



# Update on Delta Conveyance

Bay-Delta Committee  
Item 6a  
September 22, 2020

# Delta Conveyance

## Metropolitan Board Actions

### December 2020 2021-22 Planning Costs

- Funding Agreement for planning costs
- Review Delta Conveyance Agreement in Principle
- Potential updates to Delta Conveyance Design and Construction Authority (DCA)

### Post-2022 Planning Costs

- Funding agreement for additional planning costs

### Project Participation

- Approve Project/Contract Amendment for Conveyance

## Regulatory Actions

◆ Draft EIR/S

◆ Final EIR/S

◆ Federal/State ESA Approvals

◆ Project Approval ROD/NOD

◆ SWRCB  
Change in Point of Diversion

◆ DSC  
Certification of Consistency

*This slide does not show all necessary permits and regulatory processes. It is a general representation of one way DWR may seek to comply with regulatory requirements.*

# Bay-Delta Committee

Sep

## Overview

- Preliminary costs
- Preliminary benefits
- Funding Agreement

Oct

## DCA Agreement

- DCA Agreement
- Address questions from September Bay-Delta Committee meeting

Nov

## Outline Proposed Board Action

Dec

## Board Action

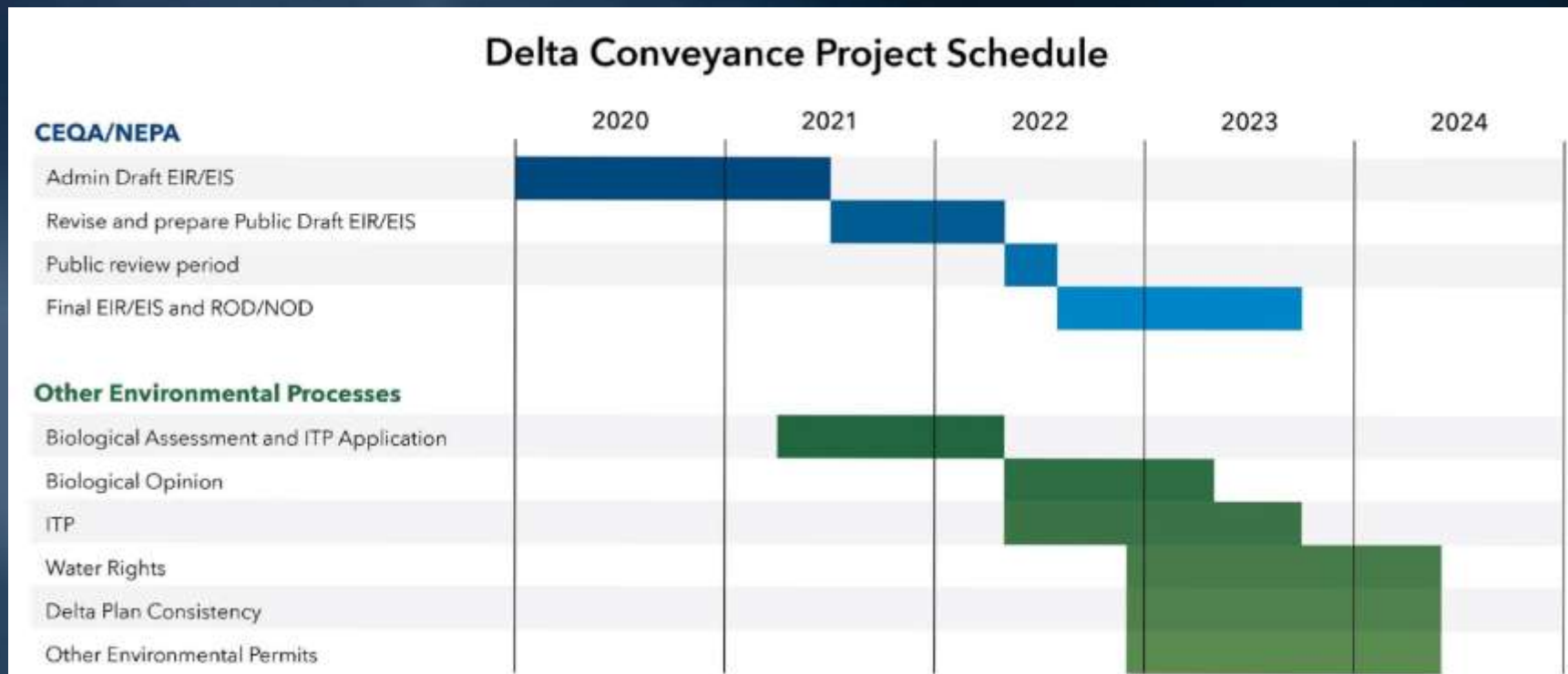
- Funding request for planning costs
- Potential updates to DCA

*Monthly updates on Delta Conveyance Design and Construction Authority, Delta Conveyance Finance Authority, and Delta Conveyance Authority Delta Stakeholder Engagement Committee*

# Overview

- Delta Conveyance
  - Preliminary costs and cost allocation
  - Preliminary benefits
  - Agreement in Principle
  - Funding Agreement
  - Next steps
- Updates
  - Delta Conveyance Design and Construction Authority
  - Stakeholder Engagement Committee

# Project Schedule



# Delta Conveyance Preliminary Costs and Cost Allocation



# Preliminary 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 tunnel and associated shafts
- Southern complex facilities
  - Pump station
  - Forebay
  - Connections to existing CA Aqueduct

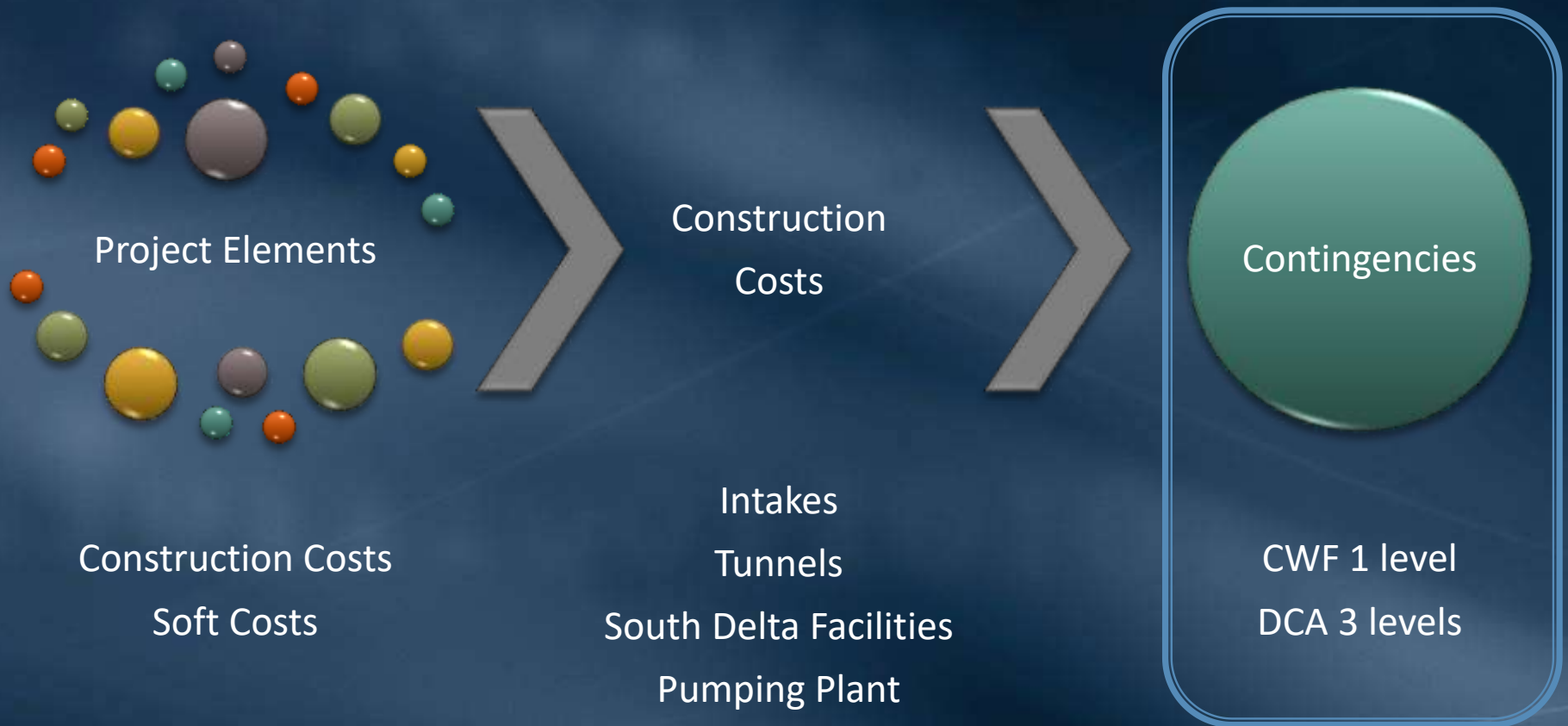


# Preliminary DCA Cost Assessment

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 Public Water Agency's investment in project planning
DCA Cost Assessment:	\$15.9 billion in non-discounted dollars
Included:	Based on preliminary engineering, but includes project costs for construction, management, oversight, mitigation, planning, soft costs, and contingencies



# Review of CWF Cost Estimate and Preliminary DCA Cost Assessment



# Contingency Levels for DCA Preliminary Cost Assessment



CA WaterFix Overall Contingency

35% of construction costs

# Contingency and Soft Cost Variance

## Preliminary Costs

Category	DCA Estimate (\$ Billions)	% of Baseline Construction Cost	Industry Range <sup>4</sup> (% of Baseline Construction Cost)	Applied Industry Range (\$ Billions)	Variance from Industry Range (\$ Billions)
Baseline Construction	8.37 <sup>1</sup>	100	100	8.37	-
Contingency	3.71 <sup>2</sup>	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	0.84 to 1.26	1.16 to 1.59
<b>Subtotal for Variance<sup>3</sup></b>	<b>14.92</b>	<b>178</b>	<b>126 to 151</b>	<b>10.55 to 12.64</b>	<b>2.28 to 4.37</b>
DCO oversight, mitigation, land acquisition	.98	n/a	n/a	n/a	n/a
<b>Total Project</b>	<b>15.9</b>	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

# Delta Conveyance Preliminary Benefits

# Project Objectives Defined

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

# Preliminary Project Benefits

## SWP Reliability and Resilience Compared to Future Conditions

Without Project may result in ~300,000 AF to 1 MAF reduction in SWP supplies

### CLIMATE RESILIENCY

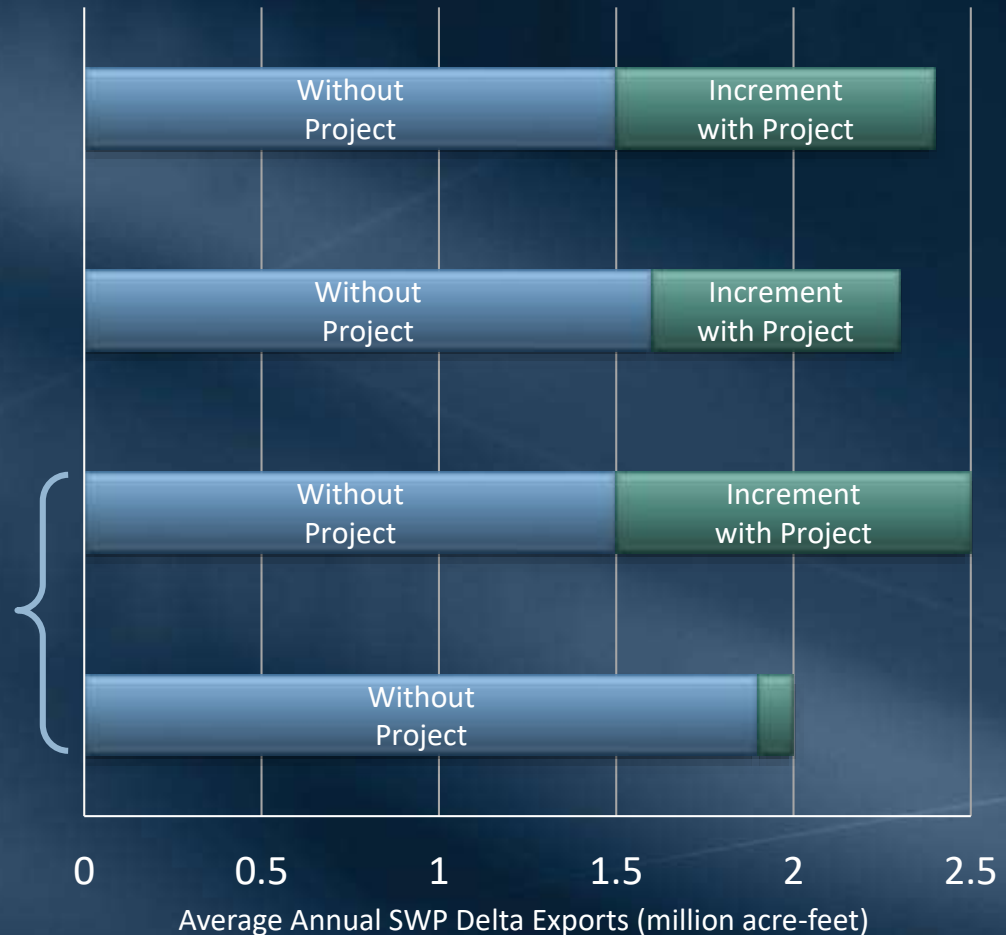
Protect up to ~900 TAFY under extreme sea level rise

### SEISMIC RESILIENCY

Protect or preserve up to ~700 TAFY under seismic risks and Delta island flooding

### WATER SUPPLY RELIABILITY OPERATIONAL RESILIENCY

Protect or provide ~100 TAFY to ~1000 TAFY  
More restrictive South Delta  
Increased Delta Outflow Requirements



TAFY = Thousand acre-feet per year on average

Note: Project has potential to increase SWP reliability or mitigate losses under many plausible future risk scenarios





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

# Delta Conveyance AIP

- Option to opt-out of Delta Conveyance costs and benefits
- Option to assume additional Delta Conveyance costs and benefits if available
- Effective Date will be after the contract extension amendment becomes effective
- Costs and benefits are allocated based on the Delta Conveyance Participation Table
- Includes whitepaper that provides details about how benefits would be accounted for and how excess capacity can be used

# Funding Agreements

# Key Provisions

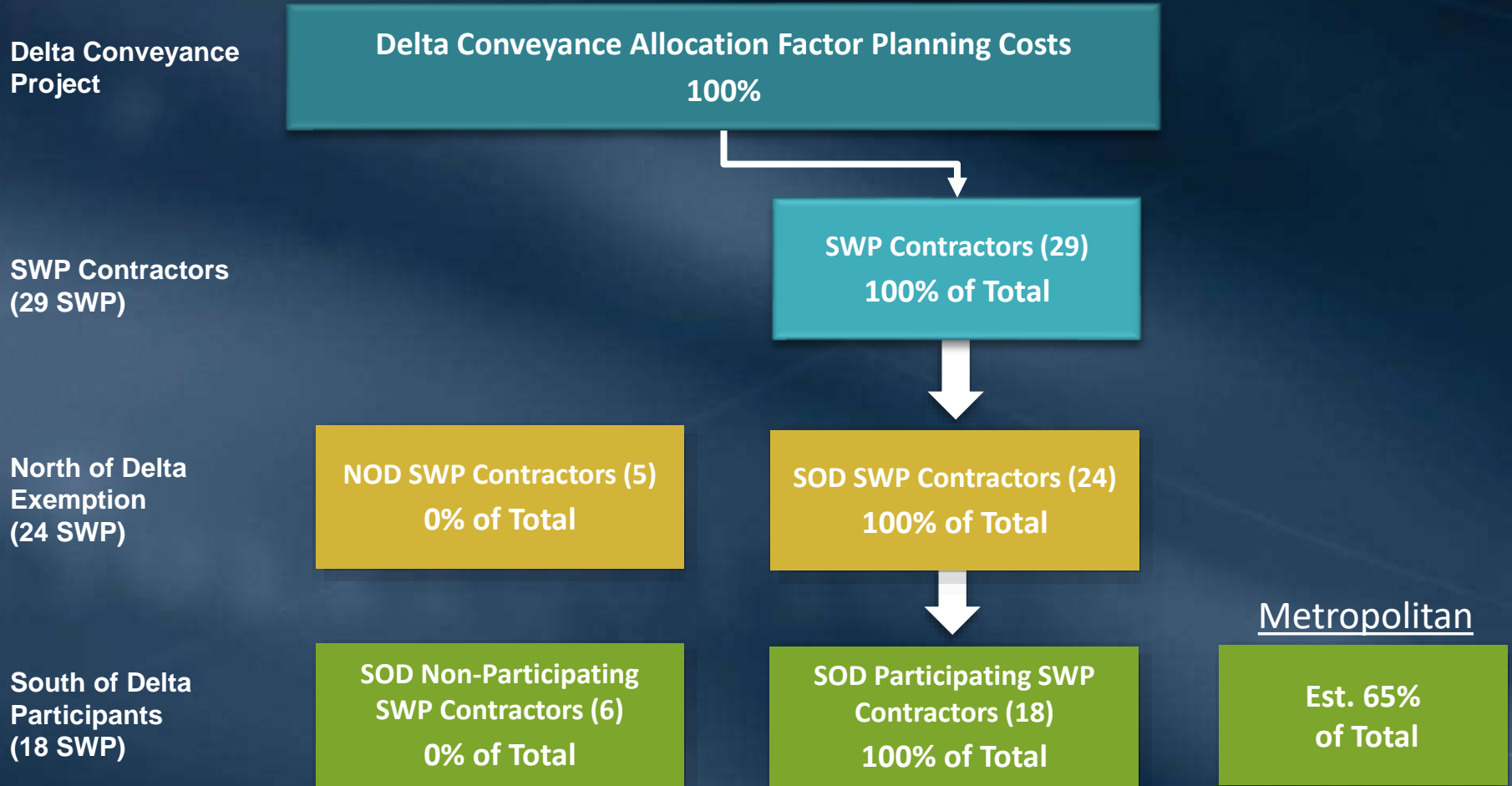
- Funding Agreements for \$385 million for planning costs from 2021-2024
- Authorizes contributed funds to be spent on DCA invoices consistent with the Joint Exercise of Powers Agreement and with DWR's Delta Conveyance Office environmental planning costs
- Allows customization for contributed funds
- Provides flexibility to provide additional funds without amendments to the Agreement

# Options

- Statement of Charges PAYGO or Lump Sum Payments
- Authorization for entire share of \$385 million in planning costs or only first two years
- Will allow for additional funds to be contributed upon showing of board authorization without further amendment

# Delta Conveyance Allocation Factor (%)

## Planning Costs





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# Delta Conveyance Design and Construction Authority Update

# Delta Conveyance Design and Construction Authority

## August

- Amendment #3 to the Joint Exercise of Powers Agreement
- Presentation on Delta Conveyance Preliminary Cost Assessment
- Stakeholder Engagement Committee Update

## September

- Amendment #4 to the Joint Exercise of Powers Agreement
- Expand the DCA Delta Stakeholder Engagement Committee and Appoint an Ex Officio Member to the Committee
- Stakeholder Engagement Committee Update

# Delta Conveyance

## Stakeholder Engagement Committee

### August

- DWR Updates
- Intakes Design Refinements
- Traffic Reductions
- Briefing on Bethany Alternative

# Delta Conveyance Stakeholder Engagement Committee Virtual Tours

- Proposed Project Overview  
<https://youtu.be/xWGD1kuwb7Q>
- Intakes  
<https://youtu.be/JRkYO4FGTP8>
- Tunnels and Shafts  
<https://youtu.be/HKxS5r3i-gc>
- Southern Forebay  
[https://youtu.be/TL\\_1JZD2JZY](https://youtu.be/TL_1JZD2JZY)
- South Delta Conveyance  
<https://youtu.be/XhmDIjSKLMw>



