



CALIFORNIA
WATER FIX
RELIABLE. CLEAN. WATER.

DWR - 1008

PROJECT DESCRIPTION



OVERVIEW OF TESTIMONY

- **Summary of the Project**
 - Project Facilities
 - Environmental Commitments
 - Operations Criteria
 - Adaptive Management
- **Reaffirmation of Range of Alternatives**
- **Improved Delta Flow Criteria**
- **Public Interest Considerations**
- **Overview of Remaining DWR and Reclamation Testimony**

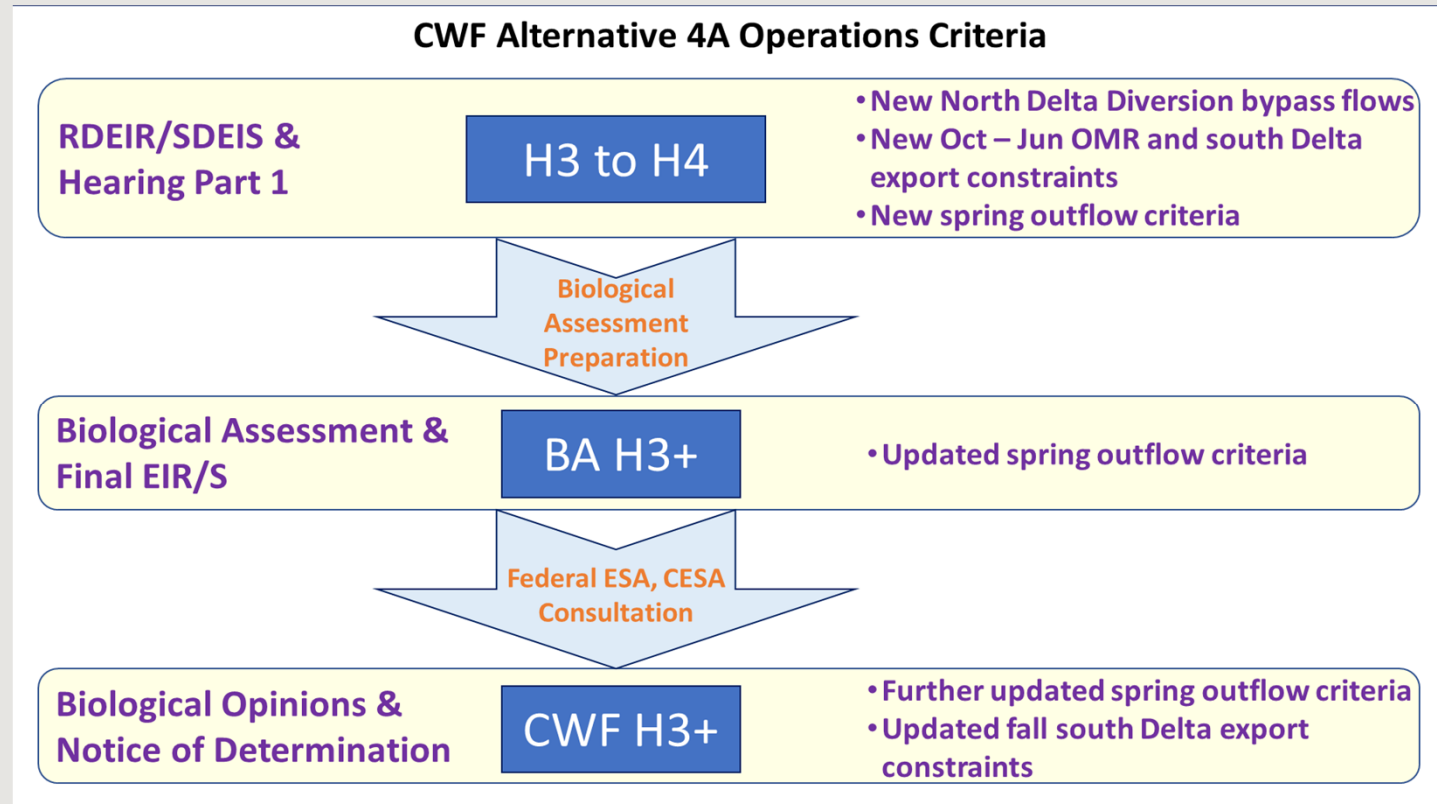


PROJECT DEFINITION

- **California WaterFix Alternative 4A with operational scenario H3+ (CWF H3+) is the Project approved by Department of Water Resources (DWR)**
- **Project is defined in the July 2017 Certified Final Environmental Impact Report (FEIR)**
- **The Notice of Determination (NOD) was filed by DWR with the Governor's Office of Planning and Research, State Clearinghouse, on July 21, 2017**



REFINEMENT OF PROJECT DESCRIPTION





REAFFIRMATION OF RANGE OF ALTERNATIVES

- **CWF H3+ is within range of alternatives described in Part 1**
 - Operational range between Alternative 4A H3 to H4
 - Boundary analysis defined by Boundary 1 and Boundary 2
- **Prior to Part 2, USFWS and NMFS biological opinions criteria were defined – and there was no longer a need to consider a range of alternatives**
- **Therefore, only CWF H3+ is considered in Part 2**



CWF H3+ OPERATIONAL CRITERIA

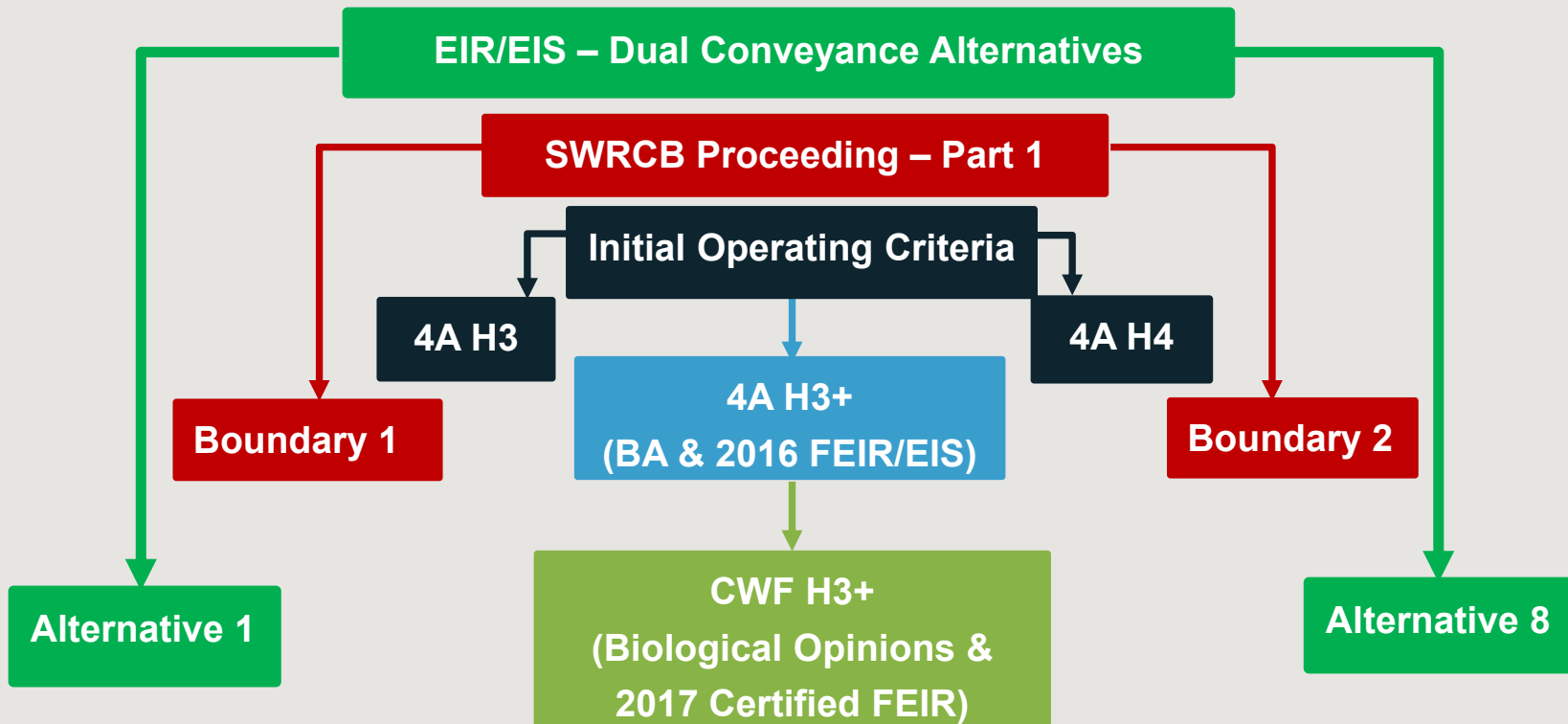
- **Operational criteria presented in the 2016 Biological Assessment and 2016 FEIR/EIS was refined based on 2017 USFWS and NMFS biological opinions**
 - Real-time operations approach for:
 - North Delta Intake Bypass Flows
 - South Delta export criteria for October-November
 - Head of Old River Gate operations
 - Spring Delta outflow targets and criteria March-May
- **More details will be provided by the operations and CalSim II/DSM2 experts**



RANGE OF ALTERNATIVES IN PARTS 1 AND 2

Similar to Existing Delta Outflow Requirements

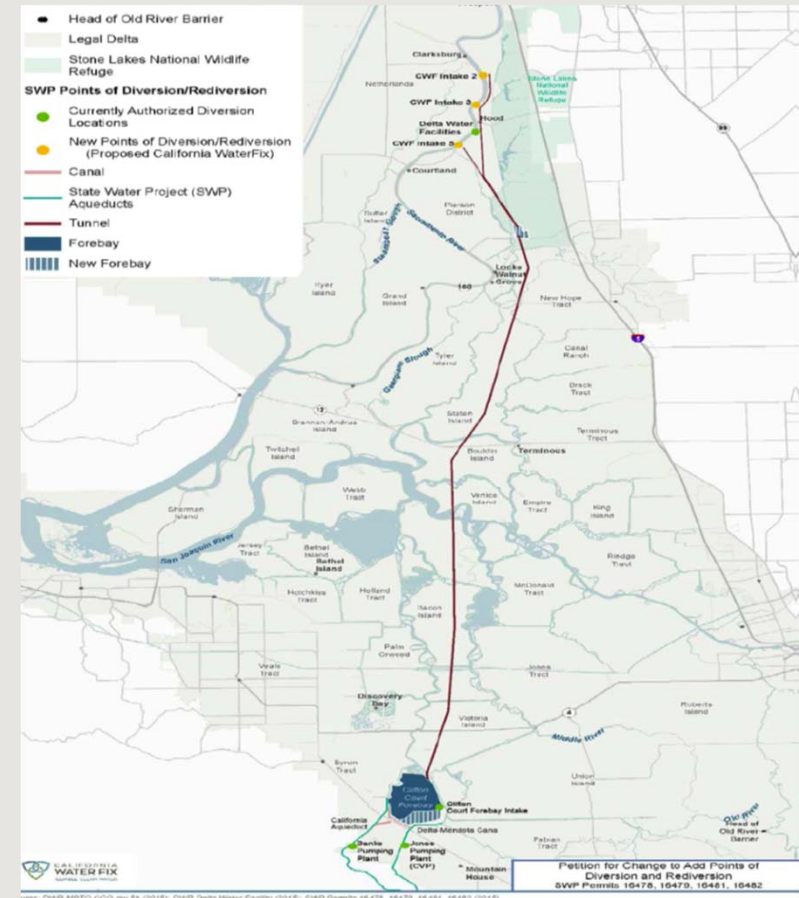
Higher Delta Outflow Requirements





CWF H3+ PROJECT FACILITIES

- **Project facilities as described in Part 1**
 - Based upon dual conveyance from both the north and south Delta
 - 3 intakes with state-of-the-art fish screens
 - Two tunnels that extend to existing Delta export facilities
 - Intermediate forebay
 - Pumping plant and new forebay near existing Clifton Court Forebay
- **More details will be provided by engineering and recreation experts**





CWF H3+ ENVIRONMENTAL COMMITMENTS

- **Habitat restoration commensurate with mitigation requirements in the 2017 Certified FEIR**
 - Include refinements based on consultation with U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife
 - Increased mitigation restoration habitat
 - Delta smelt tidal natural community
 - Riparian natural community
 - Grassland natural community
- **More details will be provided by the biology experts**



ADAPTIVE MANAGEMENT

- **Adaptive management addresses potential long-term changes in operations due to new scientific knowledge through an interagency process**
- **Broad purposes to:**
 - Promote collaborative science
 - Guide development/implementation of science and monitoring
 - Apply new information and insights to management decisions/actions and recommend changes for CWF H3+
- **More details will be provided by the biology experts**



IMPROVED DELTA FLOW CRITERIA

- **CWF H3+ will comply with existing Delta Flow Criteria**
 - Decision 1641
 - 1995 Water Quality Control Plan
 - 2008 USFWS and 2009 NMFS Biological Opinions
- **CWF H3+ also will increase spring Delta outflow as compared to Existing Conditions and No Action Alternative to benefit aquatic resources**
- **Delta outflow probably will be addressed in adaptive management process**



CWF H3+ IMPROVES PUBLIC INTEREST CONSIDERATIONS

- **CWF H3+ will improve Delta ecosystem conditions by capturing flow in wet periods and reducing exports in dry periods**
 - Reduce reverse flows in south Delta
 - Reduce entrainment of aquatic species in south Delta and use state-of-the-art fish screens at North Delta Diversions
- **CWF H3+ adaptive management process will address scientific uncertainties and incorporate monitoring to improve SWP/CVP operations in a manner to minimize negative effects on aquatic species**
- **CWF H3+ will improve water supply reliability to over 25 million Californians and 3 million acres of irrigated land – which will reduce the potential for groundwater and local surface water overuse**



OVERVIEW OF REMAINING DWR AND RECLAMATION TESTIMONY

- **Panel 1**
 - Project description
 - SWP and CVP operations
- **Panel 2**
 - Modeling approaches for hydrologic, water quality, and biological models
 - Engineering-related construction-based effects on navigation
- **Panel 3**
 - Approaches to evaluating effects on recreation opportunities