Appendix J. Fish Rescue Plan During Dewatering

Prior to construction site dewatering fish will be captured and relocated to avoid direct mortality and to minimize take. The following measures are adapted from Chapter Nine of the DFG *California Salmonid Stream Habitat Restoration Manual* and are consistent with those defined as *reasonable and prudent* by NOAA for projects concerning several northern California Evolutionary Significant Units for Coho salmon, Chinook salmon, and steelhead trout. Before dewatering begins, contact information provided by NOAA will be supplied to the biologist on-site.

Fish relocation activities will be performed only by qualified fisheries biologists with a current DFG collectors permit, and who have experience with fish capture and handling. The biologist will remain onsite during the entire process of dewatering. If the site is exposed to warm air temperatures at the time of fish relocation then all capture activities will occur during morning periods. The biologist will periodically measure air and water temperatures and cease activities when water temperature exceeds levels allowed by DFG and NOAA.

Methods to be used for capturing fish will include seining and dip netting; electrofishing is not permissible because the site could contain listed fish species of fish that may be harmed by that method. However, the habitat is generally not complex at the construction site so seining should be effective.

The biologist will begin to capture fish before pumping begins, if the site conditions allow. If the site is too deep to seine, the biologist will begin capturing fish with a dip-net as the water level is reduced. If pumping is required to reduce water depths for the removal of fish, the biologist will construct a mesh net around the pump area so that fish are not entrained into the pump.

The biologist will minimize handling of salmonids, and when handling is necessary the biologist will always wet hands or nets prior to touching fish. Captured fish will be held in a container with a lid that contains cool, shaded

water that will be continuously aerated with a battery-powered external bubbler. Fish will not be subjected to jostling or excess noise, will no be overcrowded in the containers, and water temperature in the container will not be allowed to exceed levels allowed by DFG and NOAA. Two holding containers will be available to segregate young-of-the-year fish from larger fish to avoid predation. Fish are not expected to be abundant, but if they are the biologist will periodically cease capture and relocate fish to the pre-selected release location. Fish will not be removed from the container until the time of release.

An different appropriate release location will be selected in advance for different life-stages of the captured species, and the biologist will release fish only in those pre-determined locations. These release locations will be selected on the basis of having water temperature similar to that of the capture location, and having ample habitat. Fish will be unable to enter the work area because of the temporary cofferdams. Adult salmonids migrating upstream will be placed upstream of the construction site; juvenile fish migrating downstream will be released downstream of the construction site.

For all captured individuals the biologist will identify species, estimate year-classes, and record estimated numbers at the time of release. The fish will not be anesthetized or measured. A report summarizing the fish relocation activities will be submitted to DFG and NOAA soon after the relocation effort.