

CHAPTER 4.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

National Environmental Policy Act Section 101 2(c)(iv) requires a detailed statement on any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented. Irreversible and irretrievable resource commitments are related to the use of non-renewable resources and the effects that the use of those resources have on future generations. Irreversible commitments of resources are those that cannot be reversed except over an extremely long period of time. These irreversible effects primarily result from destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site).

The proposed action would constitute an irreversible or irretrievable commitment of non-renewable or depletable resources, for the materials, time, money, and energy expended during activities implementing the proposed action. Under all alternatives, except for the no-action alternative, there would be irreversible and irretrievable commitments of resources. Particular irreversible and/or irretrievable impacts that would result are noted below.

Consumption of fossil fuels and energy would occur during construction and operation activities. Fossil fuels (gasoline and diesel oil) would be used to power construction equipment and vehicles. Electrical power would be used for lighting and operations. The energy consumed for project construction and operation represents a permanent and non-renewable commitment of these resources.

Materials for construction of new facilities and associated private-sector economic and population growth would be irretrievably committed for the life of the project. Use of these materials represents a further depletion of natural resources. Construction and maintenance activities are considered a long-term non-renewable investment of these resources.

Land that would be physically altered by construction would be committed to the new use for the foreseeable future and would represent a permanent commitment of the land for the life of the project to a developed use and would decrease the amount of open land available for other uses. Access to the acquired lands would be limited to authorized personnel.

The capital and labor required for construction would be an irreversible and irretrievable commitment of the following resources:

- Soil would be displaced by construction and training activities.
- Areas of coral reef habitat would be permanently loss as a result of dredging in Apra Harbor.
- Terrestrial habitat for special status species would be permanently lost on Guam.
- Increases in vessel traffic in Apra Harbor would permanently impact marine biological resources.
- Certain archaeological sites, traditional cultural properties and historical buildings would be permanently removed or disturbed.

In addition to the resources expended during the construction and operation of the support facilities described above, there would be consumptive use of certain non-renewable energy resources required to operate dredge support systems, barges, tugs, trucks, pumps, and equipment. There would also be

commitment of time and money to accomplish the disposal of dredged material. Time and money would be expended in the planning, testing, permitting, and implementation of dredged material disposal. Dredged material disposed of offshore would be irreversibly and irretrievably committed to the disposal process. Disposal of sediment not suitable for ocean disposal at upland sites would not necessarily be irretrievably and irreversibly committed to such use, as the material could be reused for various purposes.