Water Plan Update 2005
Evaluation Criteria

Evaluation Criteria	Definitions
Agriculture	
Water Reliability (Average)*	A measure of that system's ability to sustain the social, environmental and economic systems which it serves during a year of average participation.
Water Reliability (Dry)*	A measure of that system's ability to sustain the social, environmental and economic systems which it serves during a dry year.
Water Reliability (Wet)*	A measure of that system's ability to sustain the social, environmental and economic systems which it serves during a wet year.
Profitability	
Sustainability	Acres lost due to salination, urbanization, fallowing, or environmental conversion; reduction in crop suitability due to excessive salts in land/water; increased salt management costs (add'l leachings); ability to leach salt.
Catastrophic Vulnerability	
Drought	The magnitude and probability of economic, social or environmental consequences that would occur as a result of a sustained drought under a given study plan. Measures the "drought tolerance" of study plans.
Earthquake	The degree to which (and probability) consequences would occur as a result of earthquake-induced infrastructure damage under a given study plan.
Flood	The magnitude a probability of consequences that would occur as a result of flood-induced infrastructure damage under a given study plan.
Terrorism/Vandalism	The magnitude and probability of consequences that would occur as a result of terrorist-induced infrastructure damage under a given study plan.
Toxic Spills	The magnitude and probability of water supply and/or water quality consequences that would occur as a result of toxic spills under a given study plan.
Wildfire	The magnitude and probability of consequences that would occur as a result of wild-fire induced infrastructure damage under a given study plan.
Cost Comparison	
Average Annual Cost of Implementing Option (Represents "turn key" conditions including environmental and third party impact mitigation, storage, conveyance, energy, capitalized O&M, administrative, planning, legal and engineering costs)	Total costs of option implementation including environmental and third party impact mitigation, storage, conveyance, energy, capitalized O&M, administrative, planning, legal and engineering costs
Economic Costs	
Cost of Reliability Enhancement	The total cost required to add an increment of reliability.
Cost of Unreliability	The sum of the foregone long-term value and short-term costs and losses incurred to the users.
Energy	
Produced by Study Plan	Both instantaneous capacity (megawatt) and energy produced (kilowatt hours).
Consumed by Study Plan	The energy consumption required to facilitate water management-related actions such as desalting, pump-storage, groundwater extraction, conveyance or treatment. This criterion pertains to the economic feasibility of a proposed action in terms of O&M costs.
Environmental	
Water Quality	The degree to which a study plan is expected to affect water quality in terms of ecosystem health, recreation, salinity intrusion, usability per sector, treatment costs, etc. Aquatic species and water bodies are vulnerable to changes to water quality.
Species Recovery	
Habitat Overall Condition	
Groundwater	The economic or environmental consequences resulting from unmet groundwater management objectives such as water levels, storage capacity, water quality, subsidence or sustainability. Examples of such consequences could be increased pumping requirements,
Environmental Justice	The extent and likelihood of disproportionate costs and benefits to people of particular races, cultures, and/or incomes as a consequence of a given study plan.
Flood Management	The degree to which a study plan might affect flood management operations and/or facilities.
Operational Flexibility	The degree to which a study plan affects the temporal or spatial operational efficiency of existing and proposed infrastructure to maximize benefits.
Recreation	
Sport-Fish Populations	The availability of fish species that support recreational fishing in terms of mortality rates and habitat sustainability associated with water management activities.
Reservoir-Based (boating, swimming, camping, etc.)	The availability of flat water recreation, such as boating and skiing, in the form of future storage facilities as well as operation of existing surfaces storage facilities.
Watercourse-based	The availability of recreational opportunities that are dependent on in-stream flows such as whitewater rafting.
Regional Self-sufficiency	The degree to which a study plan involves implementation of regional water management options.
Public Trust	The extent and likelihood for a study plan to conflict with uses protected by the public trust doctrine, such as fishing, navigation, etc. Involves the development, management and conservation of public resources to the benefit of current and future generations.
Third Party Impacts	The occurrence of incidental economic impacts to parties not directly related to (impact-causing) water management actions. For example, agricultural land retirement can impact local tax revenues and/or labor conditions.
Tribal Resources	Impact on resources utilized by the tribal nations - fish and wildlife, water quality, water availability, etc.
Urban	
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Commercial/Industrial Activity	
Water Supply	
Import	The amount of water that needs to be brought in from other regions to meet needs. See Machado bill.
GW Net Depletion in Storage	"Groundwater overdraft" long-term reduction in groundwater levels; outflow minus inflow.
Groundwater Quality	Water quality can affect supply integrity. Many pollutants are hydrophilic and not easily filtered by soil. Treated groundwater can be added to water supply.