

## BDCP Economic Analyses

July 2013

There is great interest in determining whether the investment required for the Bay Delta Conservation Plan (BDCP) is worthwhile for the water users who will pay for most of it, and for the public, who will fund many of the habitat restoration elements. BDCP is preparing six major studies to analyze the costs and economic benefits of the proposed project and its alternatives. These studies are being prepared by ICF International, Inc. (lead BDCP contractor), and The Brattle Group, led by Professor David Sunding of the University of California, Berkeley.

**Costs and Funding Sources.** The direct economic costs of implementing the proposed project are described in Chapter 8 of the BDCP, which was released in an administrative draft form in May 2013. Chapter 8 describes the costs of implementing the various conservation measures proposed in the Plan, including a conveyance facility. Likely funding sources for each aspect of the BDCP are also described in the chapter. Although this chapter describes funding sources in some detail, it is not a financing plan. Subsequent financing documents will be necessary.

**Alternatives to “Take.”** The U.S. Endangered Species Act requires analysis of alternatives in a habitat conservation plan that may avoid or reduce the “take” of various species covered by the BDCP. Chapter 9 describes these alternatives, called “take alternatives.” These alternatives were developed based, in part, on the alternatives in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS). However, the take alternatives are different from those in the EIR/EIS because they serve a different purpose. In BDCP, the take alternatives are used to evaluate the feasibility of reducing take of the covered species. An important criterion for assessing take alternatives is known as “practicability.” This test involves, among other things, determining whether the project would be economically feasible.

The set of take alternatives in Chapter 9 vary along three basic dimensions: larger and smaller conveyance infrastructure, more or less habitat restoration, and different water operations rules. The alternatives in BDCP Chapter 9 will demonstrate whether the alternatives to take have unacceptable effects on covered species, fail the practicability test, or both.

The analysis of alternatives to take is important because it compares the economic costs of alternatives to their economic benefits, which determines the feasibility of each alternative. For example, Chapter 9 assesses whether a tunnel capable of diverting up to 9,000 cubic feet per second is the most desirable configuration for an isolated conveyance facility, and whether stricter operating criteria that reduce project deliveries relative to BDCP are economically feasible.

**Economic Benefits of Take Alternatives.** BDCP Appendix 9.A examines the economic benefits of the proposed project to participating water agencies. This research, released in May 2013, is integral to the practicability analysis provided in Chapter 9. The benefits study details the benefits of the proposed project to the agricultural and urban water agencies receiving supplies from the State Water Project and the Central Valley Project.

The study considers several categories of benefits: water supply reliability; water quality; and reduced seismic risk. The estimated economic benefits of BDCP are calculated in comparison to “existing conveyance” without BDCP, with high- and low-outflow scenarios, to provide a reasonable comparison point for the cost practicability analysis.

**Statewide Economic Impact Study.** The purpose of this study is to determine the economic impacts of the BDCP on various interest groups, including Delta farmers, commercial fishing interests, recreational users of the Delta, and others. This study will also examine the economic benefits of BDCP that can be quantified to the state as a whole. This assessment is needed to understand the broader social impacts of the proposed

project. Where other elements of economic studies done for the BDCP evaluate affordability, or narrowly defined benefits to water users, this study looks at whether the project is a worthwhile investment for the state as a whole. The draft statewide impacts study will be released in summer 2013.

**Employment Impacts of BDCP.** The BDCP is a major public works project that will generate significant employment opportunities in the Delta region and beyond. This study, released in February 2013, documents the jobs created by the construction, operations, and habitat restoration components of the Plan. The study concludes that 137,000 jobs (a job is defined as full-time employment for an entire year) will

be created over the 50-year life of the permit. The study also shows where these jobs will be located, including a detailed accounting of how many jobs will be created in San Joaquin, Sacramento, and Yolo counties.

**Socioeconomic Impacts.** Chapter 16 of the BDCP Consultant Administrative Draft EIR/EIS includes a qualitative and quantitative evaluation of the socioeconomic impacts anticipated from implementation of the BDCP, focusing on community character, social and economic characteristics, population, housing, employment, and income. Chapter 16 also evaluates a variety of different alternatives including through-Delta and isolated conveyance, varying levels of habitat restoration and a no-action alternative.

## SUMMARY

By examining the costs of BDCP in Chapter 8, the benefits of BDCP to the participating agencies in the contractor benefits study, and the economic impacts of BDCP on other affected parties in the statewide economic impact study, the public can determine whether the BDCP is a good investment for California.

Local agencies receiving water through the Delta can determine the benefits and costs of investing in BDCP based on the economic benefits determined in BDCP Appendix 9.A, and the costs assigned to the agency as determined by the final financing plan.

The final finance plan for BDCP will be a combination of public finance for many of the habitat restoration elements, and funding from the state and federal water contractors who receive water from the state and federal water projects. The allocation to each contractor will be determined by the division of water benefits between the State Water Project and the federal Central Valley Project, as well as the distribution of water benefits among the various contractors in each of these projects. The California Department of Water Resources, U.S. Bureau of Reclamation, and their various water contractors are working to develop a financing plan, a draft of which will be made public when available. There is no timeline yet established for the financing plan.

### Chapter 8 (costs of funding sources)

Revised Administrative draft: Published May 29, 2013  
Draft for public review and comment: **October 2013**

### Chapter 9 (alternatives to "take")

Revised Administrative draft: Published May 29, 2013  
Draft for public review and comment: **October 2013**

### Economic Benefits of Take Alternatives

Published May 29, 2013

### Statewide economic impacts study

Draft for public review: **August 2013**  
Final study: **Fall 2013**

### Employment impacts study

Published February 2013

### Chapter 16 of EIR/EIS (socioeconomic impacts)

Administrative draft: Published May 10, 2013  
Draft for public review and comment: **October 2013**

All documents will be available online at [www.BayDeltaConservationPlan.com](http://www.BayDeltaConservationPlan.com)

For more information, or to submit comments, visit [www.BayDeltaConservationPlan.com](http://www.BayDeltaConservationPlan.com), call 1-866-924-9955, or email [info@BayDeltaConservationPlan.com](mailto:info@BayDeltaConservationPlan.com).