduling, limiting exposed areas, runoff velocity reduction, sediment trapping and good housekeeping practices.

Future fuel storage and dispensing facilities should be designed, constructed, operated and maintained in accordance with Federal, State and Local regulations. Waste fluids, including

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oils, coolants, degreasers and aircraft wash facility wastewater will be managed and disposed of in accordance with applicable Federal, State and Local regulations.

## **WETLANDS**

Wetlands are defined in Executive Order 11990, Protection of Wetlands, as “those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support, a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas such as sloughs, potholes, wet meadows, river overflows and natural ponds. Jurisdictional Waters of the United States may also include drainage channels, washes, ditches, arroyos or other waterways that are tributaries to Navigable Water of the United States or other waters where the degradation or destruction of which could affect interstate or foreign commerce.

During the biological assessment conducted during the environmental assessment in March of 2006 wetland areas were identified and inventoried. The biological assessment should be updated for previously undisturbed areas underlying the runway extension footprint. This would be included as part of the environmental assessment for the runway extension.

## **WILD AND SCENIC RIVERS**

The Wild and Scenic Rivers Act (PL 90-542) describes those river areas eligible for protection from development. As a general rule, these rivers possess outstanding scenic, recreational, geological, fish and wildlife, historical, cultural or other similar value.

The Wild and Scenic River list from the National Park Service indicated one Wild and Scenic River listed in Arizona. The Verde River is located in Yavapai County in western Arizona, more than 175 miles from Colorado City and would not be affected by the proposed improvements.

## **MEANS TO MITIGATE AND/OR MINIMIZE ADVERSE ENVIRONMENTAL IMPACTS**

Where appropriate, the mitigation or minimization of environmental impacts was noted in the discussion of impacts. These actions are summarized below:

- Maintain compatible land uses in the vicinity of the airport;
- Acquire land for the runway extension and landside development;
- Utilize pilot controlled lighting on all airfield lighting and visual aids. Utilize timers or motion sensors for apron and automobile parking area lights;
- Adhere to FAA AC 150/5370-10C, Standards for Specifying the Construction of Airports and best management practices to minimize or eliminate impacts to water quality and air quality during construction;

## SUMMARY AND CONCLUSIONS OF ENVIRONMENTAL IMPACTS

Table 6-1 provides a summary of the analysis ratings for the eighteen environmental impact categories with respect to the proposed airport improvements. While some categories indicate a potential impact, they are all estimated to be below the threshold of significance as described in FAA Order 5050.4B. The selected alternatives for the development, offer the least overall environmental impact of all the potential development alternatives evaluated.

Impact Category	Impact Level	Description
Air Quality	Minor	Short-term dust and exhaust
Coastal Resources	None	
Compatible Land Use	None	
Construction Impacts	Minor	Short-term dust, exhaust erosion
DOT Act Section 4(F)	None	
Farmlands	None	
Fish, Wildlife and Plants	None	
Floodplains	None	
Hazardous Material, Pollution Prevention and Cultural Resources	None	
Historical, Architectural, Archaeological and Cultural Resources	None	
Light Emissions and Visual Impacts	None	
Natural Resources and Energy Supply	None	
Noise	Minor	
Secondary (Induced) Impacts	Minor Positive	Economic benefit from airport
Socioeconomic Impacts, Environmental Justice and Children's Environmental Health	Minor Positive	Increased employment
Water Quality	Minor	Storm water runoff
Wetlands	None	
Wild and Scenic Rivers	None	

Based on this evaluation no significant environmental impacts are expected from the projects included in the Airport Development Plan. Although no significant environmental impacts are anticipated, FAA policy may dictate that an Environmental Assessment be prepared for the major projects including the runway extension and runway strengthening. Categorical Exclusion determinations would be appropriate for the remaining projects.