

## **32. Relationship Between Short-term Uses and Long-term Productivity**

### **32.1 Introduction**

The Council on Environmental Quality (CEQ) NEPA regulations (40 CFR 1502.16) require consideration of “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity.” This consideration involves using all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which humans and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. This section of the NEPA regulations recognizes that short-term uses and long-term productivity of the environment are linked, and that opportunities that are acted upon have consequences that could have continuing effects well into the future.

In addition, California Public Resources Code §21001(g) indicates that it is the policy of the State to “require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs...”

The Sites Reservoir Project’s (Project’s) action alternatives (Alternatives A, B, C, C<sub>1</sub>, and D) analyzed in this EIR/EIS would involve construction of new facilities, including a reservoir, dams, recreation areas, roads, a bridge, pumping/generating plants, electrical switchyards, an inlet/outlet structure and tunnel, a spillway and stilling basin, pipelines, a canal connection, an overhead power line, and pipeline intake/discharge facilities. All alternatives also include improvements to existing facilities, such as installation of a new pump at an existing pumping plant, road relocations, dredging and expanding an existing reservoir, and modifications to an existing canal and its facilities. In addition, the alternatives include the demolition of numerous structures within the Sites Reservoir inundation area, the removal of several existing paved and gravel roads, and the inundation of lands to create a reservoir. The specific impacts of the Project alternatives would vary in type, intensity, and duration according to the activities occurring at any given time. Implementation of the Project would require tradeoffs between long-term productivity and short-term uses of the environment.

### **32.2 Short-term and Long-term Effects of the Alternatives**

The expected impacts on environmental resources as a result of constructing, operating, and maintaining Alternatives A, B, C, C<sub>1</sub>, and D are presented in Chapters 6 through 31. The conclusions presented in those chapters were the basis for developing Table 32-1; the table summarizes the anticipated short and long term effects of implementing the Project alternatives.

Table 32-1 lists the potentially significant short-term effects (both beneficial and adverse) and the long-term beneficial and significant unavoidable adverse effects associated with each environmental resource.

In this chapter, “short-term effects” relate to the short-term uses of environmental resources during the construction of the Project, and “long-term effects” relate to the maintenance and enhancement of long-term productivity – in particular, the consistency of the Project with long-term economic, social, regional, and local planning objectives.

It should be noted that the relationship between short-term uses and long-term productivity of the Project would not be appreciably different between the alternatives given their relative similarities.

**Table 32-1**  
**Short-term and Long-term Effects of Alternatives A, B, C, C<sub>1</sub>, and D by Environmental Resource**

Resource	Short-term Effects*		Long-term Effects*	
	Beneficial	Adverse	Beneficial	Adverse
Surface Water Resources	None	None	Average annual CVP and SWP deliveries would increase under all alternatives particularly in dry and critical years to improve dry/critical year water reliability for CVP and SWP customers. Over the long-term averages, National Wildlife Refuge Level 4 supplies for all alternatives would increase in the Sacramento River, San Joaquin River, and Tulare Lake hydrologic regions.	None
Surface Water Quality	None	Impacts associated with instream or adjacent to water course construction (would be minimized through environmental commitments or mitigated to a less-than-significant level).	None	None
Fluvial Geomorphology and Riparian Habitat	None	None	None	None
Flood Control and Management	None	None	Peak flow on Funks and Stone Corral creeks would be managed to decrease the potential for flooding downstream of the Project.	None
Groundwater Resources	None	None	Operation of the Project would increase surface water supply reliability, and lessen groundwater demand/overdraft for all project participants receiving Project supplies.	None

Resource	Short-term Effects*		Long-term Effects*	
	Beneficial	Adverse	Beneficial	Adverse
Groundwater Quality	None	None	None	None
Aquatic Biological Resources	None	Impacts associated with instream or adjacent to water course during construction	Beneficial effects would occur to anadromous species (winter-run and spring-run Chinook salmon) in the Sacramento River related to temperature and flow timing/stabilization.	None
Botanical Resources	None	Impacts within footprint of some facilities to special status plant species and plants that provide habitat for terrestrial species.	None	None
Terrestrial Biological Resources	None	Loss of golden eagle foraging habitat and potential loss of nests from Sites Reservoir and Dams and Recreation Areas.	Beneficial effect on many avian species, including the bald eagle, would result from the filling of Sites Reservoir by creating lacustrine habitat.	Loss of golden eagle foraging habitat and potential loss of nests from Sites Reservoir and Dams and Recreation Areas.
Wetlands and Other Waters	None	Impacts within footprint of some facilities to wetlands and waters that provide habitat for terrestrial species.	None	None
Geology, Minerals, Soils, and Paleontology	None	None	None	Potential impacts to paleontological resources (if encountered)
Faults and Seismicity	None	None	None	None
Cultural/Tribal Cultural Resources	None	Impacts to historical resources of the built environment and traditional/tribal cultural properties.	None	Impacts to historical resources/properties, tribal cultural properties and resources, and dedicated or known cemeteries (if eligible for CRHR or NRHP listing).
Indian Trust Assets	None	None	None	None

Resource	Short-term Effects*		Long-term Effects*	
	Beneficial	Adverse	Beneficial	Adverse
Land Use	None	The inundation of Antelope Valley would eliminate the town of Sites.  Convert Prime Farmland and Unique Farmland at certain Project facility locations to non-agricultural use.	None	Inundation of Antelope/Sites Valley would eliminate the town of Sites.  Convert Prime Farmland and Unique Farmland at certain Project facility locations to non-agricultural use.
Recreation Resources	None	None	Recreational opportunities would be created at new Sites Reservoir.	None
Socioeconomics	Increased job opportunities during construction; increased local spending	None	Creation of small number of local jobs to support Project operations and maintenance.	None
Environmental Justice	None	None	None	None
Air Quality	None	Generate emissions during Project construction of PM <sub>10</sub> , NO <sub>x</sub> , and ROG that would conflict with an applicable Air Quality Plan, contribute substantially to an air quality violation, and/or result in a cumulatively considerable net increase of nonattainment pollutants.	None	None
Climate Change and Greenhouse Gas Emissions	None	GHG emissions would result during Project construction period.	None	GHG emissions would continue during the operation of the Project.
Navigation, Transportation, and Traffic	None	None	None	None
Noise	None	None	None	None
Public Health and Environmental Hazards	None	None	None	None
Public Services and Utilities	None	None	None	None

Resource	Short-term Effects*		Long-term Effects*	
	Beneficial	Adverse	Beneficial	Adverse
Visual Resources	None	None	None	None
Power Production and Energy	None	None	None	None

\*This table lists the potentially significant short-term effects (both beneficial and adverse) associated with each environmental resource, and the long-term beneficial, and significant unavoidable effects (i.e., impacts that would remain significant after the implementation of mitigation measures).

Notes:

CVP = Central Valley Project

GHG = greenhouse gas

NO<sub>x</sub> = oxides of nitrogen

PM<sub>10</sub> = particulate matter less than 10 microns in aerodynamic diameter

ROG = reactive organic gases

SWP = State Water Project

### 32.3 Conclusion

In conclusion, the long-term benefits of providing additional water supply reliability, ecosystem benefits, and improved operational flexibility of the CVP/SWP system as a result of implementing the Project action alternatives would outweigh the short-term and long-term adverse effects on the individual resources evaluated in this EIR/EIS.

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