

BDCP

BAY DELTA CONSERVATION PLAN

Public Meeting

December 14, 2011

California Natural Resources Agency

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BAY DELTA CONSERVATION PLAN

Effects Analysis Update

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Presentation Contents

- Review purpose of Effects Analysis
- Provide update on Effects Analysis
- Review appendices deliverable schedule
- Discuss available appendices

Purpose of Effects Analysis

- Provide necessary information for ESA and NCCPA permitting
- Provide structural foundation for analysis of alternatives
- Determine the overall effects on listed fish and wildlife and natural communities as a result of the BDCP
- Includes only analyses for biological effects

Organization of Effects Analysis

- Organized by
 - Stressor (i.e., passage obstruction)
 - Geographic subregion (i.e., Yolo Bypass)
 - Species life stage (i.e., sturgeon adults)
- Final conclusions presented for each species by 'rolling-up' the cumulative effects for each stressor, subregion and lifestage for each species
 - 'Roll-up' included in Chapter 5; available April 2012

Delta Science Program Review

- Reviewed Conceptual Foundation & Analytical Framework (Appendix A) and Entrainment (Appendix B)
- 11 main recommendations
- ICF reviewing report and will modify appendices appropriately
- Review of entire BDCP Effects Analysis (Chapter 5) and remaining appendices in April 2012

Conceptual Foundation & Analytical Framework (Appendix A)

- Conceptual Foundation
 - Describes purpose, vision, strategy for BDCP
 - Describes structure for biological goals and objectives
- Analytical Framework
 - Describes models used in effects analysis, analytical comparisons—base case assumptions; Climate Change assumptions; weight of evidence
 - ‘Roll-up’

Entrainment (Appendix B)

- Describes changes in operations of water diversions in the Delta as a result of BDCP
- Provides estimates of entrainment of covered fish species under BDCP
- Uses entrainment estimates to estimate relative difference in entrainment between preliminary proposal and the existing biological condition

Analytical Tools and Methods

- Over 19 hydrological and biological models
- Model types
 - Conceptual (ex: DRERIP)
 - Environmental (ex: CALSIM II)
 - Biological (ex: Egg mortality model)
 - Population & Life History (ex: OBAN)
 - Habitat Suitability

Organization of Each Appendix

- Executive Summary
 - Conclusions Summaries and Tables
- Background
- Methods
- Results
- Conclusions

Schedule for Web Posting

<u>Appendix</u>	<u>Deliverable Date</u>
<ul style="list-style-type: none"> •Appendix A - Conceptual Foundation/Analytical Framework •Appendix B - Entrainment •Appendix G - Fish Life Cycle Models 	December 12, 2011
<ul style="list-style-type: none"> •Appendix C - Flow/Passage 	December 14, 2011
<ul style="list-style-type: none"> •Appendix F - Ecological Effects 	December 16, 2011
<ul style="list-style-type: none"> •Appendix D - Toxics/Water Quality 	January 6, 2012
<ul style="list-style-type: none"> •Annotated Outline of Chapter 5 (Effects Analysis) 	January 12, 2012
<ul style="list-style-type: none"> •Appendix E - Habitat Restoration 	January 13, 2012
<ul style="list-style-type: none"> •Appendix I - Analysis Not Used 	January 17, 2012
<ul style="list-style-type: none"> •Chapter 5 (Effects Analysis) 	April 9, 2012

Effects Analysis Appendices

- Current appendices available online and findings to date
 - Conceptual Foundation and Analytical Framework (Appendix A)
 - Entrainment (Appendix B)
 - Flow/Passage (Appendix C)
 - Fish Population Analysis (Appendix G)

- Flow/Passage
 - Describes the changes in flows in Sacramento River system, San Joaquin River system, and Delta channels
 - Evaluates effects on fish that result from changes in flows and flow-related parameters by comparing the preliminary proposal to existing biological conditions
 - Divides analysis by Upstream Area, Delta Area, and Passage/Migration effects

Fish Population Analysis (Appendix G)

- Fish Population Analysis
 - Describes the application of life cycle models used to help determine population-level effects of BDCP covered activities on selected covered fish species.
 - Information gained from models will help inform the roll-up in Chapter 5.
 - Models run:
 - Winter-run Chinook salmon: OBAN & IOS
 - Spring-run Chinook salmon: OBAN
 - Delta smelt: State-Space Multistage

Appendices In Progress

- Toxins
- Ecological Effects
- Habitat Restoration
- Analyses Not Used
- Construction Effects

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Questions and Comments

Working Groups Update

- Yolo Bypass Fishery Enhancement Planning Team
- South Delta Habitat
- Biological Goals and Objectives
- Governance

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Questions and Comments

- Next public meeting
 - January 25, 2012 at 1:00 p.m. (tentative)
 - Visit www.baydeltaconservationplan.com for documents and upcoming meeting information