



7.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

NEPA-implementing regulations require a review of irreversible and irretrievable effects that result from development of the Proposed Project (40 C.F.R. §§ 1500–1508). Irreversible commitments of resources are those that are expended in a way that cannot be completely restored to their original condition. Irretrievable commitments of resources are those that occur when a resource is removed or consumed and will therefore never be available to future generations for their use. These commitments of resources apply primarily to the use of non-renewable resources such as fossil fuels, water, labor, and electricity. Two categories, Hazardous, Toxic and Radioactive Waste (HTRW) and Human Health and Safety, evaluated in Chapter 4, are not subject to the trade-off between short-term use and long-term productivity and are therefore not evaluated in this section.

Navy Base ICTF construction activities would result in the irretrievable commitment of fossil fuels for electricity and for the operation of vehicles and equipment, as well as labor and fiscal resources that would otherwise be available for other projects. The use of water for dust control during construction activities would be irreversible.

An irreversible and irretrievable loss of existing resources within the Navy Base ICTF study area would also occur as a result of Alternatives 1–7 and the No-Action Alternative. Resources lost would include permanent loss of varying amounts of soil, vegetation, terrestrial and aquatic habitats, waters of the U.S., EFH, coastal resources, and cultural resources.

Irreversible loss of biological resources would occur under the Navy Base ICTF alternatives. These losses would include waters of the U.S. such as tidal salt marsh, freshwater wetlands, and tidal open waters; vegetation including marsh, marine water, and urban development land cover classes; and EFH such as estuarine emergent marsh, oyster reefs/shell banks, intertidal flats, and estuarine water column.

Construction of the Navy Base ICTF under Alternatives 1, 3, 4, 5, 6, and 7 would result in the irretrievable loss of NRHP-listed buildings. The potential for archaeological sites to exist within the Proposed Project or River Center project site is unlikely; however, if an archaeological site that is eligible for the NRHP were to be damaged or destroyed, that site would be irretrievable.

7.1 UNAVOIDABLE ADVERSE IMPACTS

NEPA-implementing regulations (40 C.F.R 1502.1 and 1502.16) require disclosure of those adverse environmental impacts that cannot be avoided with the implementation of mitigation measures. Unavoidable impacts resulting from the Navy Base ICTF alternatives include fugitive dust and exhaust emissions from construction activities, temporary displacement of wildlife species, disturbance of cultural resources, and modifications to scenic resources. In addition, the Navy Base ICTF would result in the introduction of substantial new sources of light and glare that, even after shielding, could disturb nighttime sleep or nighttime activities. The combination of these Project effects as well as the potential for noise, vibration, economic, mobility and access, and community cohesion effects would cause major impacts on neighborhoods and Environmental Justice communities adjacent to the Project.

7.2 RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

NEPA-implementing regulations (40 C.F.R 1502.16) require that an EIS consider the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. For the purposes of this EIS, short-term is defined as the construction period for development of the Navy Base ICTF and long-term is defined as the full operation of the Navy Base ICTF.

Construction of the Navy Base ICTF and its alternatives would result in the short-term uses of physical, natural, and cultural resources. Short-term effects of the Navy Base ICTF and its alternatives would include construction-related impacts such as transportation interruptions, temporary displacement of wildlife individuals, altered visual settings, and a localized increase in noise, nighttime light and glare, and air emissions from vehicles and construction equipment. Long-term environmental impacts include the loss of waters of the U.S.; the loss of essential fish habitat; an increase in localized noise and air emissions from vehicles, trucks, and locomotives; the loss of historic resources; new sources of light or glare; altered visual settings; the potential reduced economic viability of new and existing adjacent businesses; and a disproportionate adverse impact to Environmental Justice communities.

Long-term impacts of the Navy Base ICTF would include increased employment opportunities resulting in economic benefits to the local and regional economy. Other long-term benefits may include improvements to water quality through compliance with state water quality standards.