

fall well below applicable State and Federal standards.

DOE expects only minor unavoidable adverse impacts on public or worker health as a result of the shutdown alternatives. The amount of radioactivity that exposed lakebed sediments would release would be a small fraction of releases at the SRS and would be well below applicable regulatory standards. The hypothetical maximally exposed individual would receive an annual effective dose equivalent of 6.9×10^{-9} millirem, compared to about 300 millirem from natural radiation sources.

Exposure to contaminated lakebed sediments for the onsite worker would be well below established DOE limits.

Implementing either shutdown alternative would result in the recession of L-Lake; eventually L-Lake would reach equilibrium or recede to stream conditions. The recession of the lake would be unavoidable and would result in the loss of up to 1,000 acres (4 square kilometers) of lacustrine habitat. The loss of habitat would displace aquatic species, some of which could

be lost depending on the rate of recession. Federally listed threatened or endangered species, such as the bald eagle, wood stork, and American alligator would be affected directly or by disruptions and loss to benthic and foraging habitat. These species would be able to disperse to more suitable habitats in the area. These impacts would not affect regional populations.

The shutdown of the River Water System would result in minor to nonexistent impacts to soils, groundwater, land use, and aesthetics. A minor impact to groundwater resources would result to support small equipment cooling loads in K- and L-Areas that the River Water System supplies. Groundwater resources in the area would accommodate the withdrawal needed to support these systems.

For the most part, impacts would be similar under both shutdown alternatives. However, under the Preferred Alternative, DOE would preserve the capability to pump water to reservoirs if unforeseen and unacceptable impacts occurred.

4.7 Short-Term Uses and Long-Term Productivity

This section considers the short-term uses of the environment and the maintenance of its long-term productivity. The implementation of the Proposed Action would stop river water flow to L-Lake, but would not involve construction, emissions, decommissioning, or waste generation associated with actions that typically place short-term demands on resources. However, the Proposed Action would affect resources of the L-Lake/Steel Creek ecosystem. The primary and secondary productivity of the lake would decrease from the reduction in nutrient loading that river water inputs had supplied. The standing crop of fish, in particular, would be re-

duced over time, and ultimately would be reduced to small populations of stream fish. Although the productivity of the lake would shift with recession, the decline in productivity would be temporary. An increase in terrestrial productivity would accompany the decline in aquatic productivity; as grasses, forbs, shrubs, and trees recolonized the former lakebed over time, a variety of terrestrial and semiaquatic animal species would inhabit the former lakebed. The regrowth of forested wetlands and uplands would enhance the long-term productivity and diversity of the area.