

CHAPTER 5 COMPARISON OF PRELIMINARY BENEFITS AND COSTS ESTIMATES

The preliminary evaluation of project benefits was performed in accordance with the basic guidelines for evaluating water development projects at the federal level as specified in the P&Gs¹. Under the P&Gs, the federal objective for water contributions is to maximize the contribution to National Economic Development (NED) consistent with protection of the environment.

Accurate representation and comparison of the project alternatives' future benefits and costs over its full development and operating period requires that all future benefits and costs are discounted into current dollars to reflect the time value of money. Federal regulation requires use of the federal discount rate as specified by the Department of the Interior for economic analysis for water resource planning. In accordance with agency regulation, the federal discount rate of 3.75 percent was used for fiscal year 2013 to calculate present value of the project's future benefits and costs for this study (Federal Register, 2013).

The methodologies, assumptions, and tools used for estimating the benefits and detail breakdowns of the benefits by beneficiaries are described and presented in Chapter 7 of the 2013 North-of-the-Delta Offstream Storage Investigation Progress Report (DWR and Reclamation, 2013). The cost estimates are presented and described in Chapter 4 of this report.

Table 5-1 presents the preliminary estimated total annual benefits, costs, net benefits, and benefit-cost ratios for the three NODOS alternatives.

Table 5-1. Preliminary Estimated Total Annual Benefits, Costs, Net Benefits, and Benefit-Cost Ratios for the NODOS Alternatives (\$Million, 2013 Dollars)^a

	Alternative A	Alternative B	Alternative C
Annual Benefits	\$249.3	\$254.8	\$275.8
Annual Costs	\$188.6	\$177.8	\$203.6
Annual Net Benefits (Benefits – Costs)	\$61	\$77	\$72
Benefit-Cost Ratio	1.32	1.43	1.35

^a Discounted at the federal discount rate of 3.75% over 100 years.

¹ U.S. Water Resources Council, March 10, 1983, *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies*, Washington, D.C.

PRELIMINARY- SUBJECT TO CHANGE