## 3.1 Introduction

As described in detail in Chapter 2, *Project Objectives and Purpose and Need*, the ecological health of the Delta continues to be at risk, and the conflicts between species protection and Delta water exports have become more pronounced, as amply evidenced by the continuing court decisions regarding the intersection of the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), and the operations criteria of the State Water Project (SWP) and the federal Central Valley Project (CVP). The alternatives in the BDCP/California WaterFix EIR/EIS are intended to comply with both the federal Endangered Species Act (ESA) and California's endangered species laws (i.e., California Endangered Species Act [CESA] or the Natural Community Conservation Planning Act [NCCPA]) with respect to both the operation of the existing State Water Project (SWP) Delta facilities and the construction and operation of new conveyance facilities for the movement of water entering the Delta from the Sacramento Valley watershed to the existing SWP and federal Central Valley Project (CVP) pumping plants in the southern Delta.

The BDCP alternatives (Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, and 9) were developed in response to ecological and water supply issues and to meet the stated objectives and purpose of and need for the proposed project (see Chapter 2, *Project Objectives and Purpose and Need*). The proposed BDCP sets out a comprehensive conservation strategy for the Delta designed to restore and protect ecosystem health, water supply, and water quality within a stable regulatory framework. The BDCP alternatives are also proposed to provide for the conservation and management of covered species¹ through *conservation measures*, including the construction and operation of north Delta water conveyance facilities, within the area covered by the BDCP (i.e., the BDCP Plan Area] and the Areas of Additional Analysis). These actions are designed to contribute to the recovery of the covered species as well as reducing the adverse effects of water diversions on certain covered species, while providing a more reliable water supply.

As noted in Chapter 1, Section 1.1, *About the BDCP/California WaterFix*, in response to public and agency comment, the lead agencies have included an alternative implementation strategy in the form of non-HCP alternatives (Alternatives 4A, 2D and 5A). The non-HCP alternatives permit DWR to explore alternative regulatory approaches that could facilitate expeditious progress on Delta solutions. These alternatives, originally addressed at length in the RDEIR/SDEIS, incorporate an alternative implementation strategy to achieve the project goals and objectives, focusing on the conveyance facility improvements necessary for the SWP and CVP to address increased demands upon and risks to water supply reliability needs in conjunction with ecosystem improvements to significantly reduce reverse flows and reduce direct impacts on fish species associated with the existing south Delta intakes. The preferred alternative (Alternative 4A) and other non-HCP alternatives are described in more detail in Section 3.2.4, Development of the California WaterFix and Section 3.5, Alternatives, and do not include a habitat conservation plan. The alternative implementation strategy allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project.

<sup>&</sup>lt;sup>1</sup> Covered species are species addressed in the BDCP. The BDCP covered species are listed in Table 3-13a.

- The BDCP implementation schedule was informed by the data and analyses used to develop the conservation strategy, as summarized below.
  - The near-term, early long-term, and late long-term restoration targets established for tidal, seasonally inundated floodplain, and channel margin habitats (BCDP Chapter 3, Section 3.4, *Conservation Measures*) and the extent of habitat restoration effects on natural communities and covered species habitats (BDCP Chapter 5, *Effects Analysis*).
  - Vernal pool complex and grassland restoration targets (BCDP Chapter 3, Section 3.4, *Conservation Measures*) and the extent of habitat restoration effects on natural communities and covered species habitats (BDCP Chapter 5, *Effects Analysis*).
  - Vernal pool complex, alkali seasonal wetland complex, grassland, and cultivated lands protection/preservation targets (BDCP Chapter 3, Section 3.4, *Conservation Measures*).
  - The pipeline/tunnel construction schedule and the extent of construction effects on natural communities and covered species habitats (BDCP Chapter 5, *Effects Analysis*).

The duration and schedule for construction of the BDCP water conveyance facilities is provided in Appendix 3C, *Construction Assumptions for Water Conveyance Facilities*. Construction of the water conveyance facilities may begin approximately one year after permit issuance and continue for an estimated 9–14 years. Operations could begin as early as Year 11. The BDCP implementation schedule for CM3–CM10 (natural community restoration) and amount of acreage by conservation measure is provided in Table 3-4. The acreages shown in Table 3-4 would vary depending on the alternative selected. A total of 65,000 acres of tidal habitat, 10,000 acres of seasonally inundated floodplain habitat and 20 linear miles of channel margin habitat would be enhanced under all action alternatives except as otherwise specified. The implementation schedule for CM2 and CM11–CM21 is provided in Table 3-4.