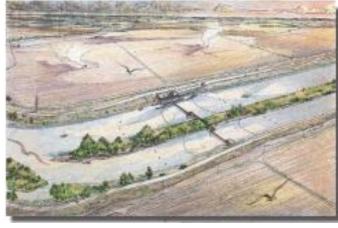
Temporary Rock Barriers to South Delta Gates

Jacob McQuirk

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and Management Branch







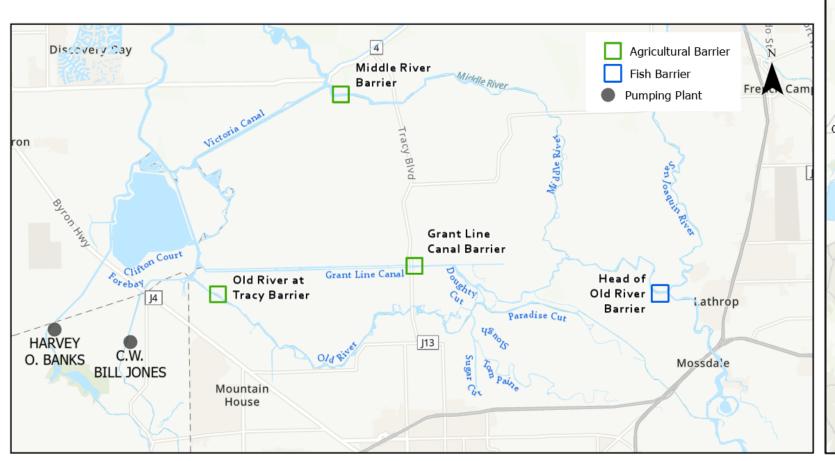
Presentation Outline

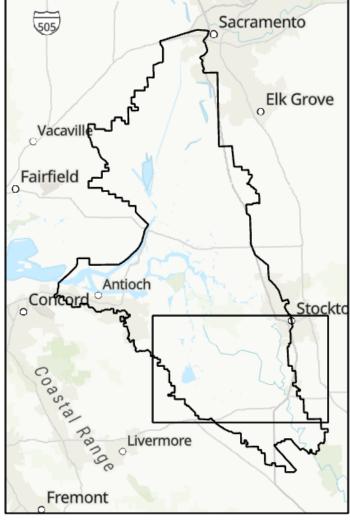
- Mitigating Effects of Export Operations
- Existing Temporary Barriers Project (TBP)
- South Delta Gates Proposal
- South Delta Gates Benefits
 - Environmental
 - Water Supply
 - Financial
- Assistance Needed
- Q&A

Mitigating Effects of Export Operations

- SWP and CVP Delta export operations effect the south Delta
 - Lowers water surface elevation in the channels
 - Reduces water circulation, thus water quality, impacts agricultural diversions
- South Delta Water Agency (SDWA) filed lawsuit against the State of CA/DWR and US Department of Interior/USBR
 - To put litigation on hold until settlement reached, a temporary solution was developed
 - DWR without USBR implements Temporary Barrier Project annually

Temporary Barriers Project - Location





Temporary Barriers Project – Agricultural Barriers

Old River near Tracy Barrier



Grant Line Canal Barrier



Middle River Barrier



Temporary Barriers Project – History and Construction

- TBP was initiated in 1991 in response to a lawsuit filed in 1982 by the South Delta Water Agency (SDWA) against the State, DWR and US Department of Interior, USBR.
- DWR agreed to install three temporary barriers in <u>Old River near Tracy</u>
 (ORT) since 1991, <u>Middle River (MR) since 1987</u>, and <u>Grant Line Canal (GLC)</u>
 near the Tracy Boulevard bridge since 1996 to ensure that local agricultural diverters within the SDWA do not experience adverse water level impacts. These barriers are planned and constructed annually typically from May through November.

Temporary Barriers Project - Challenges and Limitations

- Lack of engagement and financial contribution from USBR
- Outdated design with very limited operational flexibility
- Unable to fully mitigate for SWP/CVP export operations' impacts on water levels
- Impacts listed species
- Permit renewal every 5 years
- Increasing mitigation requirements
- Challenging to develop and implement adaptive management
- Inability to address environmental issues
- Temporary solution to address export-related impacts on diverters
- Continued non-compliance with D-1641 south Delta salinity objectives

South Delta Gates (Proposed)

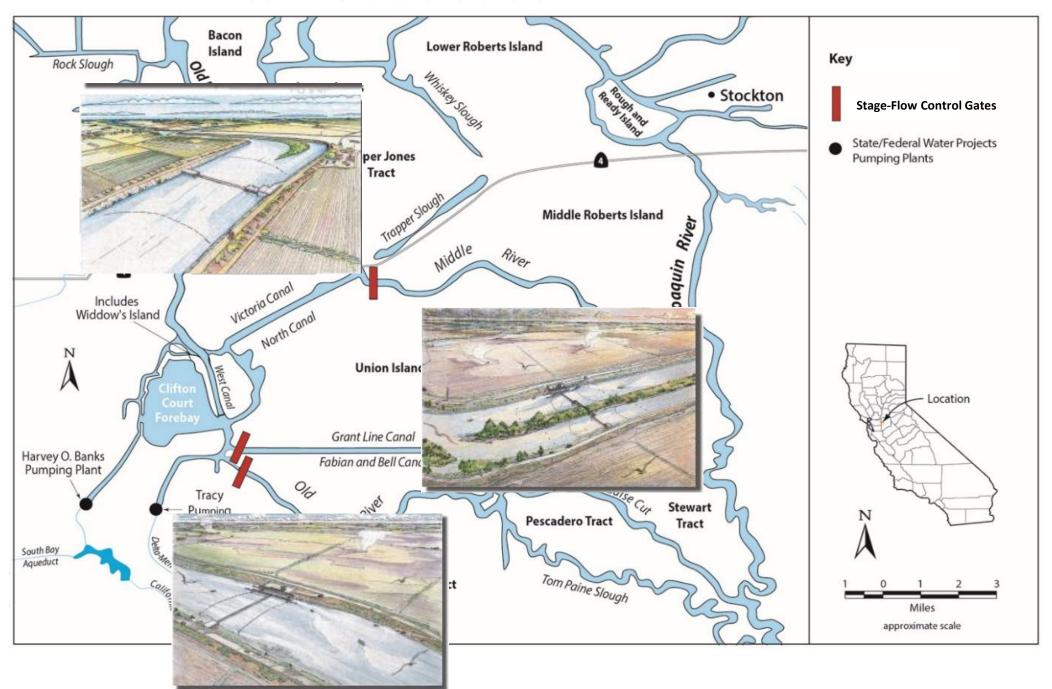
Purpose:

- Provide a long-term solution to mitigate for SWP and CVP export operations effects in the south Delta
- Settle the SDWA lawsuit in partnership with USBR (USBR to pay their fair share of the solution)
- Improve water quality and fish passage in the south Delta
- Minimize environmental impacts associated with mitigating SWP and CVP export operations effects in the south Delta

Scope:

- Construct and operate permanent operable gates in lieu of implementing TBP at the following south Delta locations:
 - Middle River
 - Grant Line Canal and Fabian Bell Canal
 - Old River

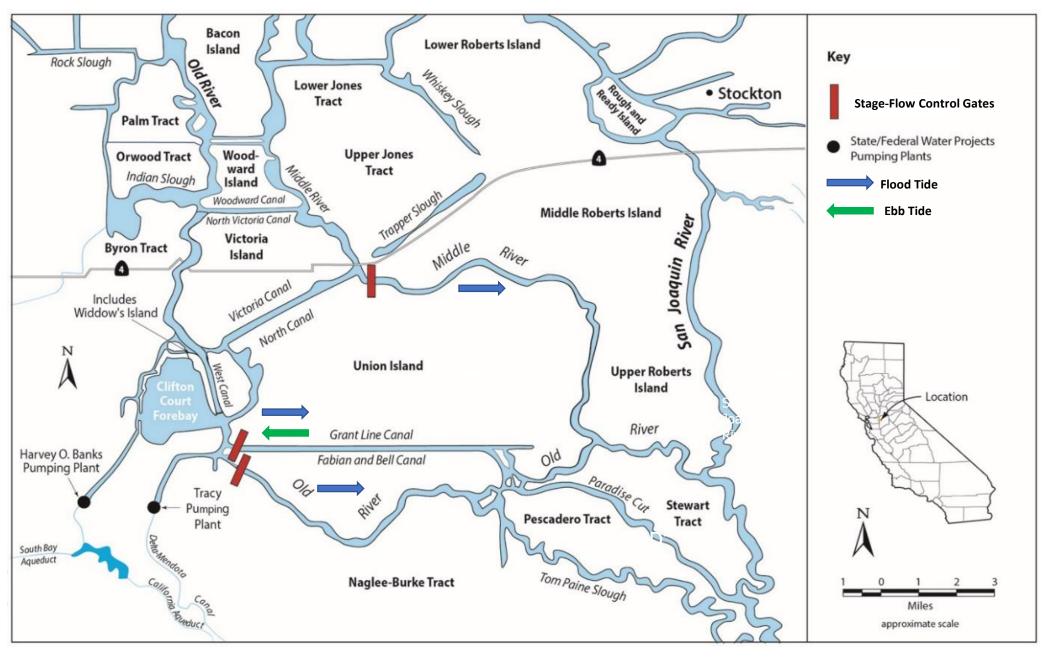
South Delta Gate Locations



Environmental Benefits

- Improves water quality by inducing circulation and mixing water
- Eliminates annual TBP construction impacts
- Improves migratory conditions in the south Delta for anadromous fish
 - More adaptive management opportunities than TBP
 - Reduces migratory delays and predation

South Delta Gates: Circulation Directions



Water Supply Benefits

- Improves south Delta water level protection from export operations for senior water rights holders
 - Improves water level maintenance, when needed
- Improves water circulation and water quality = Improve water supply reliability
- Provides operational flexibility on adaptive management (drought, water transfer, water level, etc.,)
- Potential weed management benefit
- Improves long-term climate resiliency

Financial Benefits

- Unique window of opportunity for securing Federal (BIL) and State funding from appropriations (Propositions 50 and 13)
- Can be funded without SWP or CVP contractor contributions
- Lowers SWP and CVP costs
- Lowers mitigation costs

Estimated Project Costs & Potential Funding Sources

- Estimated Project Costs: \$183.7M*
- Cost Sharing between State and Federal
- Potential Funding Period: FY 2023 through FY 2028
- Potential Funding Sources:
 - DWR from State appropriations (\$44.7M received July 2023)
 - USBR from Federal appropriations

^{*} November 2022 DOE cost update

Assistance Needed

- DWR is seeking SLDMWA support on the potential benefits of South Delta Gates Project to the SWP and CVP while addressing long standing issues in their region
- Actively engage with USBR Region and Headquarters management to support the project and pursue federal funds
 - Identify federal funding source and schedule
 - Execute and administer partnership agreement
 - Lead federal agency for NEPA and permitting
- DWR will continue coordinating with USBR staff though SLDMWA engagement will benefit our communications with them

Q&A

Thank you!

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