

Project Background

The U.S. Department of the Interior, Bureau of Reclamation (Reclamation) is the federal lead agency overseeing design and construction of the Battle Creek Salmon and Steelhead Restoration Project (Restoration Project). The Restoration Project is identified in the CALFED Bay-Delta Program (CALFED) Programmatic Record of Decision (ROD) (August 2000) (CALFED Bay-Delta Program 2000b) as a fish passage action in support of the CALFED Ecosystem Restoration Program. The proposed Restoration Project presents an opportunity to reestablish approximately 42 miles of prime salmon and steelhead habitat on Battle Creek, plus an additional 6 miles of habitat on its tributaries (Figure 1-1). Restoration would be accomplished primarily through the modification of the Battle Creek Hydroelectric Project (Federal Energy Regulatory Commission [FERC] Project No. 1121) (Hydroelectric Project) facilities and operations (Figure 1-2), including instream flow releases. Any proposed changes to the Hydroelectric Project trigger the need for the Pacific Gas and Electric Company (PG&E) to seek a license amendment from FERC.

Reclamation, the federal lead agency, is responsible for ensuring overall National Environmental Policy Act (NEPA) compliance, while FERC, a cooperating federal agency, is responsible for ensuring that proposed changes to the Hydroelectric Project comply with NEPA prior to issuing a license amendment for the Hydroelectric Project. Because this FERC license requires Clean Water Act (CWA) (33 USC 1251 et seq.) Section 401 water quality certification from the California State Water Resources Control Board (SWRCB), the SWRCB is the state lead agency responsible for ensuring California Environmental Quality Act (CEQA) compliance.

A detailed description of the proposed action for the Restoration Project is presented in Chapter 2, “Project Description.”

Action-Specific Implementation Plan Purpose

This Restoration Project action-specific implementation plan (ASIP) serves as the biological assessment (BA) for compliance with Section 7 of the federal

Endangered Species Act (ESA) and the Natural Community Conservation Plan (NCCP) for compliance with the California Endangered Species Act (CESA) and the California Natural Community Conservation Planning Act (NCCPA). The ASIP tiers from the programmatic CALFED Multi-Species Conservation Strategy (MSCS) and is consistent with the requirements of other programmatic CALFED ESA, CESA, and NCCPA compliance documents and agreements (see Tiering from CALFED Programmatic Documents, below).

The purpose of this ASIP is to present the information necessary for:

- U.S. Fish and Wildlife Service (USFWS) to issue incidental take authorization under Section 7 of the ESA for one species covered under the CALFED USFWS Programmatic biological opinion (BO) (valley elderberry longhorn beetle);
- USFWS to concur that the Restoration Project will not likely adversely affect one species (bald eagle);
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) to issue incidental take authorizations under Section 7 of the ESA for three species covered under the CALFED NOAA Fisheries Programmatic BO (Central Valley spring-run Chinook salmon, Sacramento River winter-run Chinook salmon, and Central Valley steelhead);
- pursuant to Section 305(b)(2) of the Magnuson-Stevens Act, for NOAA Fisheries to issue conservation recommendations necessary to address potential adverse effects of the Restoration Project on Essential Fish Habitat (EFH) for three anadromous fish species (Central Valley spring-run, Sacramento River winter-run, and Central Valley fall/late fall–run Chinook salmon); and
- the California Department of Fish and Game (DFG) may, if requested¹, issue incidental take authorization under Section 2835 of the NCCPA for ten species covered under the CALFED Programmatic NCCP Determination (Central Valley spring-run, Sacramento River winter-run, Central Valley steelhead, American peregrine falcon, bald eagle, Cooper’s hawk, little willow flycatcher, osprey, yellow-breasted chat, and northwestern pond turtle).

Reclamation, as the federal lead agency overseeing the design and construction of the Restoration Project, requests these incidental take authorizations for Restoration Project construction and the adaptive management plan. FERC, as a cooperating agency responsible for ensuring that proposed changes to the Hydroelectric Project comply with the federal ESA and CESA prior to issuing a license amendment for the Hydroelectric Project, requests these incidental take authorizations for continued operation of the Hydroelectric Project. These incidental take authorizations are requested for the 30-year term of CALFED.

An NCCP typically requires the preparation of an implementation agreement to be signed by the project participants and DFG. The implementation agreement defines the obligations of the signatories and other parties, provides legally

¹ This text was changed from the original Draft ASIP (April 2004) at the request of DFG on November 18, 2004.

binding and enforceable assurances that the plan will be implemented and adequately funded, and provides a process for amendment of the plan. The Restoration Project has several unique upfront commitments that provide assurances. If an NCCP permit is requested², DFG will not require a separate implementation agreement for this ASIP, as the following documents bind the parties to their respective obligations and ensure that the action is implemented in accordance with the MSCS:

- The Restoration Project is supported by all signatories to the 1999 MOU (Appendix A), including Reclamation, DFG, USFWS, NOAA Fisheries, and PG&E.
- The ASIP identifies adequate compensation measures and appropriate commitments for addressing project-related effects on biological resources and water quality.
- The Burton Ranch conservation easement, located in the Battle Creek project area and held by The Nature Conservancy, will be used to offset wetland, woody riparian, oak woodland, chaparral, and grassland habitat losses relating to Restoration Project construction.
- As required by the FERC license amendment for the Hydroelectric Project, the Restoration Project will include the MOU prescribed flows for North Fork and South Fork Battle Creek and follow the facility design and maintenance specifications, as described in the MOU (Appendix A) and the Facility Monitoring Plan (Appendix B).
- The Section 401 water quality certification will ensure that long-term operations of the Hydroelectric Project comply with state water quality standards.
- A funded Adaptive Management Plan (Appendix C) will be implemented to ensure the success of the Restoration Project by the Adaptive Management Policy Team specified in the MOU, which includes the state and federal biological resource agencies and PG&E.
- A Water Acquisition Fund is a source of funding from CALFED included in the MOU to facilitate future purchases of additional flow releases in Battle Creek, should they be needed.
- An Adaptive Management Fund is a private source of funding committed under a separate MOU with The Nature Conservancy to be used for possible future changes to the facilities or augmenting flows consistent with terms of the Restoration Project MOU.

Section 305(b)(2)–(4) of the Magnuson-Stevens Act requires federal action agencies (e.g., Reclamation) to consult with NOAA Fisheries on any action authorized, funded, or undertaken that may adversely affect Essential Fish Habitat (EFH). Battle Creek is EFH for winter-run Chinook salmon, spring-run Chinook salmon, and fall/late fall–run Chinook salmon. For this project, the EFH assessment is integrated into this ASIP, and the EFH consultation process will be integrated into the NOAA Fisheries BO for the project. NOAA Fisheries will provide EFH Conservation Recommendations for any action that would adversely affect EFH.

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Tiering from CALFED Programmatic Documents

The following five documents establish the CALFED program-level compliance with the ESA, CESA, and NCCPA and establish the “umbrella” under which all ASIPs are prepared.

- **The *Multi-Species Conservation Strategy*:** ASIPs tier from information presented in the MSCS. The MSCS served as the CALFED programmatic:
 - BA under Section 7 of the ESA,
 - habitat conservation plan (HCP) under Section 10 of the ESA, and
 - NCCP under the NCCPA.
- **USFWS’s *Programmatic Biological Opinion on the CALFED Bay-Delta Program* (USFWS Programmatic BO):** The USFWS Programmatic BO covers 90 ESA listed, proposed, and candidate species that were evaluated in the MSCS. The project-specific BO prepared by the USFWS based on information presented in the ASIP will tier from the USFWS Programmatic BO.
- **NOAA Fisheries’ *CALFED Bay-Delta Program Programmatic Biological Opinion* (NOAA Fisheries’ Programmatic BO):** The NOAA Fisheries Programmatic BO covers four ESA-listed fish species that were evaluated in the MSCS. The project-specific BO prepared by NOAA Fisheries based on information presented in the ASIP will tier from the NOAA Fisheries Programmatic BO.
- **DFG’s *Natural Community Conservation Planning Act Approval of the CALFED Bay-Delta Program Multiple Species Conservation Strategy* (Programmatic NCCP Determination):** The DFG Programmatic NCCP Determination covers 79 species, including 25 species covered under the Programmatic BOs that were evaluated in the MSCS. If an NCCP permit is requested³, the project-specific NCCP Determination prepared by DFG based on information presented in the ASIP will tier from the DFG Programmatic NCCP Determination.
- **The *Conservation Agreement regarding the CALFED Bay-Delta Program Multi-Species Conservation Strategy* (Conservation Agreement):** The Conservation Agreement is an agreement entered into among the CALFED member agencies that ensures that the MSCS will be implemented in a manner consistent with the statutory authority of each signatory agency. The Conservation Agreement includes a commitment that a CALFED project proponent and lead agencies (if different from the project proponent) will prepare an ASIP if the project could affect a species covered under the CALFED Programmatic BOs or NCCP Determination.

The Programmatic BOs and NCCP Determination also identify ecosystem restoration milestones that must be achieved during Stage 1 of CALFED implementation to comply with the ESA and NCCPA.

³ This text was changed from the original Draft ASIP (April 2004) at the request of DFG on November 18, 2004.

The MSCS is an appendix to the CALFED Programmatic Environmental Impact Statement/Environmental Impact Report (Programmatic EIS/EIR) that explains how the CALFED Program will meet the requirements of the ESA, CESA, and NCCPA (CALFED Bay-Delta Program 2000c). Important elements of the MSCS from which information presented in the Restoration Project ASIP is tiered include:

- the ASIP contents necessary to meet the requirements of the programmatic CALFED BOs and NCCP Determination;
- the assessment of impacts of CALFED actions on MSCS evaluated species and NCCP communities; and
- conservation measures to avoid, minimize, and compensate for impacts on MSCS evaluated species and NCCP communities.

Coordination with Agencies

The MSCS and other program-level documents described under Tiering from CALFED Programmatic Documents require that CALFED project proponents and lead agencies (if different from the project proponent) coordinate preparation of ASIPs with USFWS, NOAA Fisheries, and DFG. This coordination initiates informal consultation under Section 7 of the ESA. The purpose of this coordination is to ensure that the ASIP incorporates appropriate conservation measures consistent with requirements of the ASIP.

Development of the Restoration Project was initiated in 1999 before completion of the CALFED Programmatic EIS/EIR and the programmatic ASIP guidance documents. The Restoration Project was developed through the formation of partnerships supportive of restoration activities throughout the Battle Creek watershed. In particular, the formal partnership among federal and state agencies and PG&E to modify and reoperate the Hydroelectric Project is the key element in the restoration of Battle Creek.

In early 1999, this cooperative effort among federal and state agencies and PG&E led to the signing of an Agreement in Principle by Reclamation, USFWS, NOAA Fisheries, DFG, and PG&E to pursue a restoration project for Battle Creek. In mid-1999, the parties signed a detailed, formal memorandum of understanding (MOU) (Appendix A) in conformance with the Agreement in Principle, allowing the release of \$28 million in CALFED funding for the agencies' responsibilities in the partnership.¹

Since the signing of the MOU, Reclamation, USFWS, NOAA Fisheries, DFG, and PG&E have been working together to develop the Restoration Project. Additionally, the Restoration Project has been developed through the

¹ Additional CALFED funding is being sought. If additional funds are not made available for physical implementation of the project, the Restoration Project will be suspended until said additional funds are made available.

contributions and efforts of the public, interested parties, the Battle Creek Working Group (BCWG), the Battle Creek Watershed Conservancy (BCWC), CALFED, SWRCB, and FERC.

The same representatives from DFG, NOAA Fisheries, and USFWS that have participated in the development of the Restoration Project have also assisted with the preparation of this ASIP. Open communication with these agencies (including face-to-face meetings, conference calls, and email messages) was maintained throughout the development of the ASIP to ensure that all project-related effects are addressed in this document and to ensure that appropriate conservation measures are recommended.

Species Analyzed in This ASIP

All special-status species that could occur in the Restoration Project area, as well as the legal status of the species, are presented in Table 1-1. These species were identified on the basis of a review of existing information, a search of the California Natural Diversity Database (CNDDDB) (2000 and 2003), a special-status species list provided by USFWS (Appendix D), and field surveys conducted by Jones & Stokes between 2000 and 2003. Detailed biological survey results are discussed in Volumes I and II of the *Biological Survey Summary Report for the Battle Creek Salmon and Steelhead Restoration Project* (Summary Report) (Jones & Stokes 2001a, 2001b).

CALFED programmatic guidance documents require that effects of implementing CALFED projects on MSCS evaluated species and other special-status species that could be affected by a project must be assessed. This ASIP covers MSCS evaluated species that could occur in the project area. Only a subset of these MSCS evaluated species, however, is covered under the Programmatic BOs and NCCP Determination. Special-status species that are not evaluated in the MSCS that could potentially occur in the Restoration Project area are addressed in the *Battle Creek Salmon and Steelhead Restoration Project draft EIS/EIR* (Jones & Stokes 2003a). Mitigation measures are set forth in the EIS/EIR for those special-status species that potentially could be affected by the Restoration Project. The MSCS evaluated species that may occur in the project area and that could be adversely affected by the project, but are not covered under the Programmatic BOs and NCCP Determination, include the golden eagle and foothill yellow-legged frog. MSCS evaluated species potentially occurring in the Restoration Project area that are covered under the Programmatic BOs and NCCP Determination are shown in Table 1-2.

Field surveys conducted by Jones and Stokes between 2000 and 2003 documented whether each species was present in the project area. Table 1-2 presents each special-status species that could potentially occur in the Restoration Project area and an explanation for its inclusion or exclusion for further evaluation in this ASIP. A species that is not further evaluated in this ASIP was not found to be present and/or habitat for that species was not likely to occur

within the project area, or project activities would not likely result in harm (i.e., injury or mortality) to individuals of a species.

Table 1-3 lists the MSCS evaluated species that are covered under this ASIP. The baseline conditions and the assessment of project effects for ASIP-covered MSCS evaluated species that are not covered under the Programmatic BOs and NCCP Determination (i.e., golden eagle and foothill yellow-legged frog) are presented in detail in the EIS/EIR and are incorporated into the ASIP by reference. Because these species are not covered under the Programmatic BOs or NCCP Determination, incidental take authorizations cannot be provided for these species under Section 7 of the ESA or Section 2835 of the NCCPA. Project effects on these species and conservation measures to avoid, minimize, and compensate for those effects are summarized at the end of Chapter 4.

The ASIP provides a detailed assessment of potential project effects on MSCS evaluated species that are covered under the Programmatic BOs and NCCP Determination and that could be present in the project area. These species include:

- Central Valley spring-run Chinook salmon,
- Sacramento River winter-run Chinook salmon,
- Central Valley fall/late fall-run Chinook salmon,
- Central Valley steelhead,
- valley elderberry longhorn beetle,
- northwestern pond turtle,
- bald eagle,
- Cooper's hawk,
- osprey,
- American peregrine falcon,
- yellow-breasted chat, and
- little willow flycatcher.

For a description of each covered species, with information on its legal status, distribution, habitat association, and reasons for decline, see Appendix E.

NCCP Communities Analyzed in This ASIP

The MSCS identified 20 NCCP communities: 18 habitats and two ecologically based fish groups.

Seven of 18 NCCP habitats that were evaluated in the MSCS are present in the Restoration Project area, including:

- montane riverine aquatic,
- nontidal freshwater permanent emergent,
- natural seasonal wetland,
- montane riparian,
- upland scrub,
- grassland, and
- valley/foothill woodland and forest.

Table 1-4 lists the NCCP habitats that occur in the Restoration Project area and identifies MSCS goals for each habitat type. In addition, this table relates the NCCP habitats to the habitat sub-types that are likely to be affected by Restoration Project activities and that are assessed in this ASIP.

One of the NCCP ecologically based fish groups, anadromous fish species, is present in the Restoration Project area. This fish group includes all of the covered fish species assessed in this ASIP: Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead.

For the purposes of this ASIP, the NCCP communities that will be evaluated in this ASIP are referred to as *covered NCCP communities*. These communities include the seven NCCP habitats listed above and the MSCS fish group, anadromous fish species.

Covered Species and NCCP Community Goals

The MSCS has established programmatic goals for each of the covered species and NCCP communities (Tables 1-3 and 1-4). It is the collective commitment of the California Bay Delta Authority (CBDA) to achieve the MSCS goals over the term of the Programmatic BOs and NCCP Determination. Relative to achieving these goals, some CALFED projects will not directly contribute toward achieving these goals, some projects will partially contribute to these goals, and some projects will be designed specifically to achieve these goals. All CALFED projects, however, must fully mitigate adverse effects of the project on covered species and NCCP communities.

The Restoration Project is a CALFED Ecosystem Restoration Program (ERP) fish passage improvement action and, as such, is designed specifically to help achieve MSCS goals for fish covered species and montane riverine aquatic NCCP habitat. The Restoration Project, however, is not designed to achieve MSCS goals for other covered species and NCCP communities. Consequently, the Restoration Project establishes the following goals for the covered species and NCCP communities addressed in this ASIP:

- **Covered Fish Species:** Avoid, minimize, and fully mitigate adverse effects of Restoration Project actions on covered fish species and contribute to their recovery.
- **Other Covered Species:** Avoid, minimize, and fully mitigate adverse effects of Restoration Project actions on covered species.
- **Montane Riparian Aquatic Habitat:** Substantially increase the ecological functions of Battle Creek.
- **Other NCCP Communities:** Avoid, minimize, and compensate for adverse effects of Restoration Project actions on the functions and values of NCCP communities.

Summary of Effects on Covered Species

Table 1-5 summarizes effects of implementing the Restoration Project on species covered under this ASIP.

Other Restoration Efforts in the Battle Creek Watershed

Several combined federal and state projects are being proposed in the Battle Creek Watershed that will support and maximize the restoration efforts of the Restoration Project. These projects are listed and described in Table 1-6 and will be implemented with the assistance of federal and state agencies (e.g., USFWS, NOAA Fisheries, DFG). Most projects include improvements to the Coleman National Fish Hatchery to reduce potential fish hazards and allow easier upstream passage.