Nimbus Hatchery Fish Passage Project
Summary of Project Alternatives

Purpose of the Project: To create and maintain a reliable system of collecting adult fish for use in the Nimbus Hatchery.

Need for the Project:

- Meet hatchery mitigation goals
- Address damage and deterioration of weir structure
- Reduce operational impacts to sensitive species
- Address worker and public safety concerns

The EIS/EIR will consider the following alternatives:

- Alternatives 1A, 1B, and 1C—Modified fishway and removal of the diversion weir; fishing closures would vary under each of these alternatives as follows:
    - Alternative 1A—Fishing closure within 250 feet of the new fishway entrance
    - Alternative 1B—Fishing closure from the Hazel Avenue Bridge to Nimbus Dam
    - Alternative 1C—Fishing closure from the USGS Cable to Nimbus Dam
- Alternative 2—Replacement of the diversion weir
- No Action Alternative—Continuance of existing conditions

Alternative 1A: Modified fishway and removal of the diversion weir with fishing closure within 250 feet of the new fishway entrance

Alternative 1A involves the construction of a fishway from the Nimbus Fish Hatchery to the stilling basin below Nimbus Dam and removing the existing diversion weir. The fishway would consist of three sections: a concrete flume fishway, a pool and drop fish ladder, and a rock-lined trapezoidal channel. Two bridges across the fishway would provide continued access to the river. Construction and evaluation of the fishway is expected to take two years. The existing weir would be removed in the third year after experience with the operations of the new fishway is gained. Temporary construction impacts include closure of portions of the hatchery parking lot, potential re-routing of the American River Parkway bike trail, and restrictions on vehicle and foot traffic in the Nimbus Shoals area. Fishing would be closed year-round within 250 feet of the new fishway entrance as well as 250 feet within the hatchery outfall fishway; both of these closures are consistent with current Department of Fish and Game Code. In addition, a seasonal fishing closure from the USGS Cable to the Hazel Avenue Bridge from September 15 through December 31 would remain in effect, consistent with current Department of Fish and Game Code. Annual operations and maintenance (O&M) activities and cost would be similar or slightly increased compared to typical O&M of the existing weir.

Alternative 1B: Modified fishway and removal of the diversion weir with fishing closure from the Hazel Avenue Bridge to Nimbus Dam

Alternative 1B would be the same as Alternative 1A except for the fishing closure. Under Alternative 1B, a year-round fishing closure would extend from the Hazel Avenue Bridge to the Nimbus Dam. The area 250 feet within the hatchery outfall fishway would remain closed year-round, consistent with current Department of Fish and Game Code. In addition, a seasonal fishing closure from the USGS Cable to the Hazel Avenue Bridge from September 15 through December 31 would remain in effect, consistent with current Department of Fish and Game Code.

Alternative 1C: Modified fishway and removal of the diversion weir with fishing closure from the USGS Cable to Nimbus Dam

Alternative 1C would be the same as Alternative 1A except for the fishing closure. Under Alternative 1C, a year-round fishing closure would extend from the USGS Cable to the Nimbus Dam.

Alternative 2: Replace the diversion weir

Alternative 2 involves replacing the diversion weir with a new diversion 750 foot long, 52 foot wide concrete weir immediately upstream of the existing diversion weir. This alternative would add additional entrances to the fish ladder and continue to use the majority of the existing ladder. Six 15 foot wide bypass bays would allow O&M without lowering river flow. This alternative would not allow adult fish passage. Construction would take two years and would result in temporary closure of portions of the hatchery parking lot. No changes in fishing regulations are associated with this alternative. Fishing would remain closed year-round within 250 feet of the fish ladder entrance as well as 250 feet within the hatchery outfall fishway. In addition, a seasonal fishing closure from the USGS Cable to the Hazel Avenue Bridge from September 15 through December 31 would remain in effect. O&M activities and cost would increase compared to typical O&M of the existing weir.

No Action Alternative

The no action alternative continues using the diversion weir. Annual river flow reductions would be required seasonally to install and remove the weir superstructure and as necessary for O&M. Flows over 50,000 cubic feet per second and flood events would likely cause major damage to the weir foundation and superstructure; replacement would eventually be necessary. No changes in fishing regulations are associated with this alternative. Fishing would remain closed year-round within 250 feet of the fish ladder entrance as well as 250 feet within the hatchery outfall fishway. In addition, a seasonal fishing closure from the USGS Cable to the Hazel Avenue Bridge from September 15 through December 31 would remain in effect. Annual operations and maintenance (O&M) activities and cost would be similar or slightly increased compared to typical O&M of the existing weir.