
The proposed Bay Delta Conservation Plan (BDCP) is a comprehensive conservation strategy designed to address critical environmental and water delivery issues in the Sacramento-San Joaquin River Delta (Delta) with an ecosystem-based approach.

The BDCP is a Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP) developed in compliance with the federal Endangered Species Act (ESA) and the California Natural Community Conservation Planning Act (NCCPA). The plan will be implemented over a 50-year-period. As a planning document, the BDCP describes the proposed actions to improve the condition of habitat and species in the Delta, reduce adverse effects of water diversions, and provide a reliable water supply.

The BDCP is a conservation plan that, under state and federal endangered species laws, seeks long-term take permits for the operation of the State Water Project (SWP).

BDCP Environmental Review Process

While conservation plans like the BDCP are meant to be beneficial to the environment, specific actions in the plan can have an impact on natural (biological) and human environments. These impacts must be evaluated and actions identified to mitigate them. State and federal environmental laws require a review of potential impacts of the BDCP before it can be approved and implemented.

The BDCP Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is being prepared in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The current Administrative Draft of the BDCP EIR/EIS has been prepared by the consultants ICF International and has been released concurrent with federal agency review. It is not a federal document at this time.

The BDCP, the EIR/EIS, and supporting documentation will provide the basis for informed decision-making, including applications for issuance of endangered species incidental take permits for facility and operational changes to the SWP.
The BDCP is designed to help to restore the health of fish and wildlife species that use the Delta, and improve water supply reliability while minimizing impacts to Delta communities and farms. The BDCP supports the co-equal goals of habitat restoration and reliable water supply set forth in the Sacramento-San Joaquin Delta Reform Act of 2009.

The BDCP Consultant Administrative Draft EIR/EIS considers 15 alternatives (called “action alternatives”) and one “no action” alternative. The alternatives analyzed in the EIR/EIS include a broad combination of water delivery configurations, capacities, operations, and habitat restoration targets. The EIR/EIS alternatives are the result of public scoping sessions conducted in 2008 and 2009, the Sacramento-San Joaquin Delta Reform Act, ongoing public discussions, and input from responsible/trustee state agencies and NEPA cooperating agencies.

Project-level and Program-level Analyses

The EIR/EIS BDCP alternatives are evaluated at two levels of specificity:

- Program level
- Project level

Program-level analyses

The broad environmental effects of Conservation Measures (CM) 2 through 22 are evaluated at the program level. The impacts, benefits and mitigation measures included in the EIR/EIS for CMs 2 through 22 are based on conceptual design information for the restoration and conservation strategies for aquatic and terrestrial habitat and other stressors. Some of these CMs will require additional environmental review before being implemented. For example, Conservation Measure 2, Yolo Bypass Fishery Enhancement, will require environmental analysis before operations to increase the frequency of floodplain inundation can begin.

Project-level analysis

The BDCP EIR/EIS provides project-level analysis for CM 1—modified or new conveyance facilities. The CM1 alternative, other conveyance alternatives, and a No Action alternative have been evaluated with specificity regarding facility location, facility size, site-specific mitigation, water supply and potential funding agreements.

The BDCP EIR/EIS provides comprehensive review and analysis of:

- Flow criteria, rates of diversion, and other operational criteria necessary for improving the Delta ecosystem and fisheries under a reasonable range of conditions, subject to adaptive management
- A reasonable range of Delta conveyance alternatives
- The potential effects of climate change, possible sea level rise up to 55 inches at year 2100 (sea level rise of 18 inches is used for analysis of 2060 conditions), and possible changes in precipitation and runoff patterns
- The potential effects on migratory fish, aquatic, terrestrial, and human resources
- The potential effects on Sacramento River and San Joaquin River flood management
- The resilience and recovery of Delta conveyance alternatives in the event of catastrophic loss caused by earthquake, flood, or other natural disaster
- The potential effects of Delta conveyance alternatives on Delta water quality

Climate change:

This EIR/EIS analyzes three fundamental questions relating to climate change.

1. What is the impact of the BDCP alternatives on climate change (i.e., how will greenhouse gas (GHG) emissions from construction and operation of activities associated with the project alternatives contribute to elevated GHG concentrations in the atmosphere)?

2. How will the impacts of the BDCP alternatives on the study area for each resource (the area in which impacts may occur) be affected by climate change (i.e., are future changes in climate likely to exacerbate project impacts)?

3. How will the BDCP alternatives affect the resiliency and adaptability of the Plan Area (the area covered by the BDCP) under the effects of climate change?
May 2013

How to Navigate the EIR/EIS

The BDCP Consultant Administrative Draft EIR/EIS includes 35 chapters.

**Chapters 1-4**
- Background and Approach
  - The project area
  - Description of purpose and need for proposed action
  - Alternatives to address the purpose and need
  - The analytical approach

**Chapters 5-28**
- Resource Areas
  - Environmental setting/affected environment
  - Regulatory setting
  - Methods for analysis
  - Environmental consequences

**Chapters 29-35**
- Other Considerations
  - Climate change
  - Cumulative environmental impacts
  - Public outreach efforts

Chapters 5 through 30 are organized into the following sections:

- Environmental Setting/Affected Environment – Describes the existing conditions used for determining the impacts under CEQA and NEPA.
- Regulatory Setting – Describes the laws, regulations, and policies that affect the resource or the assessment of impacts on the resource.
- Methods for Analysis – Describes the methods used to identify and assess the potential impacts that would result from implementation of each alternative.
- Environmental Consequences – Evaluates the direct and indirect impacts associated with each alternative, organized by resource area.
- Technical data and studies are presented in technical appendices.

**Mitigating Potential BDCP Impacts**

The term “mitigation” is specifically applied in the EIR/EIS as measures used to reduce environmental impacts, after considering all of the environmental commitments described for each resource in Chapters 5 through 30. Specific mitigation measures are proposed when necessary to avoid, reduce, minimize, or compensate for adverse environmental effects of the BDCP alternatives. Mitigation meets CEQA’s specific requirement that, whenever possible, agency decision-makers adopt feasible mitigation to reduce significant impacts to a less-than-significant level. Although NEPA does not impose a similar obligation on federal agencies, this practice is consistent with NEPA’s intent that mitigation be discussed in sufficient detail to ensure that environmental consequences are fairly evaluated.

The feasibility of mitigation is ultimately determined by agency decision-makers. Under CEQA, the EIR/EIS addresses whether the mitigation presented would reduce the impact to a less-than-significant level, based on the threshold of significance presented in each resource chapter.

Additional mitigation options and opportunities are being discussed with lead and cooperating agencies. Significant and unavoidable impacts listed in the April 2013 Consultant Administrative Draft EIR/EIS may be reduced to a less-than-significant level by the time the Public Draft EIR/EIS is issued later this year.

**Environmental Impacts**

The BDCP EIR/EIS includes an independent impact analysis for each resource area and mitigation is proposed to reduce impacts on the environment. The full analysis for each resource area is presented in the Consultant Administrative Draft EIR/EIS Chapters 5 through 30.

The EIR/EIS evaluates the effects of the BDCP on both the natural (biological) and the human environment. This evaluation will address impacts to, among others:

- Water Resources
- Air Quality
- Water Quality
- Climate Change
- Socioeconomic Conditions
- Land Use
- Agricultural Resources
- Cultural Resources
- Historical Resources
- Archaeological Resources
- Biological Resources
- Geology, Seismicity, Minerals, and Soils
- Transportation/Navigation
- Recreation
- Noise
- Visual Resources
- Hazardous Materials
- Utilities and Public Services
- Environmental Justice

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*Why is an EIR/EIS Necessary?*

The BDCP environmental review documents will:

- Identify environmental effects
- Evaluate a reasonable range of alternatives that could avoid or minimize impacts
- Develop mitigation (ways to reduce or avoid environmental impacts)
- Provide information for public review and comment
- Disclose to decision-makers the project impacts, mitigation, and public comments.

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No Action Alternative

The BDCP includes evaluation of a No Action Alternative, which describes future circumstances without implementation of the proposed BDCP actions. The No Action assumptions represent continuation of the existing plans, policies, operations, and conditions that represent continuation of trends in nature. More information is provided in Appendix 3D, Defining Existing Conditions, the No Action/No Project Alternative, and Cumulative Impact Conditions.

Alternatives Overview

More than 100 alternative solutions were considered in the EIR/EIS process. Four main variables define each of the 15 action alternatives carried through in the BDCP EIR/EIS:

- **Water Delivery Facilities (BDCP CM 1)**
  - Water conveyance (delivery) alignments and design
  - Operational guidelines (See scenarios A-H descriptions on next page)
  - Water delivery capacity (from 3,000 to 15,000 cubic feet per second)
- **Habitat Restoration and Measures to Reduce Effects of Covered Activities and Other Stressors on Covered Species (BDCP CMs 2 through 22)**
- **Target habitat restoration/enhancement acreages**

The BDCP includes Alternative 6, the Future Alternative, evaluation of which would allow for the conservation and management of covered species, protection and restoration of aquatic, riparian and terrestrial habitats, and restoration and protection of SWP and CVP water supply reliability.

The first screening process resulted in the development of initial conveyance concepts and operational considerations.

**Screening Level Two**: Focused on identification of those alternatives that would meet the project purpose and need while avoiding or substantially reducing potential adverse impacts.

Through the second screening process, 21 alternatives representing a synthesis of the conveyance concepts and operational concepts were developed.

**Screening Level Three**: Focused on identification of those alternatives that were technically feasible and practical in terms of design, construction, and cost. Because CEQA and NEPA require only that a reasonable range of alternatives be considered, alternatives were narrowed down to eliminate duplicative analyses.

Ultimately, 15 action alternatives and the No Action Alternative were carried forward for evaluation in the EIR/EIS. Each action alternative includes conservation components such as creation and restoration of habitat, activities to reduce other stressors such as water quality improvements, and reduction of predation.

The Alternatives Screening Process

![Diagram of Alternatives Screening Process]

The 15 action alternatives analyzed in the EIR/EIS were developed over a 6-year period in collaboration with state and federal fish and wildlife agencies, public water agencies, nongovernment organizations, agricultural interests, and the general public. To satisfy CEQA and NEPA requirements, the state and federal lead agencies are required to study and make available for public review and comment a reasonable range of alternatives for consideration that meet the project’s purpose and need while reducing or avoiding adverse impacts.

The BDCP alternatives were selected using a multi-step screening selection process, including consideration of the responsible and cooperating agencies’ comments during scoping and on preliminary draft documents. Alternatives were also screened against the Sacramento-San Joaquin Delta Reform Act requirements to ensure compliance with Water Code 8320.

**Screening Level One**: Focused on identification of alternatives that would allow for the conservation and management of covered species, protection and restoration of aquatic, riparian and terrestrial habitats, and restoration and protection of SWP and CVP water supply reliability.

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**Screening Level Two**: Focused on identification of those alternatives that would meet the project purpose and need while avoiding or substantially reducing potential adverse impacts.

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Ultimately, 15 action alternatives and the No Action Alternative were carried forward for evaluation in the EIR/EIS. Each action alternative includes conservation components such as creation and restoration of habitat, activities to reduce other stressors such as water quality improvements, and reduction of predation.
EIR/EIS Alternatives Analysis

The 15 action alternatives and the No Action Alternative selected for review in the EIR/EIS include various combinations of water conveyance configurations, capacities, operations, and habitat restoration, and their effects on biological resources, hydrology, and the human environment. The alternatives studied in the EIR/EIS include a variety of conveyance alignments and other specifications resulting from public scoping sessions conducted in 2008 and 2009, the Sacramento-San Joaquin Delta Reform Act of 2009, and stakeholder and agency involvement over the last 6 years.

EIR/EIS Alternatives*

<table>
<thead>
<tr>
<th>ALTERNATIVE</th>
<th>ALIGNMENT OPTION</th>
<th>CONVEYANCE TYPE</th>
<th>INTAKES</th>
<th>NORTH DELTA DIVERSION CAPACITY (cfs)</th>
<th>OPERATIONAL SCENARIO</th>
<th>HABITAT RESTORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Action Alternative</td>
<td>N/A</td>
<td>Through-Delta</td>
<td>N/A</td>
<td>Current Operations</td>
<td>N/A</td>
<td>8,000 acres of restored aquatic habitat</td>
</tr>
<tr>
<td>Alternative 1A</td>
<td>Pipeline/Tunnel</td>
<td>Dual</td>
<td>1 through 5</td>
<td>15,000 cfs</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Alternative 1B</td>
<td>East</td>
<td>Dual</td>
<td>1 through 5</td>
<td>15,000 cfs</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Alternative 1C</td>
<td>West</td>
<td>Dual</td>
<td>West/W1 through W5</td>
<td>15,000 cfs</td>
<td>A</td>
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</tr>
<tr>
<td>Alternative 2A</td>
<td>Pipeline/Tunnel</td>
<td>Dual</td>
<td>1 to 3, 6 and 7, or 1 through 5</td>
<td>15,000 cfs</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Alternative 2B</td>
<td>East</td>
<td>Dual</td>
<td>1 to 3, 6 and 7, or 1 through 5</td>
<td>15,000 cfs</td>
<td>B</td>
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</tr>
<tr>
<td>Alternative 2C</td>
<td>West</td>
<td>Dual</td>
<td>W1 through W5</td>
<td>15,000 cfs</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Alternative 3</td>
<td>Pipeline/Tunnel</td>
<td>Dual</td>
<td>1 and 2</td>
<td>6,000 cfs</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Alternative 4</td>
<td>Pipeline/Tunnel</td>
<td>Dual</td>
<td>2, 3, and 5</td>
<td>9,000 cfs</td>
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<td>Alternative 5</td>
<td>Pipeline/Tunnel</td>
<td>Dual</td>
<td>1</td>
<td>3,000 cfs</td>
<td>C</td>
<td>Up to 105,000 acres of restored and protected habitat</td>
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<td>Alternative 6A</td>
<td>Pipeline/Tunnel</td>
<td>Isolated</td>
<td>1 through 5</td>
<td>15,000 cfs (No South Delta Intakes)</td>
<td>D</td>
<td>Approximately 145,000 acres of restored and protected habitat (see below)</td>
</tr>
<tr>
<td>Alternative 6B</td>
<td>East</td>
<td>Isolated</td>
<td>1 through 5</td>
<td>15,000 cfs (No South Delta Intakes)</td>
<td>D</td>
<td>Approximately 145,000 acres of restored and protected habitat (see below)</td>
</tr>
<tr>
<td>Alternative 6C</td>
<td>West</td>
<td>Isolated</td>
<td>W1 through W5</td>
<td>15,000 cfs (No South Delta Intakes)</td>
<td>D</td>
<td>Approximately 145,000 acres of restored and protected habitat (see below)</td>
</tr>
<tr>
<td>Alternative 7</td>
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<td>Dual</td>
<td>2, 3, and 5</td>
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<td>Approximately 145,000 acres of restored and protected habitat (see below)</td>
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<tr>
<td>Alternative 8</td>
<td>Pipeline/Tunnel</td>
<td>Dual</td>
<td>2, 3, and 5</td>
<td>9,000 cfs</td>
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<td>Approximately 145,000 acres of restored and protected habitat (see below)</td>
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<tr>
<td>Alternative 9</td>
<td>Through-Delta Separate Corridor</td>
<td>Through-Delta</td>
<td>Delta Cross Channel and Georgiana Slough channel modifications</td>
<td>15,000 cfs</td>
<td>G</td>
<td>Approximately 145,000 acres of restored and protected habitat (see below)</td>
</tr>
</tbody>
</table>

* The EIR/EIS alternatives and operational scenarios described reflect revisions made to the EIR/EIS since the February 2012 preliminary draft.

Water Operations Scenarios

Scenario A would include specific criteria guiding water supply parameters at a variety of locations and facilities. This includes criteria for: north Delta diversion bypass flow, south Delta channel flows, Fremont Weir bypass operations, Delta inflow and outflow, Delta Cross Channel gate operations, Rio Vista minimum instream flows, Delta water quality and residence time, and in-Delta agricultural, municipal, and industrial water quality requirements.

Scenario B includes additional south Delta modifications from Scenario A to add an operable barrier at the Head of Old River, Fall X2, and additional south Delta protections.

Scenario C would adopt the operational guidelines of Scenario A north of the Delta. South of the Delta, this scenario would be consistent with the existing 2008-2009 Biological Opinions.

Scenario D would be modified from Scenario A to eliminate use of south Delta intakes and add criteria surrounding Fall X2.

Scenario E would be modified from Scenario A to increase north Delta diversion bypass flow and would include other modifications to south Delta channel flow criteria. Fremont Weir operations, Rio Vista minimum instream flow criteria, and Delta inflow and outflow criteria.

Scenario F increases Delta outflow up to 1.5 million acre-feet annually, as requested by the State Water Resources Control Board and other interest groups.

Scenario G would be similar to those described under Scenario A, but would be modified to conform to the conveyance components of the separate corridors option.

Scenario H would be modified from Scenario A to include the decision tree process and CM1 operations. This is the operational scenario included in the proposed BDCP project under CM 1.

Up to 145,000 ACRES OF RESTORED AND PROTECTED HABITAT

- New Floodplain – Up to 10,000 acres
- Tidal Habitat – Up to 65,000 acres
- Channel Margin – 20 levee miles
- Riparian Habitat – Up to 5,000 acres
- Grassland Habitat – Up to 10,000 acres
- Other Habitats – Up to 5,000 acres
- Managed Wetlands – 6,500 acres
- Cultivated Lands – 45,000 acres

More information on the Decision Tree Process and adaptive management is provided in the Draft BDCP and in the CM 1: Facilities and Operations Brochure available online at www.BayDeltaConservationPlan.com

The BDCP planning process is working with various stakeholders to define more specific habitat restoration measures. These individual restoration projects may be the subject of separate, site-specific environmental review processes as the BDCP is approved and implemented.

* Intake locations are analysed for maximum impacts and may be refined, more information is provided in Appendix 3F.
CEQA and NEPA have different requirements when it comes to selecting a preferred alternative. Under NEPA, the federal lead agencies have not selected a preferred alternative at this time, and a preferred alternative need not be identified in the Draft EIR/EIS.

Under CEQA, Alternative 4 has been tentatively identified as the “Preferred Alternative” by the California Department of Water Resources and is the same as the proposed BDCP as described in the Draft BDCP released in 2013. However, this alternative is subject to change as DWR receives and considers public and agency input on the environmental analysis. The present version of Alternative 4 represents a tremendous amount of scientific work and analysis to identify a proposed BDCP that is grounded in solid science and reaches what DWR considers to be an optimal balance between ecological and water supply objectives.

The final version of the BDCP proposed action could change from the description above if Alternative 4 itself is refined, because another alternative is determined to be preferable, or because the lead agencies develop a new alternative with some features from some existing alternatives.


Public participation process

Who’s Involved

The California Department of Water Resources is applying for certain permits under state and federal endangered species laws to implement and operate the proposed BDCP.

DWR, acting as lead agency for compliance with CEQA, and Reclamation, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, acting as lead agencies for compliance with NEPA, are preparing the joint EIR/EIS.

Additionally, the EIR/EIS is being developed with more than a dozen federal, state, and local resource agencies participating in a cooperating or coordinating capacity. The U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, California Natural Resources Agency, and the State Water Resources Control Board will analyze BDCP-proposed actions, and alternatives to those actions, in fulfillment of multiple local, state, and federal permitting requirements. Ultimately, state and federal agencies will be responsible for approving the authorizations needed to implement the BDCP.
For more information or to submit comments, visit www.BayDeltaConservationPlan.com, call 1-866-924-9955, or email info@BayDeltaConservationPlan.com.