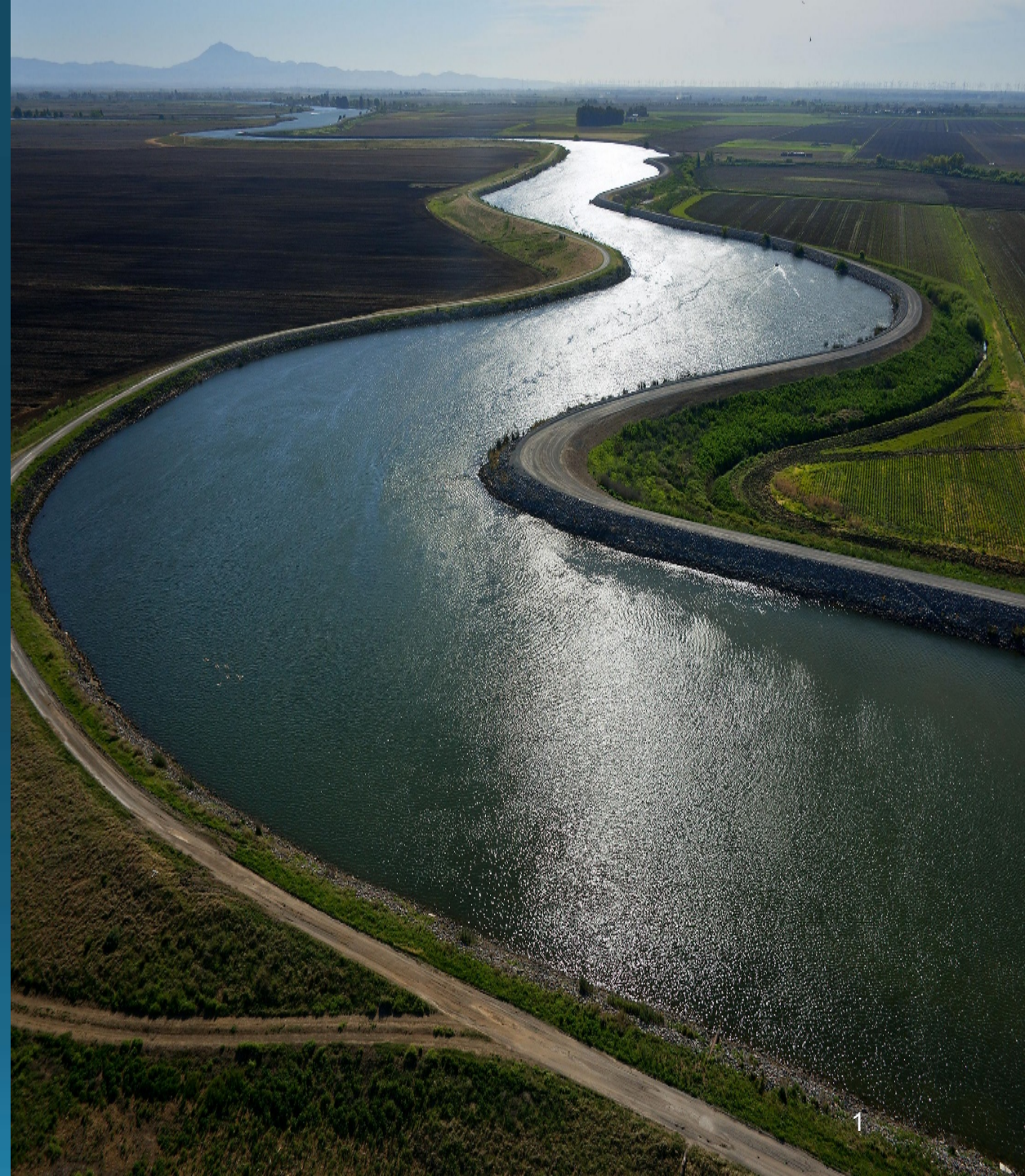


Delta Conveyance Project

WATER RESOURCES AND WATERSHED COMMITTEE
OCTOBER 14, 2020
ITEM NO. 3



Presentation Outline

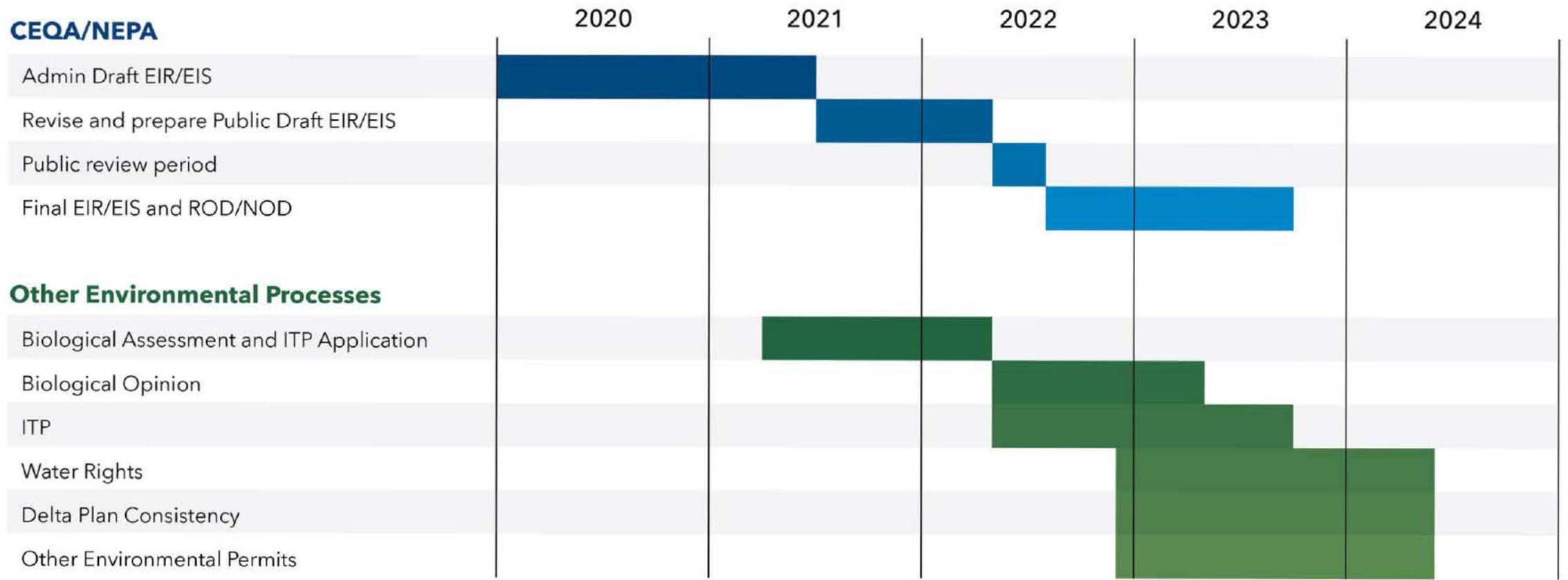
- Previous Related Actions
- Notice of Preparation – Project Definition
- DCF Preliminary Benefits
- DCF Costs
- Planning Related Agreements
- Design and Construction Agency Participation
- Recommendations

Previous Board Action and Recent Developments

May 2018	Authorized Gap Fund	<ul style="list-style-type: none">• Approximately \$2 Million for continued funding of planning costs
July 2018	CA WaterFix	<ul style="list-style-type: none">• Approved Agency Participation
Nov 2018	Joined Finance JPA	<ul style="list-style-type: none">• General Manager assigned to Board
FEB 2019	Governor Newsom	<ul style="list-style-type: none">• Shifts State's direction and initiates planning to support a single tunnel
JAN 2020	Department of Water Resources (DWR)	<ul style="list-style-type: none">• Released Delta Conveyance NOP• Single Tunnel (6,000 cfs)
APR 2020	Department of Water Resources (DWR)	<ul style="list-style-type: none">• Completes DCF AIP negotiations except for contractor participation

Preliminary Project Schedule

Delta Conveyance Project Schedule



Notice of Preparation

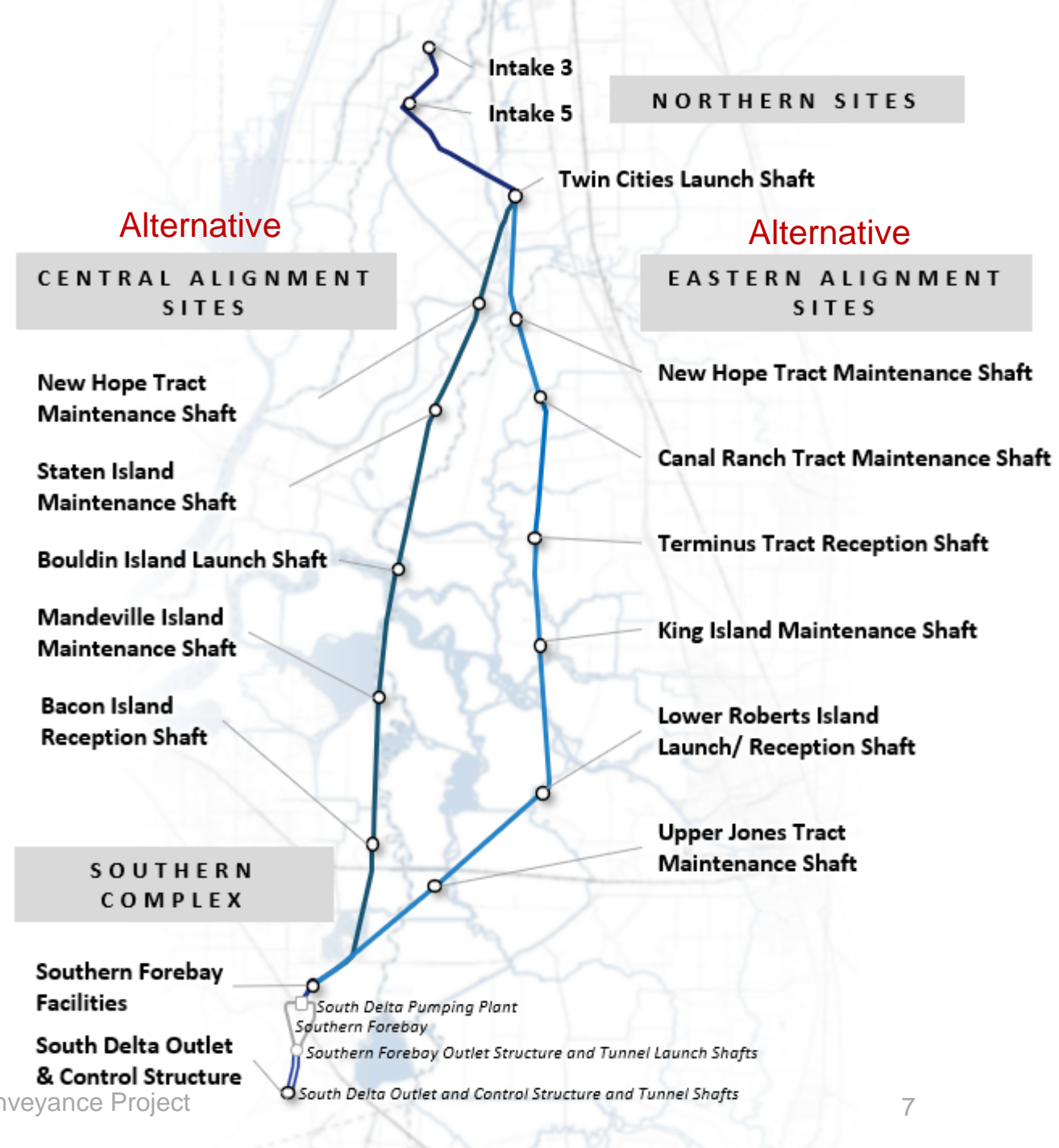
Delta Conveyance Objectives

To restore and protect ability to deliver SWP Water Supply

- **CLIMATE RESILIENCY:** Addresses climate change, extreme weather, and rising sea-levels in the Delta for the SWP
- **SEISMIC RESILIENCY:** Minimizes health/safety risk to public from earthquake-caused reductions in water delivery quality and quantity from the SWP
- **WATER SUPPLY RELIABILITY:** Restores and protects ability to deliver SWP water in compliance with regulatory and contractual constraints
- **OPERATIONAL RESILIENCY:** Provides SWP operational flexibility to improve aquatic conditions and manage risks of additional future constraints

Notice of Preparation

- Proposed Project: Single tunnel up to 6,000 cfs (≈42 miles)
- Alternatives include
 - Capacities ranging from 3,000 to 7,500 cfs
 - Varying degrees of involvement of the CVP, including no involvement
- Final choice of potentially feasible alternatives TBD in Draft EIR



DCP Preliminary Benefits

Reliability and Resiliency Benefits

- Resiliency/Reliability
 - Climate change adaptation
 - Sea-level rise adaptation
 - Seismic resilience
- South Delta flow pattern improvements for fisheries
- Water transfer capacity and carriage water savings
- Water quality improvements

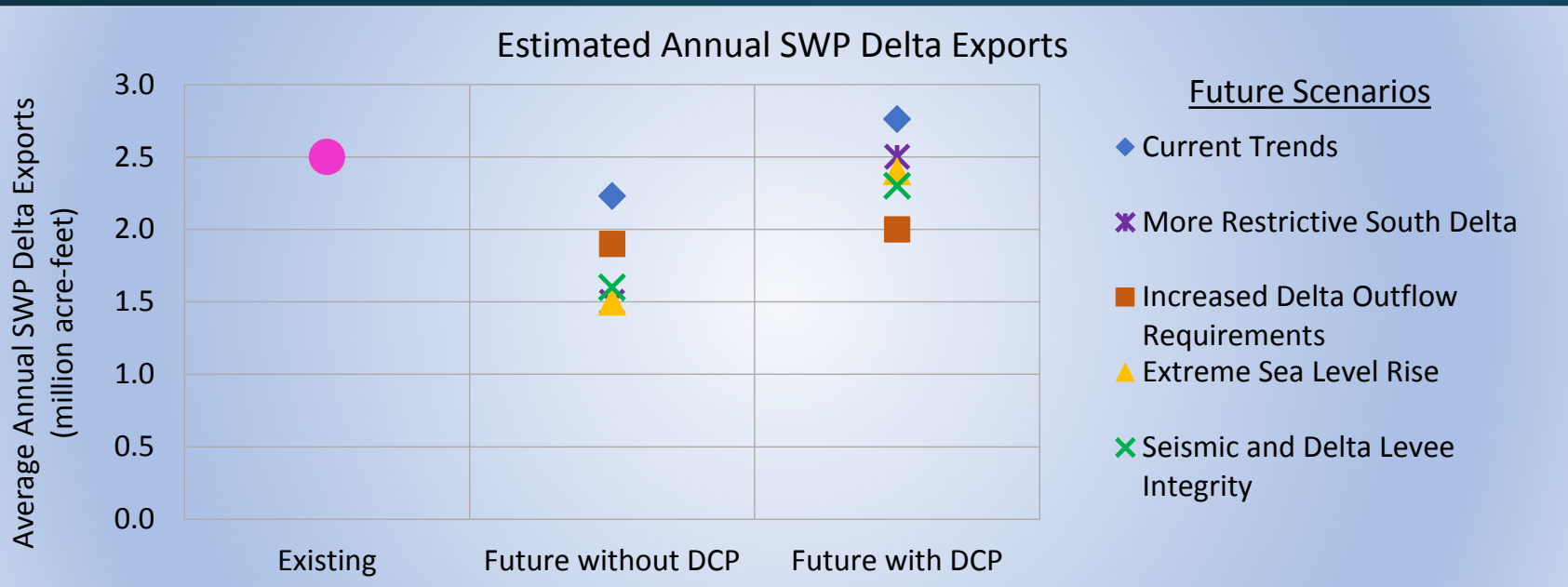


Preliminary Water Supply Assessment Scenarios

- 5 plausible combinations of regulatory, climate and sea level, and seismic/levee risk future scenarios
- Each scenario simulated with and without DCP
- DCP operations based on California WaterFix
- Coarse estimate of water supply changes using CalSim II
- Estimates will be refined as DCP further defined



DCP Improves SWP Resilience Under Future Conditions



- SWP exports decrease by ~300 to 1000 TAFY under future scenarios without DCP
- DCP allows similar SWP exports as the existing conditions in the future — *demonstrates improved resilience*

**TAFY: thousand acre-feet per year on average*

System resilience is defined as the capacity to respond, absorb, adapt to, and recover from disruptive events

- Haines 2009, Risk Analysis

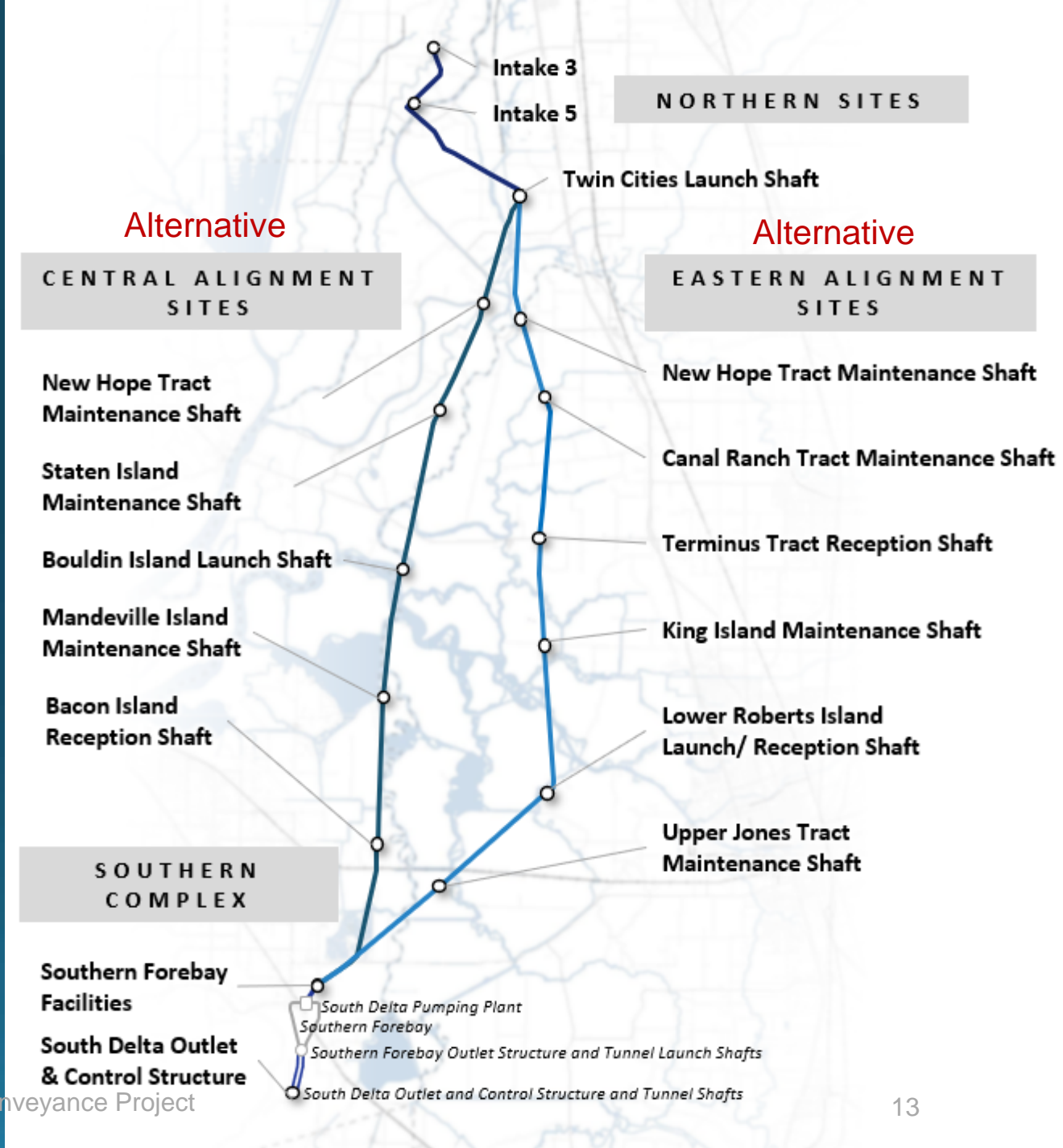
“... intended to strengthen the resilience of water systems, thereby helping communities prepare for disruptions, to withstand and recover from shocks, and to adapt and grow from these experiences.”

- California Water Resilience Portfolio 2020

DCF Preliminary Costs and Cost Allocation

Cost Information Assumptions

- **Proposed Facilities Included in Estimate:**
 - One Tunnel - Total capacity 6,000 cfs
 - Two intakes at 3,000 cfs each
 - ≈42 miles of tunnels and associated shafts
 - Southern Complex Facilities
 - Pump Station
 - Forebay
 - Connections to existing CA Aqueduct



DCA Cost Assessment

- DCA Program Scope:** Cost assessment based on DWR's Proposed Project in NOP Conceptual Engineering Report (CER) is not completed
- Purpose:** Early cost assessment to inform PWA's investment in project planning
- DCA Cost Assessment:** \$15.9 billion in 2020 dollars
- Included:** Based on preliminary engineering, but includes project costs for construction, management, oversight, mitigation, planning, soft costs and contingencies

Contingency and Soft Cost Variance

Category	DCA Estimate (\$ Billions)	% of Baseline Construction Cost	Industry Range ⁴ (% of Baseline Construction Cost)	Applied Industry Range (\$ Billions)	Variance from Industry Range (\$ Billions)
Baseline Construction	8.37 ¹	100	100	8.37	-
Contingency	3.71 ²	44	10 to 30	0.84 to 2.51	1.20 to 2.87
Program Management	0.42	5	6	0.50	(.08)
Design & CM	2.42	29	10 to 15	0.83 to 1.26	1.16 to 1.59
Subtotal for Variance³	14.92	178	126 to 151	10.55 to 12.64	2.28 to 4.37
DCO oversight, mitigation, land acquisition	.98	n/a	n/a	n/a	n/a
Total Project	15.9	n/a	n/a	n/a	n/a

1. This removes \$354 M from the DCA construction costs since those were line item risk mitigation contingencies.
2. This adds \$354 M to the DCA stated contingency of 3.3 to include risk mitigation contingencies.
3. Does not include DCO oversight, mitigation, land acquisition, capital costs, and O&M costs.
4. Based on level of detail provided in DCA documents and estimate

Agreements

Agreements for Board Consideration

1. Agreement in Principle (AIP) for the SWP Delta Conveyance Contract Amendment
 - Defines Agency's Participation Factor for Potential DCF
2. Funding Agreement for DCF Planning Costs
3. Delta Conveyance Design and Construction Authority (DCA) JPA Agreement

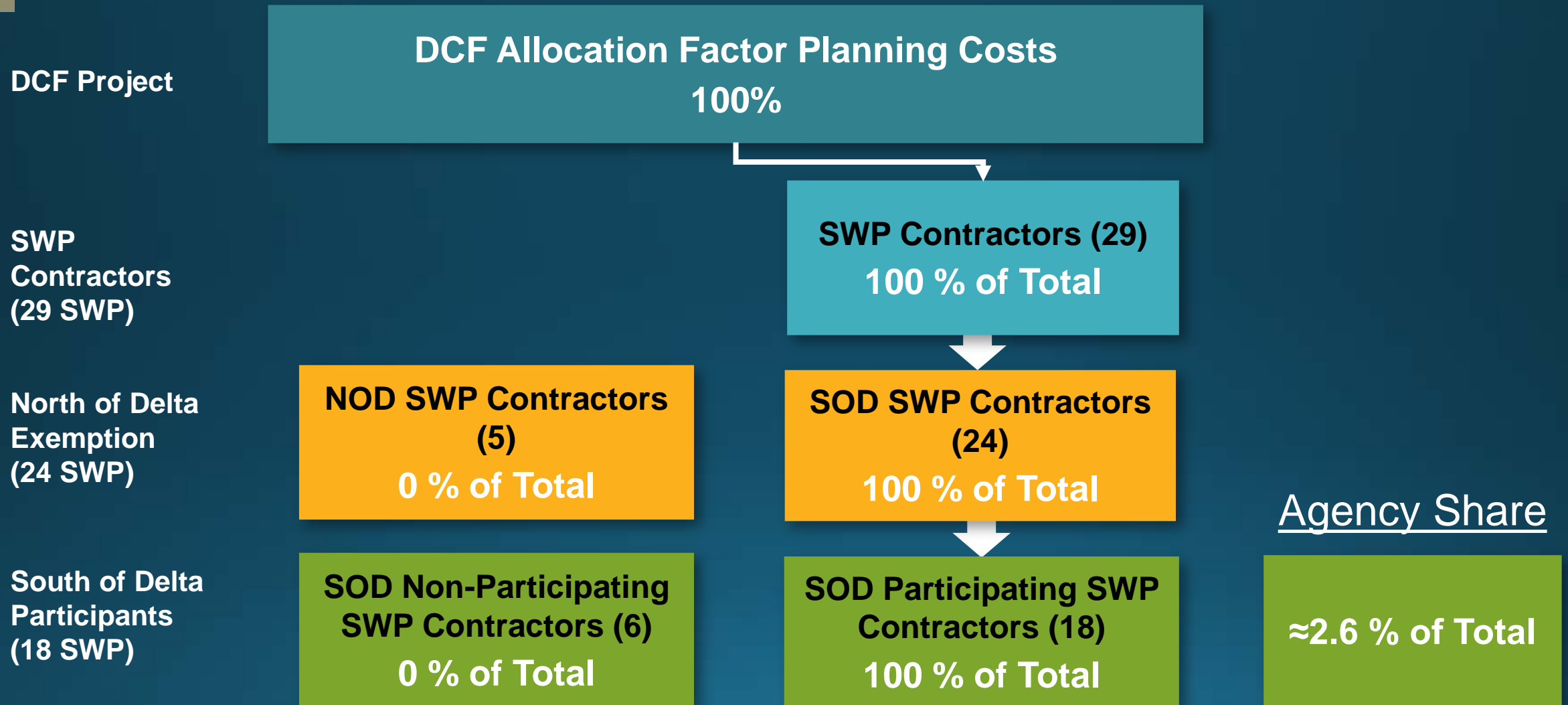


Agreement in Principle (AIP) for SWP Delta Conveyance Contract Amendment

Delta Conveyance AIP

- Option to opt-out of DCF costs and benefits
- Option to assume additional DCF costs and benefits
- Effective Date will be on or after the contract extension billing transition date
- Costs and DCF water supply are allocated based on the DCF Participation Table
- Adopt “Pay-As-You-Go” Billing Provisions for both the Capital and Minimum Components

DCF Allocation Factor (%) – Planning Costs



Planning Cost Funding Agreement

Key Provisions

- Funding Agreements for up to \$385 Million for planning costs from 2021-2024
- SCV Water share up to ≈\$10 Million
- Allows for collection through SWP billings
- Authorizes contributed funds to be spent on DCA invoices
- Does not allow funds to be spent to reimburse DWR previously contributed funds

Design and Construction Authority (DCA) Membership

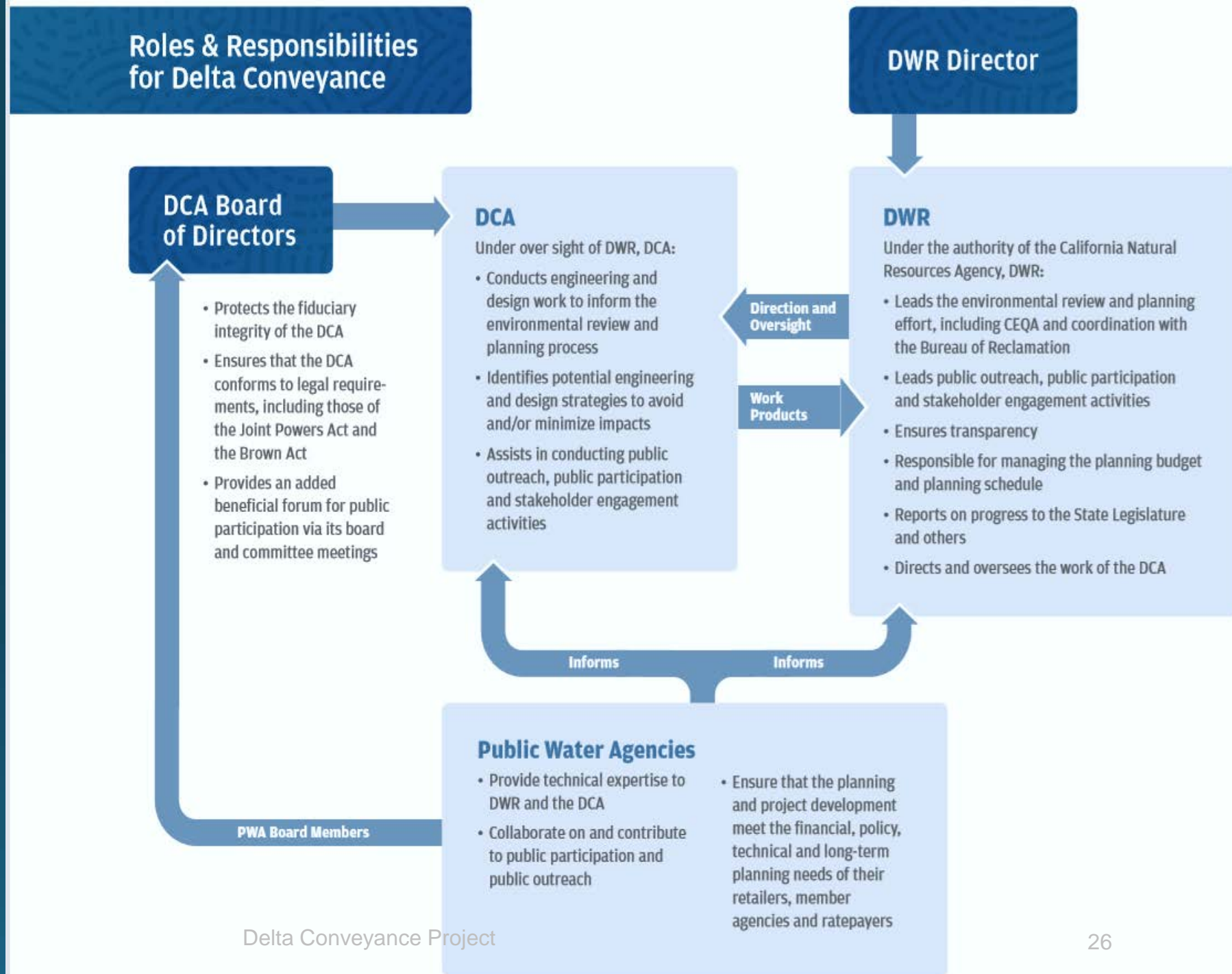
Design and Construction Authority

- Original functions delayed
- Shifted interim focus
 - Support DWR lead planning effort
 - Engineering information technical
 - Impact avoidance/mitigation
 - Conduct and support outreach and stakeholder engagement efforts

DCA Governance

- Governance shifting to be more like SWC Inc.
 - Board of Directors representing various classes
 - Single Agency Representation – MWDSC, KCWA, SCVWD
 - Multi Agency Representation –
 - South Bay
 - East Branch (2 representatives)
 - West Branch and others
 - Provision for possible CVP participation
 - Reconsideration for financial decisions based 70% participation levels

Delta Conveyance Design and Construction Authority (DCA)



Recommendation to the Board

- Inform DWR through AIP process of 2.6% level for purposes of planning funding and participation in a potential project
- Authorize execution of Funding Agreement for purposes of DCF planning costs
- Authorize joining the Design and Construction Authority