



— BUREAU OF —  
RECLAMATION

Long-Term Operation – Initial Alternatives

# **Appendix G – Specific Facility and Water Operations Deconstruction**

Central Valley Project, California

Interior Region 10 – California-Great Basin

## **Mission Statements**

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Long-Term Operation – Initial Alternatives

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# 1. Introduction

This facility and water operations deconstruction appendix analyzes potential stressors and effects associated with Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR) actions for facility maintenance and for water supplies that are layered over an additive to the seasonal operations deconstruction described in Appendix D. These actions include local effects from the maintenance of specific facilities not addressed in other biological opinions and specialized water operations from water transfers and new storage facilities that are not currently completed but may be completed and operated within the potential term of this action.

This appendix is organized first by action and then by species to maximize the modularity of effects analyses. Where effects are local to a facility, for example, herbicide application, those effects are addressed directly. Where effects include hydrologic alteration, Reclamation applied the same methodology as Appendix D for the applicable time periods. Effects addressed in seasonal operations are not repeated here. Facility and water operations actions include:

- Clear Creek
  - Spring Creek Debris Dam
- Delta
  - Water Transfers
  - Agricultural Barriers
  - Delta Cross Channel Maintenance Addressed in Seasonal Operations,
  - Barker Slough
  - Contra Costa Water Agency Facilities
  - Suisun Marsh Preservation Agreement

Where actions are intended to address effects on listed species and their critical habitats, and are a common component to all initial alternatives, those are addressed as conservation measures in Appendix H.

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## 2. Spring Creek Debris Dam, Sacramento River

Operation of Spring Creek Debris Dam controls debris and contaminated runoff from Iron Mountain Mine before it enters the Spring Creek Power Plant tailrace and then Keswick Reservoir. The mine was designated a Superfund site in 1983. Reclamation actions protect the Sacramento River system from heavy metal pollution from Spring Creek and adjacent watersheds through dilution flows and avoiding buildup of metals within Keswick Reservoir.

### 2.1 Winter-Run Chinook Salmon

**Adults** may be migrating and holding in the Sacramento River when releases from the Spring Creek Debris Dam may occur.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may decrease from lower concentrations of contaminants in the system, and the avoidance of pulses of high concentrations of contaminants.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

Spawning habitat stressors may not change.

Competition, introgression, and broodstock removal stressors may not change.

**Eggs** are present in Sacramento River; however, undiluted releases are rare in the summer.

In-river fishery and trampling stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding and dewatering stressors may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Sedimentation and gravel quantity stressors may not change.

Redd quality stressors may not change.

Predation risk stressors may not change.

**Juveniles** are rearing and migrating in the Sacramento River.

Toxicity and contaminants stressors may decrease from lower concentrations of contaminants in the system.

Stranding risk stressors may not change.

Outmigration cues stressors may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may not change.

Refuge habitat stressors may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may not change.

## 2.2 Spring-Run Chinook Salmon

**Adults** are migrating, holding, and spawning in Clear Creek.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may decrease from fewer contaminants in the system.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

Spawning habitat stressors may not change.

Competition, introgression, and broodstock removal stressors may not change.

**Eggs** are present in Clear Creek.

In-river fishery and trampling stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding and dewatering stressors may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Sedimentation and gravel quantity stressors may not change.

Redd quality stressors may not change.

Predation risk stressors may not change.

**Juveniles** are rearing and migrating in Clear Creek.

Toxicity and contaminants stressors may decrease from fewer contaminants in the system.

Stranding risk stressors may not change.

Outmigration cues stressors may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may not change.

Refuge habitat stressors may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may not change.

**Yearlings** are rearing and migrating in Clear Creek.

Toxicity and contaminants stressors may decrease from fewer contaminants in the system.

Stranding risk stressors may not change.

Outmigration cues stressors may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may not change.

Refuge habitat stressors may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may not change.

## 2.3 Steelhead

**Adults** are migrating, holding, and spawning in the Sacramento River.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may decrease from fewer contaminants in the system.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

Spawning habitat stressors may not change.

Competition, introgression, and broodstock removal stressors may not change.

**Eggs** are present in the Sacramento River.

In-river fishery and trampling stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding and dewatering stressors may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Sedimentation and gravel quantity stressors may not change.

Redd quality stressors may not change.

Predation risk stressors may not change.

**Juveniles** are rearing and migrating in the Sacramento River.

Toxicity and contaminants stressors may decrease from fewer contaminants in the system.

Stranding risk stressors may not change.

Outmigration cues stressors may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may not change.

Refuge habitat stressors may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may not change.

## 2.4 Green Sturgeon

**Adults** are migrating, spawning, and holding in the upper Sacramento River during this period.

Harvest stressors may not change.

Flow stressors may not change.

Water temperature stressors may not change.

Toxicity and dissolved oxygen stressors may increase or decrease due to operations of the Spring Creek Debris Dam.

Barriers stressors may not change.

Spawning habitat stressors may not change.

**Eggs** are present in the upper Sacramento River.

Flow stressors may not change.

Water temperature stressors may not change.

Toxicity and dissolved oxygen stressors may increase or decrease due to operations of the Spring Creek Debris Dam.

Incubation habitat stressors may not change.

Predation risk stressors may not change.

**Larvae** are present in the upper Sacramento River.

Flow stressors may not change.

Water temperature stressors may not change.

Toxicity and dissolved oxygen stressors may increase or decrease due to operations of the Spring Creek Debris Dam.

Entrainment risk stressors may not change.

Rearing habitat stressors may not change.

Food stressors may not change.

Predation risk stressors may not change.

**Juveniles** are present in the upper Sacramento River.

Flow stressors may not change.

Water temperature and salinity stressors may not change.

Toxicity and dissolved oxygen stressors may increase or decrease due to operations of the Spring Creek Debris Dam.

Entrainment risk stressors may not change.

Rearing habitat stressors may not change.

Food stressors may not change.

Predation risk stressors may not change

## 3. Agricultural Barriers, Delta

DWR installs agricultural barriers between April and July to improve water levels and support diversions for Delta water users while operating the State Water Project (SWP).

The barriers are installed using large angular rocks and include multiple 48-inch diameter corrugated metal culverts. The culverts are equipped with flap gates on their upstream ends that can be tidally operated. Tidal operation allows the culverts to be completely closed on ebb tides to retain water upstream of the barriers, and opened on flood tides to allow water to flow through them, to upstream. The barriers' large center section (weir) is lower than their abutments and allows water on flood tides to pass over them, to upstream. On ebb tides, water flows downstream over the large center section (weir) of the barriers until the upstream water elevation reaches the elevation of the barriers' weir, at which point the barriers behave as low head dams with only minimal river flow passing through the rock.

Middle River has been shown through acoustic telemetry studies to not be a migratory pathway for out migrants.

### 3.1 Winter-Run Chinook Salmon

**Adults** are present from the winter through the spring in the Delta.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present from the winter to the spring in the Delta.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Stressors on outmigration cues may not change since most fish emigrate prior to installing barriers.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may decrease due to blockage from the barriers

Stressors on refuge habitat may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may not change.

## 3.2 Spring-Run Chinook Salmon

**Adults** are migrating in the Delta.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are rearing and migrating during this period.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Outmigration cues stressors may not change since most fish emigrate prior to installing barriers.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may decrease due to blockage from the barriers.

Refuge habitat stressors may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may not change.

**Yearlings** are migrating during this period.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Outmigration cues stressors may not change since most fish emigrate prior to installing barriers.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may decrease due to blockage from the barriers.

Refuge habitat stressors may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may not change.

## 3.3 Steelhead

**Adults** are present in the winter and summer in the Delta.

Toxicity and contaminants stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may reduce due to improved water levels and water circulation in the Delta.

Refuge habitat stressors may not change.

Food availability stressors may not change.

Predation and competition stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present in spring and fall in the Delta.

Toxicity and contaminants stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may reduce due to improved water levels and water circulation in the Delta.

Refuge habitat stressors may not change.

Food availability stressors may not change.

Predation stressors may not change.

Competition stressors may not change

### 3.4 Green Sturgeon

**Adults** are present in the Delta.

Harvest stressors may not change.

Food stressors may not change.

Water temperature and salinity stressors may not change.

Toxicity and dissolved oxygen stressors may not change.

Migration habitat stressors may not change.

Foraging habitat stressors may not change.

Predation risk stressors may not change.

**Larvae** are not present in the Delta.

**Eggs** are not present in the Delta.

**Juveniles** are rearing in the Delta.

Flow stressors may not change.

Water temperature and salinity stressors may not change.

Toxicity and dissolved oxygen stressors may not change.

Entrainment risk stressors may not change.

Rearing habitat stressors may not change.

Food stressors may not change.

Predation risk stressors may not change.

### 3.5 Delta Smelt

**Eggs** are not present and **larvae** are present.

Water temperature stressors may not change.

Food availability and visibility stressors may or may not change.

Predation risk stressors may increase due to the operation of barrier.  
Entrainment and transport direction risk stressors may increase due to the operation of barrier culverts.

**Juvenile Delta smelt** are present.

Toxicity from harmful algal blooms stressors may not change.  
Water temperature stressors may not change.  
Food availability and quality stressors may not change.  
Predation stressors may increase due to the operation of barrier.  
Entrainment risk and transport direction stressors may increase due to the operation of barrier culverts.

**Adult Delta smelt** are present

Toxicity stressors may not change.  
Water temperature stressors may not change.  
Food availability and visibility stressors may not change.  
Predation stressors may increase due to the operation of barrier.  
Entrainment stressors may increase due to the operation of barrier culverts.  
Size and location of low salinity zone stressors may not change.

### **3.6 Longfin Smelt**

**Eggs and larvae longfin smelt** are present.

Entrainment stressors (only larvae) may increase due to the operation of barrier culverts.  
Outflow stressors may increase due to the operation of barrier culverts.  
Salinity stressors may increase due to the operation of barrier culverts.  
Temperature stressors may not change.  
Habitat loss stressors may not change.  
Predation stressors may increase due to the operation of barrier.  
Toxins stressors may not change.

**Juvenile longfin smelt** are present.

Entrainment stressors may increase due to the operation of barrier culverts.  
Outflow stressors may increase due to the operation of barrier culverts.  
Salinity stressors may increase due to the operation of barrier culverts.  
Temperature stressors may not change.  
Habitat loss stressors may not change.  
Food availability stressors may not change.  
Predation stressors may increase due to the operation of barrier.  
Toxins stressors may not change.

**Adult longfin smelt** are present.

Entrainment stressors may increase due to the operation of barrier culverts.  
Outflow stressors may increase due to the operation of barrier culverts.  
Salinity stressors may increase due to the operation of barrier culverts.



Water temperature stressors may not change.

Habitat loss stressors may not change.

Food availability stressors may not change.

Predation stressors may increase due to the operation of barrier.

Toxins stressors may not change.

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## 4. North Bay Aqueduct, Delta

The North Bay Aqueduct is an underground pipeline that runs from Barker Slough in the Delta to Cordelia Forebay in western Fairfield. From the Cordelia Forebay, water is pumped to Napa County, Vallejo, and Benicia. The size of the underground pipeline varies from 72 inches at Barker Slough to 54 inches at Cordelia Forebay. The purpose of the project is to support operational flexibility and to reduce effects on listed species and critical habitats in Barker Slough. The North Bay Aqueduct is operated by DWR.

### 4.1 Winter-Run Chinook Salmon

**Adults** are present from the winter through the summer in the Delta.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present from the fall to the spring in the Delta.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Stressors on outmigration cues may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may increase; however, the diversion is screened.

Stressors on refuge habitat may not change.

Food availability and quality stressors may increase due to water exports.

Predation and competition stressors may not change.

### 4.2 Spring-Run Chinook Salmon

**Adults** are present in the Delta.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present in the Delta.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Stressors on outmigration cues may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may increase; however, the diversion is screened.

Stressors on refuge habitat may not change.

Food availability and quality stressors may increase due to water exports.

Predation and competition stressors may not change.

**Yearlings** are present in the Delta.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Stressors on outmigration cues may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may increase; however, the diversion is screened.

Stressors on refuge habitat may not change.

Food availability and quality stressors may increase due to water exports.

Predation and competition stressors may not change.

## 4.3 Steelhead

**Adults** are present in the winter and summer in the Delta.

Toxicity and contaminants stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may increase; however, the diversion is screened.

Refuge habitat stressors may not change.

Food availability stressors may increase due to water exports.

Predation and competition stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present in spring and fall in the Delta.

Toxicity and contaminants stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may increase; however, the diversion is screened.

Refuge habitat stressors may not change.

Food availability stressors may increase due to water exports.

Predation stressors may not change.  
Competition stressors may not change.

## 4.4 Green Sturgeon

**Adults** are present in the Delta.  
Harvest stressors may not change.  
Food stressors may increase due to water exports.  
Water temperature and salinity stressors may not change.  
Toxicity and dissolved oxygen stressors may not change.  
Migration habitat stressors may not change.  
Foraging habitat stressors may not change.  
Predation risk stressors may not change.

**Larvae** are not present in the Delta.

**Eggs** are not present in the Delta.

**Juveniles** are rearing in the Delta.  
Flow stressors may not change.  
Water temperature and salinity stressors may not change.  
Toxicity and dissolved oxygen stressors may not change.  
Entrainment risk stressors may not change.  
Rearing habitat stressors may not change.  
Food stressors may increase due to water exports.  
Predation risk stressors may not change.

## 4.5 Delta Smelt

**Eggs** are not present and **larvae** are present.  
Water temperature stressors may not change.  
Food availability and visibility stressors may increase due to water exports.  
Predation risk stressors may not change.  
Entrainment and transport direction risk stressors may increase due to water exports.

**Juvenile Delta smelt** are present.  
Toxicity from harmful algal blooms stressors may not change.  
Water temperature stressors may not change.  
Food availability and quality stressors may increase due to water exports.  
Predation stressors may not change.  
Entrainment risk and transport direction stressors may increase due to water exports; however, the diversion is screened.

**Adult Delta smelt** are present.  
Toxicity stressors may not change.

Water temperature stressors may not change.  
Food availability and visibility stressors may increase due to water exports.  
Predation stressors may not change.  
Entrainment stressors may increase due to water exports; however, the diversion is screened.  
Size and location of low salinity zone stressors may not change.

## **4.6 Longfin Smelt**

**Eggs and larvae longfin smelt** are present.  
Entrainment stressors (only larvae) may not change.  
Outflow stressors may not change.  
Salinity stressors may not change.  
Temperature stressors may not change.  
Habitat loss stressors may not change.  
Predation stressors may not change.  
Toxins stressors may not change.

**Juvenile longfin smelt** are present.  
Entrainment stressors may increase due to water exports; however, the diversion is screened.  
Outflow stressors may not change.  
Salinity stressors may not change.  
Temperature stressors may not change.  
Habitat loss stressors may not change.  
Food availability stressors may increase due to water exports.  
Predation stressors may not change.  
Toxins stressors may not change.

**Adult longfin smelt** are present.  
Entrainment stressors may increase due to water exports; however, the diversion is screened.  
Outflow stressors may not change.  
Salinity stressors may change.  
Temperature stressors may not change.  
Habitat loss stressors may not change.  
Food availability stressors may increase due to water exports.  
Predation stressors may not change.  
Toxins stressors may not change.

## 5. Clifton Court Forebay Weed Management, Delta

Aquatic weed management is needed to prevent potential damage to SWP equipment through cavitation at the pumps and excessive weight on the Skinner Delta Fish Protection louver array that could cause collapse of the structure. Additionally, dense stands of aquatic weeds provide cover for unwanted predators that prey on listed species within the Clifton Court Forebay.

### 5.1 Winter-Run Chinook Salmon

**Adults** are present from the winter through the summer in the Delta.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present from the fall to the spring in the Delta.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Stressors on outmigration cues may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may not change.

Stressors on refuge habitat may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may decrease due to weed removal.

### 5.2 Spring-Run Chinook Salmon

**Adults** are present in the Delta.

In-river fishery and poaching stressors may not change.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogen stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present in the Delta.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Stressors on outmigration cues may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may not change.

Stressors on refuge habitat may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may decrease due to weed removal.

**Yearlings** are present in the Delta.

Toxicity and contaminants stressors may not change.

Stranding risk stressors may not change.

Stressors on outmigration cues may not change.

Water temperature and dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may not change.

Stressors on refuge habitat may not change.

Food availability and quality stressors may not change.

Predation and competition stressors may decrease due to weed removal.

## 5.3 Steelhead

**Adults** are present in the winter and summer in the Delta.

Toxicity and contaminants stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may decrease due to less aquatic weeds.

Refuge habitat stressors may not change.

Food availability stressors may not change.

Predation and competition stressors may decrease due to weed removal.

Competition stressors may not change.

**Eggs** are not present in the Delta.

**Juveniles** are present in spring and fall in the Delta.

Toxicity and contaminants stressors may not change.

Water temperature stressors may not change.

Dissolved oxygen stressors may not change.

Pathogens and disease stressors may not change.

Entrainment risk stressors may decrease due to less aquatic weeds.

Refuge habitat stressors may not change.



Food availability stressors may not change.  
Predation stressors may decrease due to weed removal.  
Competition stressors may not change.

## **5.4 Green Sturgeon**

**Adults** are present in the Delta.  
Harvest stressors may not change.  
Food stressors may not change.  
Water temperature and salinity stressors may not change.  
Toxicity and dissolved oxygen stressors may not change.  
Migration habitat stressors may not change.  
Foraging habitat stressors may not change.  
Predation risk stressors may not change.

**Larvae** are not present in the Delta.

**Eggs** are not present in the Delta.

**Juveniles** are rearing in the Delta.  
Flow stressors may not change.  
Water temperature and salinity stressors may not change.  
Toxicity and dissolved oxygen stressors may not change.  
Entrainment risk stressors may not change.  
Rearing habitat stressors may not change.  
Food stressors may not change.  
Predation risk stressors may decrease due to less aquatic weeds.

## **5.5 Delta Smelt**

The U.S. Fish and Wildlife Service (USFWS) does not consider Clifton Court Forebay habitat for Delta smelt. Therefore, once Delta smelt enter the forebay, they are considered lost.

## **5.6 Longfin Smelt**

Reclamation considers longfin smelt similar to Delta smelt.