

5.19 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section presents the analysis of potential irreversible and irretrievable commitments of resources as a result of implementation of the No Action Alternative A, the Sponsor's Proposed Project (Alternative B), and the other action alternatives evaluated in detail in this Final SEIS. Council on Environmental Quality (CEQ) Regulations (40 CFR § 1502.16) require that an environmental consequences discussion in an EIS include identification of any irreversible or irretrievable commitments of resources which would be involved in the Proposed Action or reasonable alternative(s), should they be implemented. An *irreversible or irretrievable commitment of resources* refers to impacts on or losses to resources that cannot be reversed or recovered. Examples include permanent conversion of wetlands and loss of cultural resources, soils, wildlife, agricultural production, or socioeconomic conditions. The losses are permanent. *Irreversible* is a term that describes the loss of future options. It applies primarily to the impacts of use of nonrenewable resources, such as minerals or cultural resources, or to those factors, such as soil productivity, that are renewable only over long periods of time. *Irretrievable* is a term that applies to the loss of production, harvest, or use of natural resources.

5.19.1 FUTURE CONDITIONS: 2024

Alternative A: No Action

Under this alternative, no physical development, consumption of resources, or irreversible and/or irretrievable commitment of resources would occur that are not already occurring under the Existing Conditions (2018). Resources such as electricity, natural gas, and fuel to support aviation activity would continue to be used as they are today.

**Alternative B:
Extend Runway to the Northwest by 1,100 Feet (Sponsor's Proposed Project)**

Alternative B (Sponsor's Proposed Project), includes an extension of Runway 13/31 to the northwest by 1,100 feet for a total runway length of 4,400 feet at the existing runway width of 75 feet. In addition, this alternative would include extension of the parallel taxiway to match the length of the runway; extension of the existing FAA standard 120-foot wide RSA centered on the runway centerline to match the length of the runway; inclusion of FAA standard 240-foot RSA at each end of the runway in addition to the 1,100-foot runway extension;

The proposed extended runway and taxiway for this alternative would require all aircraft to consume some additional fuel to taxi to the extended Runway 13 for departure. As a result, the increase of taxi time due to the implementation of Alternative B would result in some irretrievable increase in demand for Jet A fuel and AvGas, as shown in Table 5.15.3 in Section 5.15, *Energy, Natural Resources, and Sustainable Design*. Due to the minimal increase in taxi distance and the availability of fuel in the region, the identified increase in demand would not exceed the existing supplies. It is not anticipated that there would be a change in the number of aircraft operations at the Airport under Alternative B when compared to Alternative A. As such, there would be no change in the demand for unleaded gasoline and diesel fuel to power GSE under this alternative.

Alternative B would require the commitment of construction labor, which is generally non-renewable and irretrievable. The construction of, and travel to and from, the proposed project site would require the consumption of petroleum products and petroleum-based electrical generation provided by the local power company. Commitment of these resources would not be considered significant.

As a result of implementing Alternative B, proposed construction activities would require the use of asphalt concrete and crushed rock and sand (aggregate). The use of these construction materials would be an irreversible commitment of resources.

As discussed in Section 5.9, *Biological Resources*, and Section 5.10, *Wetlands and Streams*, endangered species habitat and wetland habitat will be irreversibly removed from the project site by implementation of Alternative B. However, mitigation measures would be implemented for Alternative B so that on a regional basis such endangered species habitat and wetland habitat is created and/or enhanced to compensate for the irreversible losses of endangered species and wetland habitat on DVO property.

Alternative D:
Extend Runway to the Northwest by 860 Feet and to the Southeast by 240 Feet

Alternative D includes an extension of Runway 13/31 to the southeast by 240 feet and to the northwest by 860 feet for a total runway length of 4,400 feet at the existing runway width of 75 feet. In addition, this alternative would include extension of the parallel taxiway to match the length of the runway; extension of the existing FAA standard 120-foot wide RSA centered on the runway centerline to match the length of the runway; inclusion of FAA standard 240-foot RSA at each end of the runway in addition to the 1,100-foot runway extension

The proposed extended runway and taxiway for this alternative would require all aircraft to consume some additional fuel to taxi to the extended Runway 13 for departure. As a result, the increase of taxi time due to the implementation of Alternative D would result in some irretrievable increase in demand for Jet A fuel and AvGas, as shown in Table 5.15.5 in Section 5.15, *Energy, Natural Resources, and Sustainable Design*. Due to the minimal increase in taxi distance and the availability of fuel in the region, the identified increase in demand would not exceed the existing supplies. It is not anticipated that there would be a change in the number of aircraft operations at the Airport under Alternative D when compared to Alternative A. As such, there would be no change in the demand for unleaded gasoline and diesel fuel to power GSE under this alternative.

Alternative D would require the commitment of construction labor, which is generally non-renewable and irretrievable. The construction of, and travel to and from, the proposed project site would require the consumption of petroleum products and petroleum-based electrical generation provided by the local power company. Commitment of these resources would not be considered significant.

As a result of implementing Alternative D, proposed construction activities would require the use of asphalt concrete and crushed rock and sand (aggregate). The use of these construction materials would be an irreversible commitment of resources.

As discussed in Section 5.9, *Biological Resources*, and Section 5.10, *Wetlands and Streams*, endangered species habitat and wetland habitat will be irreversibly removed from the project site by implementation of Alternative D. However, mitigation measures would be implemented for Alternative D so that on a regional basis such endangered species habitat and wetland habitat is created and/or enhanced to compensate for the irreversible losses of endangered species and wetland habitat on DVO property.

**Alternative E:
Extend Runway to the Northwest by 300 Feet**

Alternative E includes a shift of Runway 13/31 106 feet to the northwest and extension of Runway 13/31 300 feet to the northwest from 3,300 feet to a total length of 3,600 feet while maintaining the 75-foot width of the runway. In addition, this alternative would include the relocation of existing taxiways accessing south end of Runway 13/31 to new runway end; extension of the parallel taxiway to match the full length of the runway; widening of the existing FAA standard 120-foot wide RSA centered on the runway centerline to match the width of 150 feet centered on the runway centerline; inclusion of FAA standard 300-foot RSA at each end of the runway in addition to the 300-foot runway extension

The proposed extended runway and taxiway for this alternative would require all aircraft to consume some additional fuel to taxi to the extended Runway 13 for departure. As a result, the increase of taxi time due to the implementation of Alternative E would result in some irretrievable increase in demand for Jet A fuel and AvGas, as shown in Table 5.15.7 in Section 5.15, *Energy, Natural Resources, and Sustainable Design*. Due to the minimal increase in taxi distance and the availability of fuel in the region, the identified increase in demand would not exceed the existing supplies. It is not anticipated that there would be a change in the number of aircraft operations at the Airport under Alternative E when compared to Alternative A. As such, there would be no change in the demand for unleaded gasoline and diesel fuel to power GSE under this alternative.

Alternative E would require the commitment of construction labor, which is generally non-renewable and irretrievable. The construction of, and travel to and from, the proposed project site would require the consumption of petroleum products and petroleum-based electrical generation provided by the local power company. Commitment of these resources would not be considered significant.

As a result of implementing Alternative E, proposed construction activities would require the use of asphalt concrete and crushed rock and sand (aggregate). The use of these construction materials would be an irreversible commitment of resources.

A discussed in Section 5.9, *Biological Resources*, and Section 5.10, *Wetlands and Streams*, endangered species habitat and wetland habitat will be irreversibly removed from the project site by implementation of Alternative E. However, mitigation measures would be implemented for Alternative E so that on a regional basis such endangered species habitat and wetland habitat is created and/or enhanced to compensate for the irreversible losses of endangered species and wetland habitat on DVO property.

As the Alternative E is a less extensive construction project than either Alternative B or Alternative D, the extent of irreversible and irretrievable commitments of resources would be less under Alternative E.