

*PENSACOLA
INTERNATIONAL
AIRPORT*

*MASTER PLAN
UPDATE*

WORKING PAPER 6

*ENVIRONMENTAL
OVERVIEW*

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RS&H



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CHAPTER 6
ENVIRONMENTAL OVERVIEW

6.1 INTRODUCTION

This environmental impacts analysis is based on the alternatives identified in *Working Paper 5, Alternatives and Recommended Master Plan*, along with the environmental impact categories identified in Federal Aviation Administration (FAA) Order 1050.1F, *Environmental Impacts: Policies and Procedures* and Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

Table 6-1 lists the alternatives and environmental resource categories, and indicates if there is the potential for an alternative to affect an environmental category. The following subsections describe the potential environmental effects of each alternative, and compare the various alternatives to one another from an environmental perspective. As *Table 6-1* shows, none of the proposed alternatives has the potential to affect climate; farmlands; or historical, architectural, archeological, and cultural resources. Therefore, those environmental resource categories are not discussed further.

It is important to note that the environmental analysis included in this section is not in and of itself a NEPA document (e.g., Categorical Exclusion, Environmental Assessment, or Environmental Impact Statement).

TABLE 6-1
POTENTIAL ENVIRONMENTAL IMPACTS OVERVIEW

Environmental Category	Alternatives										
	Airside 1	Airside 2	Passenger Terminal 1-4a	Terminal Curbside 1 & 2	Parking 1 & 2	GA 1	GA 2	GA 3	Cargo 1	Cargo 2	Cargo 3
Air Quality (Construction Emissions only)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Biological Resources	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y
Climate	N	N	N	N	N	N	N	N	N	N	N
Coastal Resources	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Department of Transportation Act, Section 4(f)	Y	N	N	N	N	N	N	N	N	N	N
Farmlands	N	N	N	N	N	N	N	N	N	N	N
Hazardous Materials, Solid Waste, and Pollution Prevention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Historical, Architectural, Archeological, and Cultural Resources	N	N	N	N	N	N	N	N	N	N	N
Land Use	Y	Y	N	N	N	N	N	N	N	N	N
Noise and Noise-Compatible Land Use	Y	Y	N	N	N	Y	Y	Y	N	Y	Y
Socioeconomics, Environmental Justice, and Children's Health and Safety Risks	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Visual Effects	Y	Y	N	N	N	N	N	N	N	N	N
Water Resources	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y

Source: RS&H, 2017
Notes: Y = Potential Effect
N = No Potential Effect

6.2 AIRSIDE ALTERNATIVES

The master plan considers two airside alternatives, identified as Airside Alternative 1 and Airside Alternative 2.

Implementation of either of the alternatives has the potential to affect the following environmental categories: air quality; biological resources; coastal resources; Department of Transportation Act, Section 4(f) resources (subsequently referred to as Section 4(f) resources); hazardous materials, solid waste, and pollution prevention; noise and noise-compatible land use; socioeconomics, environmental justice, and children's health; and water resources. The potential impacts are discussed in more detail below.

6.2.1 Air Quality

Implementation of any of the airside alternatives would temporarily increase construction emissions in the area during construction. Emissions would occur from disturbing land (particulate dust emissions), motor vehicles accessing the site and traversing disturbed grounds, and direct emissions from construction equipment. Given the similar size of the alternatives, there would not be a noticeable difference between the alternatives as it relates to potential air quality effects.

Therefore, implementation of either of the airside alternatives would have similar effects to air quality.

6.2.2 Biological Resources

Although there is the potential for federal- and state-listed species to occur in the area of the airport, the existing characteristics of the airfield (paved, mowed and maintained grass) do not provide suitable habitat for those species with the potential to occur within the area. Implementation of either alternative would require some tree clearing.

Overall, implementation of either alternative would have similar effects to biological resources

6.2.3 Coastal Resources

Neither of the airside alternatives intersect a Coastal Barrier Resources System (CBRS). The closest CBRS unit, Basin Bayou (Unit FL-102), is about four miles east of the Airport.¹ In addition, neither of the airside alternatives would affect other environmental resource categories in a manner that would affect coastal resources.

Overall, there would not be a difference between either of the airside alternatives as it relates to potential effects to coastal resources.

6.2.4 Hazardous Materials, Solid Waste and Pollution Prevention

Implementation of either of the airside alternatives would increase the use of hazardous materials commonly used in construction and generation of construction waste. This waste would be managed and disposed of in accordance with applicable regulations.

¹ USFWS (2017, October 3). CBRS Mapper. Retrieved September 2017, from Coastal Barrier Resources System Mapper: <https://www.fws.gov/cbra/maps/Mapper.html>

Overall, there would be no noticeable difference between the airside alternatives as it relates to potential effects to hazardous materials, solid waste, and pollution prevention.

6.2.5 Noise and Noise-Compatible Land Use

Implementation of either alternative has the potential to impact noise and compatible land use near the Airport. Implementation of Airside Alternative 1 would include placing a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) on Runway 26. This could result in a change in runway use percentages. Consequentially, residential properties near Runway 8-26 have the potential to be affected by noise from airplanes passing overhead. Additionally, the extension Runway 17-35 to the south has the potential to affect noise and non-compatible land uses south of the runway.

Implementation of Airside Alternative 2 would have similar impacts to noise and noise-compatible uses. According to aerial imagery, there are residential properties located west of Runway 8-26 that could be impacted by installing a MALSR on Runway 8. This could result in a change in runway use percentages; residential properties near the runway could be impacted.

The extent of the potential effects cannot be determined at this time; therefore, a quantitative comparison between the two alternatives cannot be made.

6.2.6 Section 4(f) Resources

Implementation of Airside Alternative 1 would require the acquisition of a park protected under the Department of Transportation (DOT) Act, Section 4(f). Under this Act, a Section 4(f) evaluation would need to be prepared. The Section 4(f) evaluation would need to determine if a feasible and prudent alternative would avoid the use of Section 4(f) property and describe all possible planning to minimize harm resulting from use of the resource.

Implementation of Airside Alternative 2 would not require the acquisition of a Section 4(f) resource. Therefore, Airside Alternative 1 would have a greater potential effect on Section 4(f) resources than Airside Alternative 2.

6.2.7 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Implementation of either of the airside alternatives would not require the relocation of businesses and/or residences, alteration of surface transportation patterns, the division or disruption of established communities, or the disruption of orderly planned development. Implementation of either of the alternatives may cause the short-term employment of local construction-related contractors and could be considered a positive impact.

There would not be a noticeable difference between either airside alternative as it related to potential socioeconomic, environmental justice, and children's environmental health and safety risks.

6.2.8 Visual Effects

Implementation of either airside alternative would produce light emissions, which has the potential to have an impact on visual effects to residential and commercial properties near the areas where the Runway 8 MALSR would be placed. For both airside alternatives, there is heavy vegetation surrounding

the areas where the MALSRs would be placed. There is a greater number of residential properties surrounding the Airside Alternative 1 area than the Airside Alternative 2 area. Comparatively, there is a public baseball field located next to the end of Runway 8, which could experience a change in potential light emissions.

Overall, due to the vegetative buffer between the MALSR and the surrounding residential properties and ball field, there would be no measurable difference between implementation of either alternative.

6.2.9 Water Resources

Implementation of either alternative would increase the amount of impervious surface at the Airport, which would increase stormwater runoff. Airside Alternative 1 would increase impervious surface by about 1.5 acres. Comparatively, Airside Alternative 2 would increase impervious surface by about two acres. Best Management Practices (BMPs) could be implemented to control stormwater runoff from construction.

Although Airside Alternative 2 would have an additional 0.5-acre of impervious surface than Airside Alternative 1, the difference would be minimal and would not cause a noticeable difference in stormwater runoff.

6.2.10 Conclusions for Airside Alternatives

There are no notable environmental differences between the airside alternatives, with the exception of potential impacts to a Section 4(f) resource. The Section 4(f) evaluation could result in additional time and financial resources to complete by the Airport.

6.3 PASSENGER TERMINAL ALTERNATIVES

The master plan considers four alternatives for passenger terminal development, identified as Passenger Terminal Alternative 1, Passenger Terminal Alternative 2, Passenger Terminal Alternative 3, and Passenger Terminal Alternative 4. Based on preliminary research and in addition to the environmental resource categories previously dismissed, the passenger terminal alternatives would have no potential effect to biological resources, Section 4(f) resources, land use, noise and noise-compatible land use, or water resources. Therefore, these categories are not discussed further for the curbside alternatives.

Implementation of any of the passenger terminal development alternatives has the potential to affect the following environmental categories: air quality; biological resources; coastal resources; hazardous materials, solid waste, and pollution prevention; and socioeconomics, environmental justice, and children's health. The potential impacts are discussed in more detail below.

6.3.1 Air Quality

Implementation of any of the passenger terminal alternatives would temporarily increase construction emissions in the area during construction. Emissions would occur from disturbing land (particulate dust emissions), motor vehicles accessing the site and traversing disturbed grounds, and direct emissions from construction equipment. Given the similar size of the alternatives, there would not be a noticeable difference among the alternatives as it relates to potential air quality effects.

Therefore, implementation of any of the passenger terminal alternatives would have similar effects to air quality.

6.3.2 Coastal Resources

None of the passenger terminal alternatives intersect a CBRS. The closest CBRS unit, Basin Bayou (Unit FL-102), is about four miles east of the Airport.² In addition, none of the passenger terminal alternatives would affect other environmental resource categories in a manner that would affect coastal resources.

Overall, there would not be a difference among any of the passenger terminal alternatives as it relates to potential effects to coastal resources.

6.3.3 Hazardous Materials, Solid Waste, and Pollution Prevention

Implementation of any passenger terminal alternative would increase the use of hazardous materials commonly used in construction and generation of construction waste. This waste would be managed and disposed of in accordance with applicable regulations.

Given the similar extent of the alternatives, there would be no noticeable difference among the passenger terminal alternatives as it relates to potential effects to hazardous materials, solid waste, and pollution prevention.

6.3.4 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks

Implementation of either of the passenger terminal alternatives would not require the relocation of businesses and/or residences, alteration of surface transportation patterns, the division or disruption of established communities, or the disruption of orderly planned development. Implementation of any of the alternatives may cause the short-term employment of local construction-related contractors and could be considered a positive impact.

There would not be a noticeable difference in the implementation of any passenger terminal alternative as it related to potential socioeconomic, environmental justice, and children's environmental health and safety risks.

6.3.5 Conclusions for Passenger Terminal Alternatives

There are no measurable differences between any of the passenger terminal alternatives in the potential impacts to the environmental categories listed above.

6.4 TERMINAL CURBSIDE ALTERNATIVES

The master plan considers two alternatives for the terminal curbside development, identified as Terminal Curbside Alternative 1 and Terminal Curbside Alternative 2. Based on preliminary research and in addition to the environmental resource categories previously dismissed, the curbside alternatives would have no potential effect to biological resources, Section 4(f) resources, land use, noise and noise-compatible land use, or water resources. Therefore, these categories are not discussed further for the terminal curbside alternatives.

² USFWS (2017, October 3). CBRS Mapper. Retrieved September 2017, from Coastal Barrier Resources System Mapper: <https://www.fws.gov/cbra/maps/Mapper.html>

Implementation of either curbside alternative has the potential to affect the following environmental categories: air quality; coastal resources; hazardous materials, solid waste, and pollution prevention; and socioeconomics, environmental justice, and children's health. The potential impacts are discussed in more detail below.

6.4.1 Air Quality

Implementation of either alternative would temporarily increase emissions in the area during construction. Emissions would occur from disturbing land (particulate dust emissions), motor vehicles accessing the site and traversing disturbed grounds, and direct emissions from construction equipment. Given the similar size of the alternatives, there would not be a noticeable difference between alternatives as it relates to potential air quality effects.

Therefore, implementation of either curbside alternative would have similar effects to air quality.

6.4.2 Coastal Resources

Neither of the curbside alternatives intersect a CBRS. The closest CBRS unit, Basin Bayou (Unit FL-102), is about four miles east of the Airport³. In addition, neither of the curbside alternatives would affect other environmental resource categories in a manner that would affect coastal resources.

Overall, there would not be any difference between either curbside alternative as it relates to potential effects to coastal resources.

6.4.3 Hazardous Materials, Solid Waste, and Pollution Prevention

Implementation of either curbside alternative would increase the use of hazardous materials commonly used in construction and generation of construction waste. This waste would be managed and disposed of in accordance with applicable regulations.

Overall, there would be no noticeable difference between either of the curbside alternatives as it relates to potential effects to hazardous materials, solid waste, and pollution prevention.

6.4.4 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Implementation of either of the terminal curbside alternatives would not require the relocation of businesses and/or residences, alteration of surface transportation patterns; the division or disruption of established communities, or the disruption of orderly planned development. Implementation of either of the alternatives may cause short-term employment of local construction-related contractors and could be considered a positive impact. The potential short-term employment effects from either of the alternatives would be similar.

³ USFWS (2017, October 3). CBRS Mapper. Retrieved September 2017, from Coastal Barrier Resources System Mapper: <https://www.fws.gov/cbra/maps/Mapper.html>

There would not be a noticeable difference between the implementation of either of the curbside alternatives as it relates to potential socioeconomic, environmental justice, and children's environmental health and safety risks.

6.4.5 Conclusions for Terminal Curbside Alternatives

There are no measurable differences between the terminal curbside alternatives as relates to the potential impacts to the environmental categories described above.

6.5 PARKING ALTERNATIVES

The master plan considers two alternatives for parking, identified as Parking Alternative 1 and Parking Alternative 2. Based on preliminary research and in addition to the environmental resource categories previously dismissed, the parking alternatives would have no potential effect to Section 4(f) resources; land use; or noise and noise-compatible land use. Therefore, these categories will not be discussed further for these parking alternatives.

Implementation of either parking alternative has the potential to affect the following environmental categories: air quality; biological resources; coastal resources; hazardous materials, solid waste, and pollution prevention; socioeconomics, environmental justice, and children's health; and water resources. These impacts are discussed in more detail below.

6.5.1 Air Quality

Implementation of either parking alternatives would temporarily increase construction emissions in the area during construction. Emissions would occur from disturbing land (particulate dust emissions), motor vehicles accessing the site and traversing disturbed grounds, and direct emissions from construction equipment. Implementation of Parking Alternative 1 would have a greater potential effect to air quality than Parking Alternative 2. Construction of Parking Alternative 1 would require the use of more equipment for a longer duration, which would lead to greater construction emissions than Parking Alternative 2.

6.5.2 Biological Resources

The existing characteristics of most of the area for the parking alternatives (paved, mowed and maintained) do not provide suitable habitat for species with the potential to occur within that area. A portion of Parking Alternative 1 is vegetated and undisturbed. Therefore, there is the potential for various species to occur within this area. Parking Alternative 1 would require the removal of about 0.6-acre of vegetation. Parking Alternative 2 would not require the removal of any vegetation.

Overall, Parking Alternative 1 has the potential for greater effects to biological resources than Parking Alternative 2.

6.5.3 Coastal Resources

Neither of the parking alternatives intersect a CBRS. The closest CBRS unit, Basin Bayou (Unit FL-102), is about four miles east of the Airport.⁴ In addition, neither of the parking alternatives would affect other environmental resource categories in a manner that would affect coastal resources.

Overall, there would not be a difference between either parking alternative as it relates to potential effects to coastal resources.

6.5.4 Hazardous Materials, Solid Waste, and Pollution Prevention

Implementation of either parking alternative would increase the use of hazardous materials commonly used in construction and generation of construction waste. This waste would be managed and disposed of in accordance with applicable regulations.

Parking Alternative 1 would require the clearing of vegetation, whereas Parking Alternative 2 would not. Therefore, Alternative 1 would produce a greater amount of solid waste than Alternative 2.

6.5.5 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Implementation of either of parking alternative would not require the relocation of businesses and/or residences, alteration of surface transportation patterns, the division or disruption of established communities, or the disruption of orderly planned development. Implementation of either of the alternatives may cause the short-term employment of local construction-related contractors and could be considered a positive impact. The potential short-term employment effects from Parking Alternative 1 would be greater than Parking Alternative 2. Parking Alternative 1 would be a greater undertaking than Parking Alternative 2 and would provide more job opportunities for a longer period of time.

6.5.6 Water Resources

Implementation of either of the alternatives would increase the amount of impervious surface at the Airport, which would increase stormwater runoff. Parking Alternative 1 would increase impervious surface by about two acres. Comparatively, Parking Alternative 2 would increase impervious surface by about one-half acre. BMPs could be implemented to control stormwater runoff from construction.

Therefore, Parking Alternative 1 would have a greater potential effect on water resources, specifically stormwater runoff, than Parking Alternative 2.

6.5.7 Conclusions for the Parking Alternatives

There are no measurable environmental differences between the parking alternatives as it relates to potential effects to coastal resources.

⁴ USFWS (2017, October 3). CBRS Mapper. Retrieved September 2017, from Coastal Barrier Resources System Mapper: <https://www.fws.gov/cbra/maps/Mapper.html>

Parking Alternative 1 would have a greater potential effect to air quality; biological resources; hazardous materials, solid waste, and pollution prevention; socioeconomics, environmental justice, and children's health and safety; and water resources.

6.6 GENERAL AVIATION ALTERNATIVES

The master plan identifies three alternatives for development of the general aviation (GA) area at the Airport, identified as GA Alternative 1, GA Alternative 2, and GA Alternative 3. Based on preliminary research and in addition to the environmental resource categories dismissed at the beginning of this Working Paper, none of the proposed GA alternatives would have potential effects to the following categories: Section 4(f) resources, land use, or noise and noise-compatible land use. Therefore, these categories are not discussed further in this section.

Implementation of any GA alternative has the potential to impact the following environmental categories: air quality; biological resources; coastal resources; hazardous materials, solid waste, and pollution prevention; socioeconomics, environmental justice, and children's health; and water resources. These impacts will be discussed in more detail below.

6.6.1 Air Quality

Implementation of any of the three GA alternatives would temporarily increase construction emissions in the area during construction. Emissions would occur from disturbing land (particulate dust emissions), motor vehicles accessing the site and traversing disturbed grounds, and direct emissions from construction equipment. Given the similar size of the GA alternatives, there would not be a noticeable difference between alternatives as it relates to potential air quality effects.

Therefore, implementation of any of the three GA alternatives would have similar effects on air quality.

6.6.2 Biological Resources

The existing characteristics of the all three GA alternative areas (paved, and mowed and maintained grass) do not provide suitable habitat for species with the potential to occur within the area. Under any of the three GA alternatives, there would be minimal disturbance of previously undisturbed and vegetated areas.

Overall, implementation of any of the three GA alternatives would have similar effects to biological resources.

6.6.3 Coastal Resources

None of the GA alternatives intersect a CBRS. The closest CBRS unit, Basin Bayou (Unit FL-102), is about four miles east of the Airport.⁵ In addition, none of the GA alternatives would affect other environmental resource categories in a manner that would affect coastal resources.

Overall, there would not be a difference among any GA alternative as it relates to potential effects to coastal resources.

⁵ USFWS (2017, October 3). CBRS Mapper. Retrieved September 2017, from Coastal Barrier Resources System Mapper: <https://www.fws.gov/cbra/maps/Mapper.html>

6.6.4 Hazardous Materials, Solid Waste, and Pollution Prevention

Implementation of any GA alternative would increase the use of hazardous materials commonly used in construction and generation of construction waste. This waste would be managed and disposed of in accordance with applicable regulations.

Overall, there would be no noticeable difference among the GA alternatives as it relates to potential effects to hazardous materials, solid waste, and pollution prevention.

6.6.5 Noise and Noise-Compatible Land Use

Implementation of any of the GA alternatives would have the potential to increase aviation noise on the east side of the Airport. A difference between the implementation of any of these alternatives as it relates to noise is not anticipated.

6.6.6 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Implementation of any of the GA alternatives would not require the relocation of businesses and/or residences; alteration of surface transportation patterns, the division or disruption of established communities, or the disruption of orderly planned development. Implementation of any of these alternatives may cause the short-term employment of local construction-related contractors and could be considered a positive impact. The potential short-term employment effects from any of the GA alternatives would be similar.

There would not be a noticeable difference in the implementation of any GA alternative as it relates to potential socioeconomic, environmental justice, and children's environmental health and safety risks.

6.6.7 Water Resources

Implementation of any of the GA alternatives would increase the amount of impervious surface at the Airport, which could increase stormwater runoff. GA Alternative 1 would increase impervious surface by about two acres, GA Alternative 2 would increase impervious surface by about three-quarters of an acre, and GA Alternative 3 would increase impervious surface by less than one-half acre. BMPs could be implemented to control stormwater runoff from construction.

Therefore, implementation of GA Alternative 1 would have a greater effect on water resources, specifically stormwater runoff, than the other two GA alternatives, and GA Alternative 3 would have the least effect.

6.6.8 Conclusions for GA Alternatives

There are no measurable differences among the three GA alternatives as it relates to the potential effects to: air quality; biological resources; coastal resources; hazardous materials, solid waste, and pollution prevention; and socioeconomics, environmental justice, and children's environmental health and safety risks.

There would be a measurable difference in the potential impacts to water resources. GA Alternative 1 would have the greatest potential effect to water resources.

6.7 CARGO ALTERNATIVES

The master plan considers three alternatives for cargo development, identified as Cargo Alternative 1, Cargo Alternative 2, and Cargo Alternative 3. Based on preliminary research and in addition to the environmental resource categories previously dismissed, the cargo alternatives would have no potential effect to Section 4(f) resources or land use. Therefore, these categories are not discussed further for the cargo alternatives.

Implementation of any of the three cargo alternatives has the potential to affect the following environmental categories: air quality; biological resources; coastal resources; hazardous materials, solid waste, and pollution prevention; socioeconomics, environmental justice, and children's environmental health and safety risks; and water resources. Implementation of Cargo Alternative 2 and 3 has the potential to affect noise on the east side of the Airport. The potential impacts are discussed in more detail below.

6.7.1 Air Quality

Implementation of any of the three cargo alternatives would temporarily increase emissions in the area during construction. Emissions would occur from disturbing land (particulate dust emissions), motor vehicles accessing the site and traversing disturbed grounds, and direct emissions from construction equipment. Given the similar size of the cargo alternatives, there would not be a noticeable difference among the alternatives as it relates to potential air quality effects.

Therefore, implementation of any of the cargo alternatives would have similar effects to air quality.

6.7.2 Biological Resources

Biological resources include terrestrial and aquatic plant and animal species; game and non-game species; special status species; and environmentally sensitive or critical habitats.

The area of Cargo Alternative 1 is a former residential and commercial development area. This area consists of scattered trees, shrubs, cleared grassland, and previously paved areas. Given the previous disturbance of this area, it is unlikely that many species use the area. Comparatively, portions of Cargo Alternative 2 and Cargo Alternative 3 occur in areas that are previously undisturbed and have dense vegetation. Cargo Alternative 3 would require the greatest amount of tree-clearing activities.

Given the existing condition of the land, it is estimated that Cargo Alternative 3 would have a greater potential effect to biological resources than the other two alternatives. Cargo Alternative 1 is estimated to have the least potential effect to biological resources.

6.7.3 Coastal Resources

Although the Pensacola International Airport is located in the Florida Coastal Management Program area, the cargo alternatives do not intersect a Coastal Barrier Resources System Unit (CBRS). The closest CBRS unit, Basin Bayou (Unit FL-102), is about four miles east of the Airport.⁶ In addition, none of the cargo

⁶ USFWS (2017, October 3). CBRS Mapper. Retrieved September 2017, from Coastal Barrier Resources System Mapper: <https://www.fws.gov/cbra/maps/Mapper.html>

alternatives would affect other environmental resource categories in a manner that would affect coastal resources.

Overall, there would not be a difference among any of the cargo alternatives as it relates to potential effects to coastal resources.

6.7.4 Hazardous Materials, Solid Waste, and Pollution Prevention

Implementation of any of the cargo alternatives would increase the use of hazardous materials commonly used in construction and generation of construction waste. This waste would be managed and disposed of in accordance with applicable regulations.

With regard to solid waste, all cargo alternatives would require the clearing and grubbing of land. Given the existing dense vegetation in the areas of Cargo Alternative 2 and Cargo Alternative 3, implementation of either of these alternatives would produce more solid waste than Cargo Alternative 1.

Based on this preliminary research, implementation of Cargo Alternative 2 has the potential to have the greatest effect on hazardous materials and solid waste than the implementation of Cargo Alternative 1 or Cargo Alternative 2.

6.7.5 Noise and Noise-Compatible Land Use

Implementation of Cargo Alternative 2 and Cargo Alternative 3 would have the potential to increase aviation noise on the east side of the Airport. A difference between the implementation of either of these alternatives as it relates to noise is not anticipated.

6.7.6 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Implementation of any of the cargo alternatives would not require the relocation of businesses and/or residences, alteration of surface transportation patterns, the division or disruption of established communities, or the disruption of orderly planned development. Any of the alternatives may result in short-term employment of local construction-related contractors and could be considered a positive impact to the local economy. The potential short-term employment effects from any cargo alternative would be similar.

There would not be a noticeable difference between the implementation of any of the cargo alternatives as it relates to potential socioeconomic, environmental justice, and children's environmental health and safety risks.

6.7.7 Water Resources

Implementation of any of the cargo alternatives would not affect wetlands or floodplains.⁷⁸ However, implementation of any of the alternatives would increase the amount of impervious surface at the Airport,

⁷ USFWS. (2017). Wetlands Mapper. Retrieved September 2017, from National Wetlands Inventory: <https://www.fws.gov/wetlands/data/mapper.html>

⁸ Federal Emergency Management Agency. (2017). Flood Insurance Rate Map 3710451400K, Effective September 2, 2015. Retrieved September 2017, from FEMA Flood Map Service Center:

which could increase stormwater runoff. Cargo Alternative 1 would increase impervious surface by an estimated 15 acres. Comparatively, Cargo Alternative 2 would increase impervious surface by an estimated seven acres, while Cargo Alternative 3 would increase impervious surface by an estimated 10 acres. Under any alternative, BMPs could be implemented to control stormwater runoff from construction.

In summary, Cargo Alternative 1 would have the greatest effect on water resources, specifically stormwater runoff. Comparatively, Cargo Alternative 2 would have the least effect to water resources.

6.7.8 Conclusions for Cargo Alternatives

There are no measurable differences among the three cargo alternatives as it relates to potential effects to air quality; coastal resources; hazardous materials, solid waste, and pollution prevention; and socioeconomic, environmental justice, and children's health and safety.

There would be a measurable difference between the potential impacts to biological resources and water resources. Cargo Alternative 3 would have the greatest potential effect to biological resources and Cargo Alternative 1 would have the least potential effect to biological resources. Alternatively, Cargo Alternative 1 would have the greatest potential effect to water resources and Cargo Alternative 2 would have the least potential effect to water resources. Additionally, Cargo Alternatives 2 and 3 would have the potential to increase aviation noise on the east side of the Airport.