

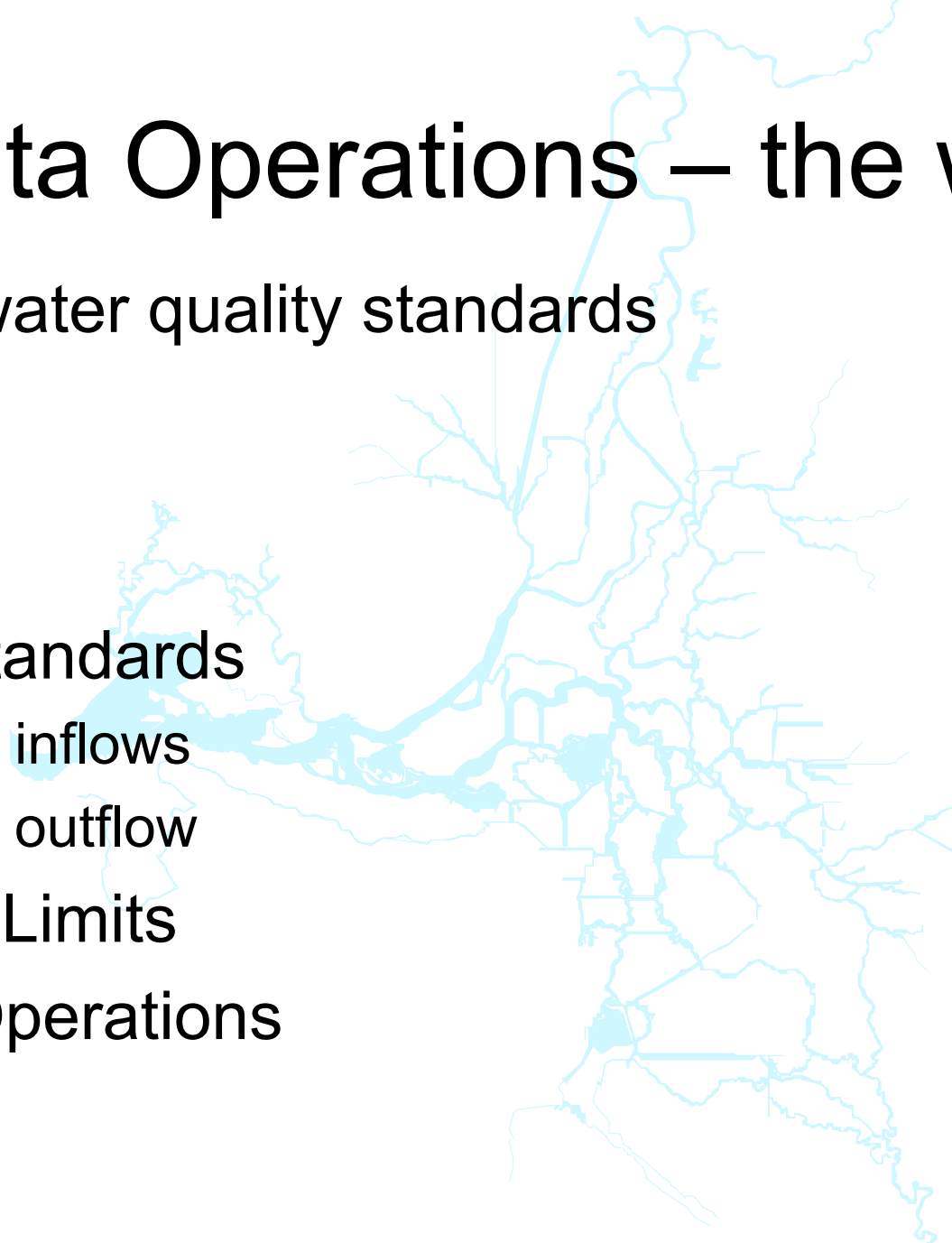
Delta Cross Channel Gate Operations for Water Quality

Curtis Creel

November 15, 2004

Delta Operations – the why

- Delta water quality standards
 - M&I
 - Ag
 - Fish
- Flow standards
 - Delta inflows
 - Delta outflow
- Export Limits
- DCC Operations



Delta Operations – the how



- Change reservoir releases
- Change export levels
- Change Delta hydraulics
 - Operate SMSC Gates
 - Operate DCC Gates

DCC Operational Paradigms



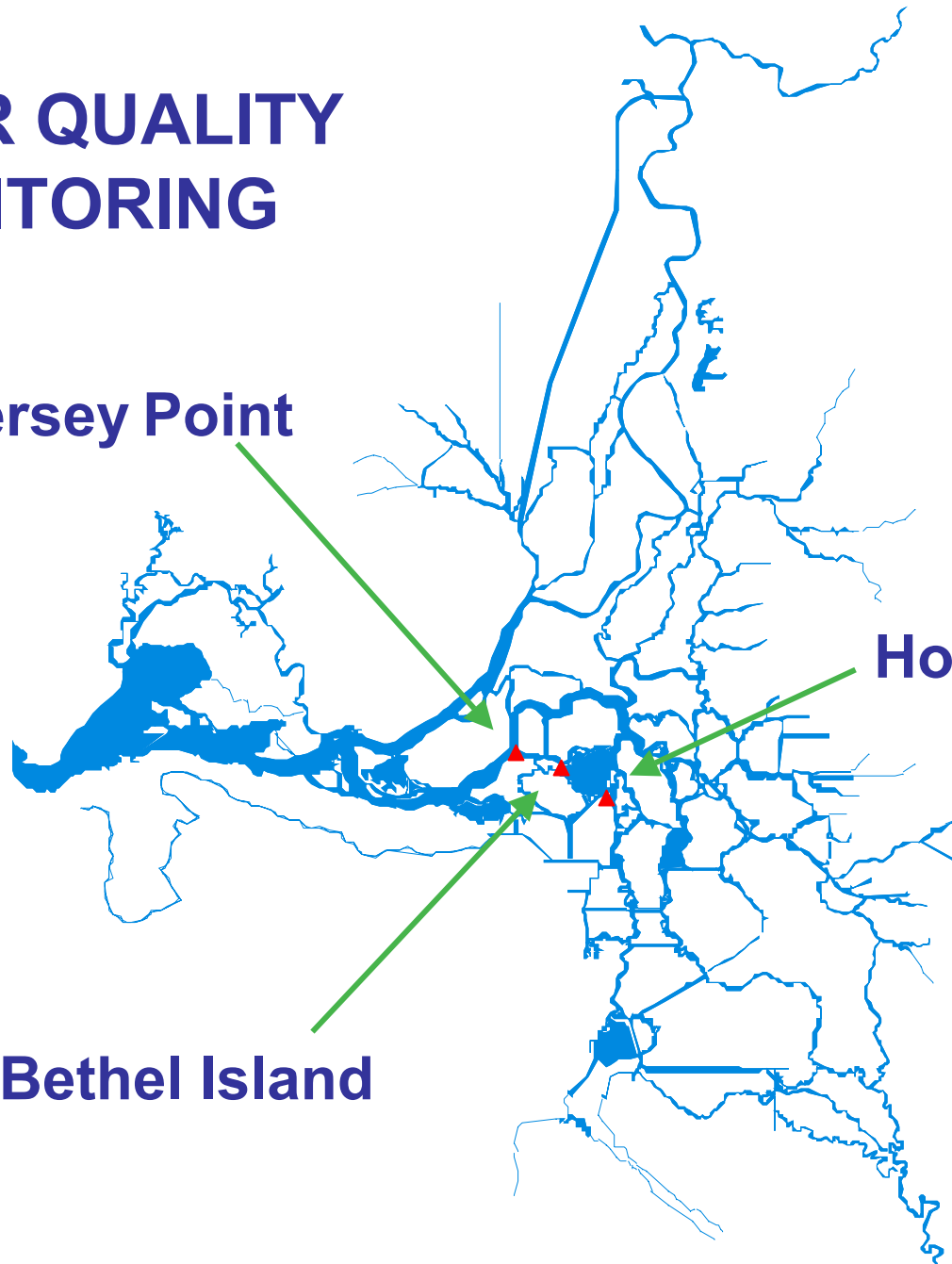
- Close:
 - Improve Sacramento River WQ (summer)
 - Improve Sacramento River flow (Rio Vista) (fall)
 - Reduce flood potential (fall & winter)
 - Improve juvenile salmon emigration (fall & winter)
- Open:
 - Improve SJ River WQ (summer)
 - Improve CCC WQ (fall)

WATER QUALITY MONITORING

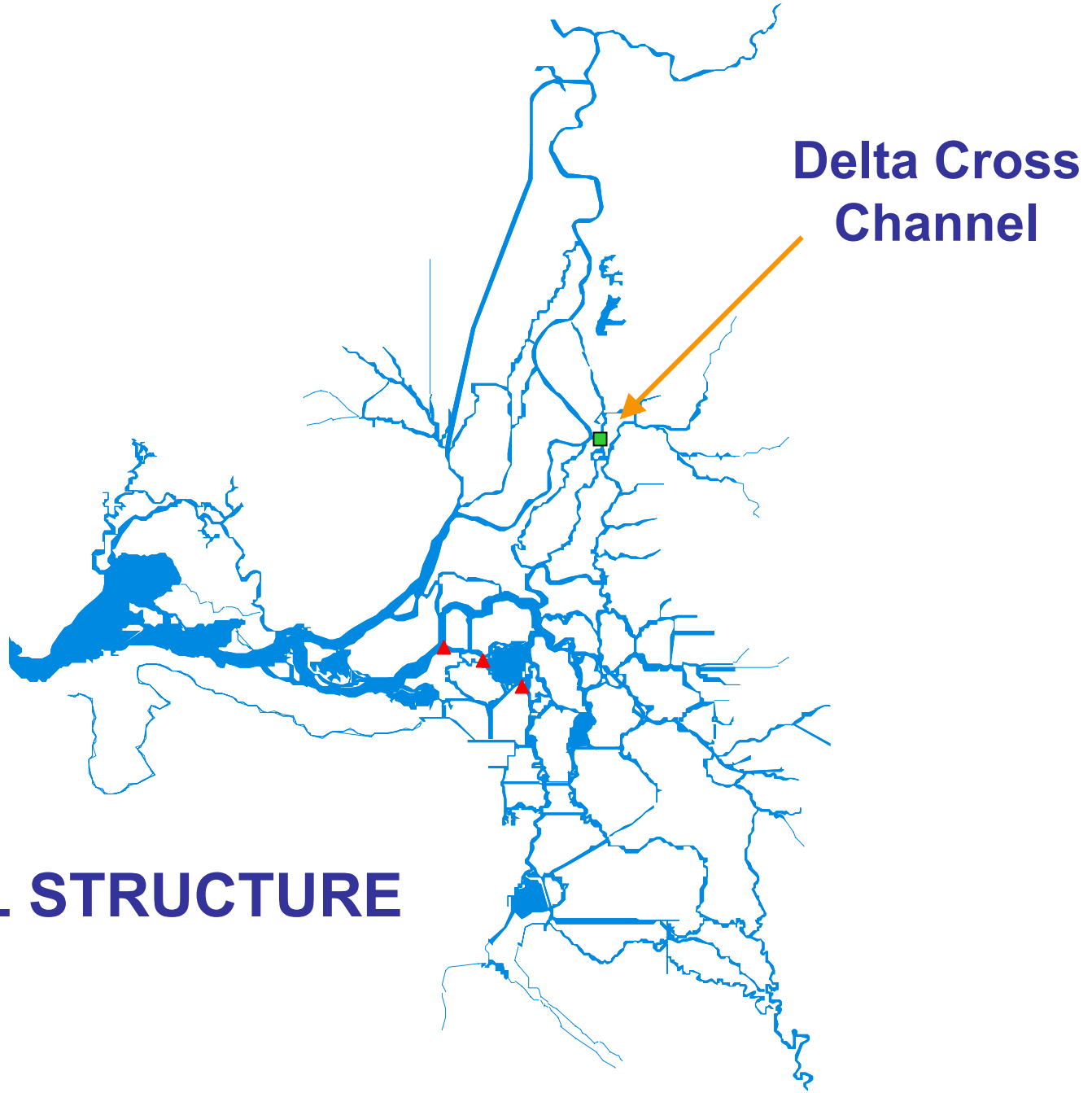
Jersey Point

Holland Tract

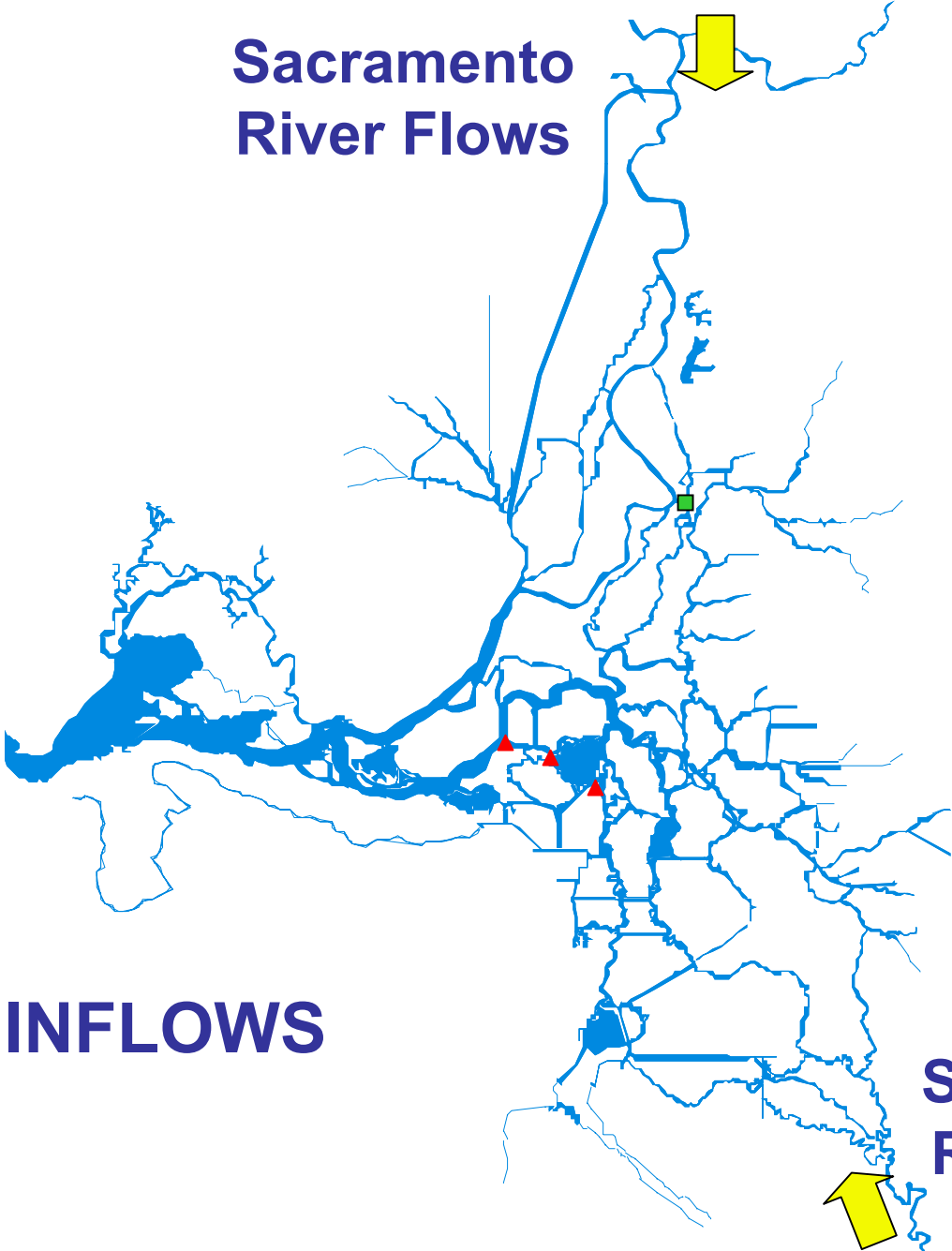
Bethel Island



CONTROL STRUCTURE

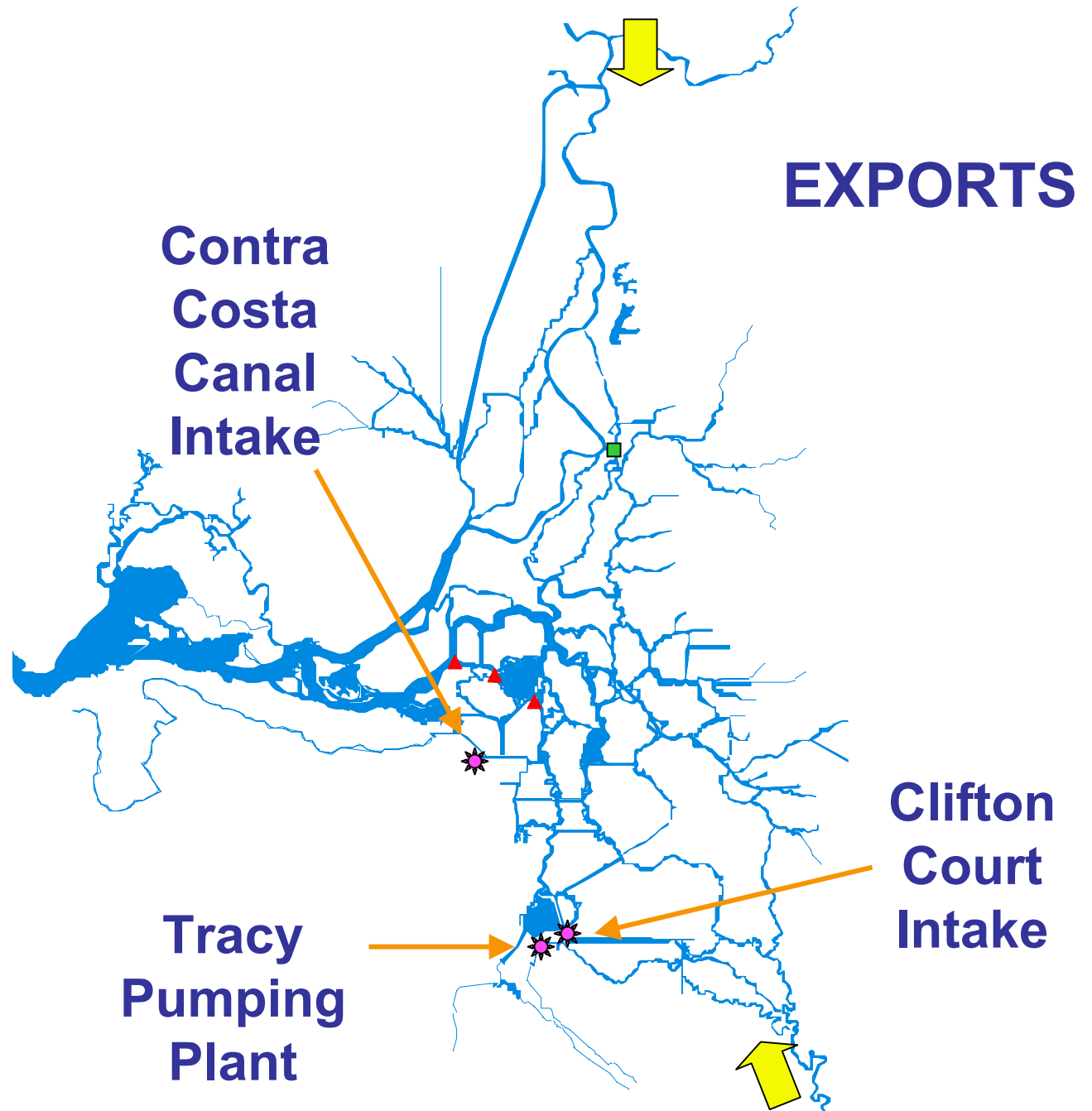


**Sacramento
River Flows**



DELTA INFLOWS

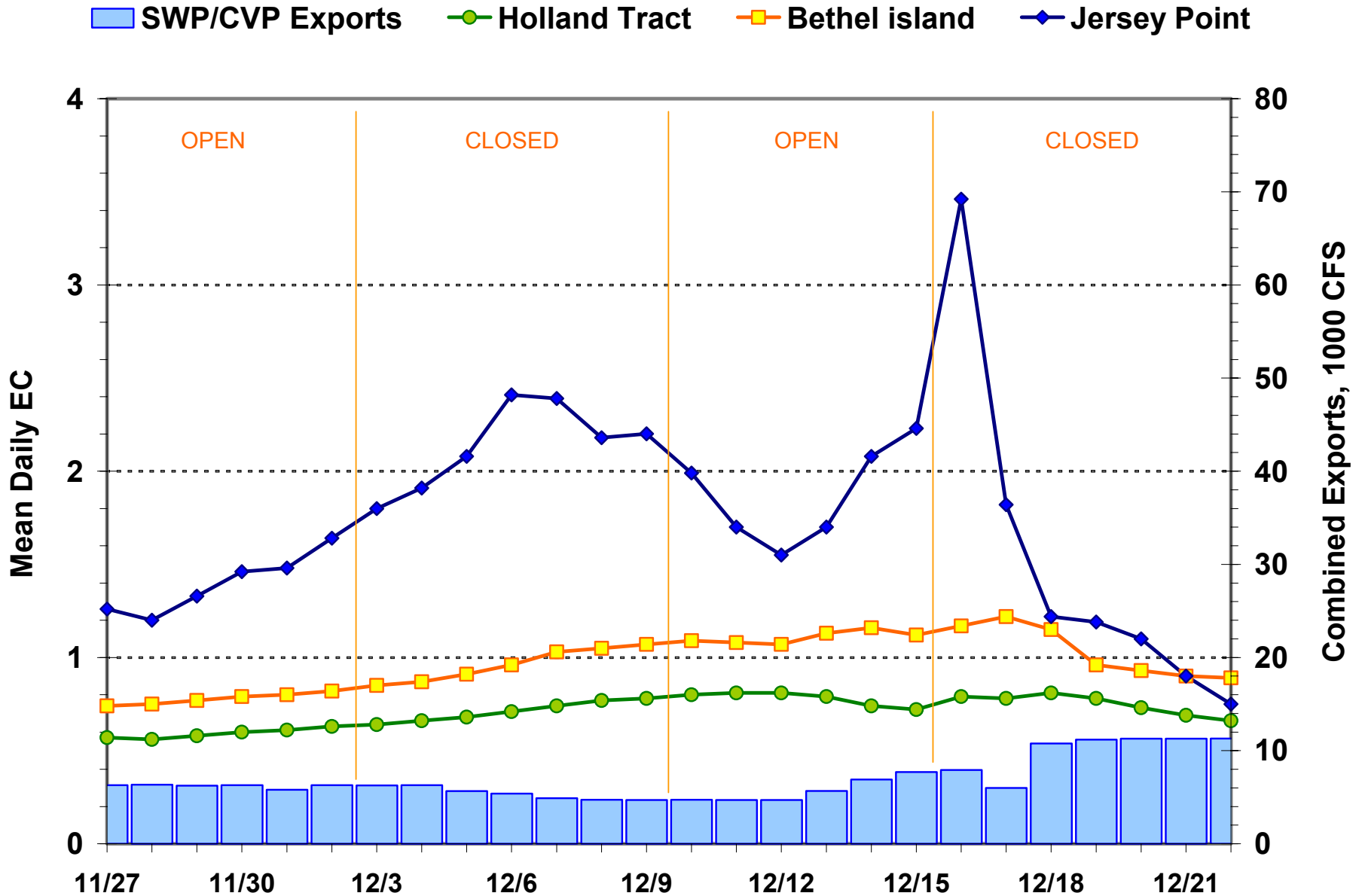
**San Joaquin
River Flows**





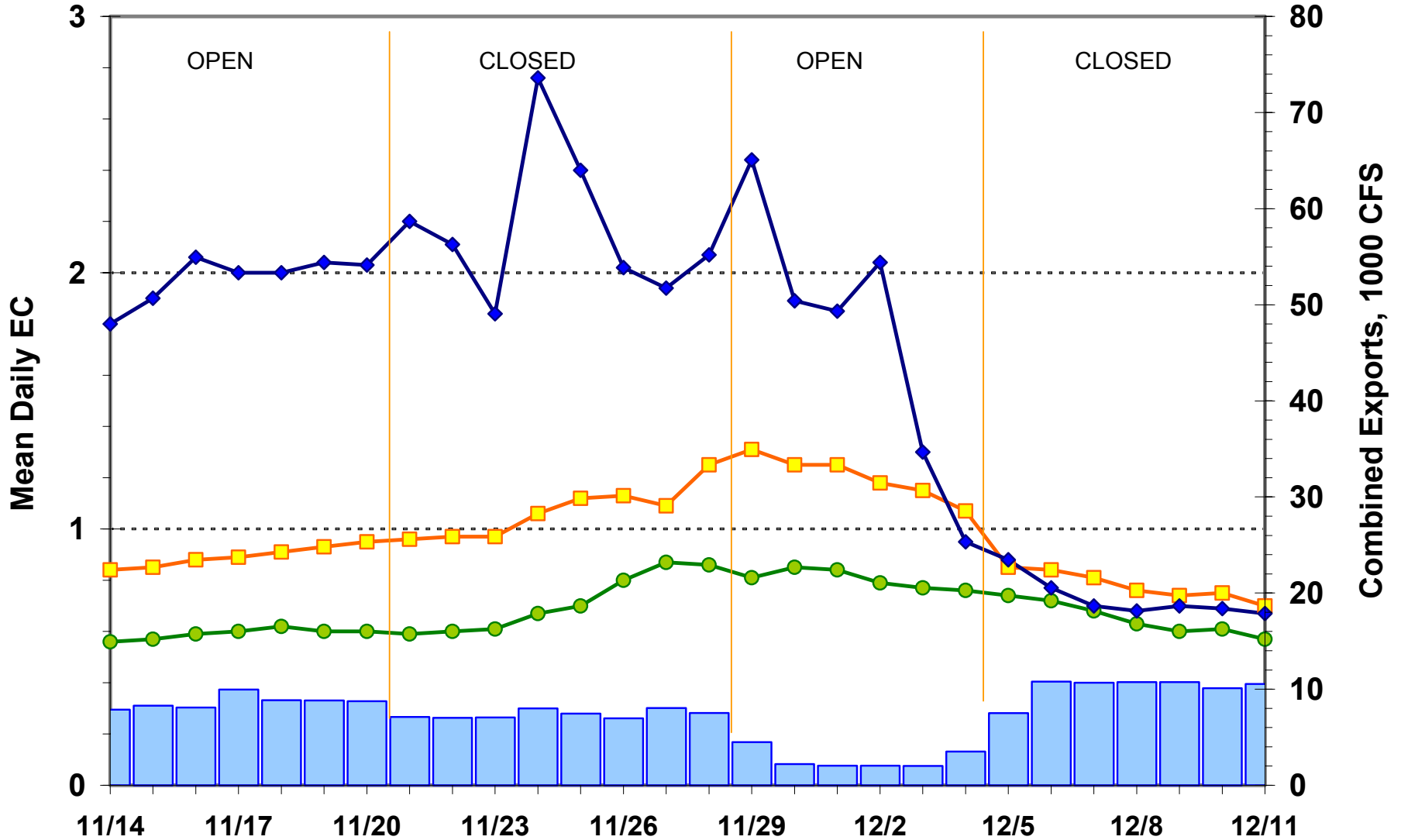
Example

Water Quality and Exports in 2022

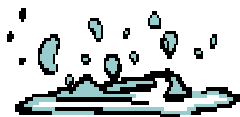


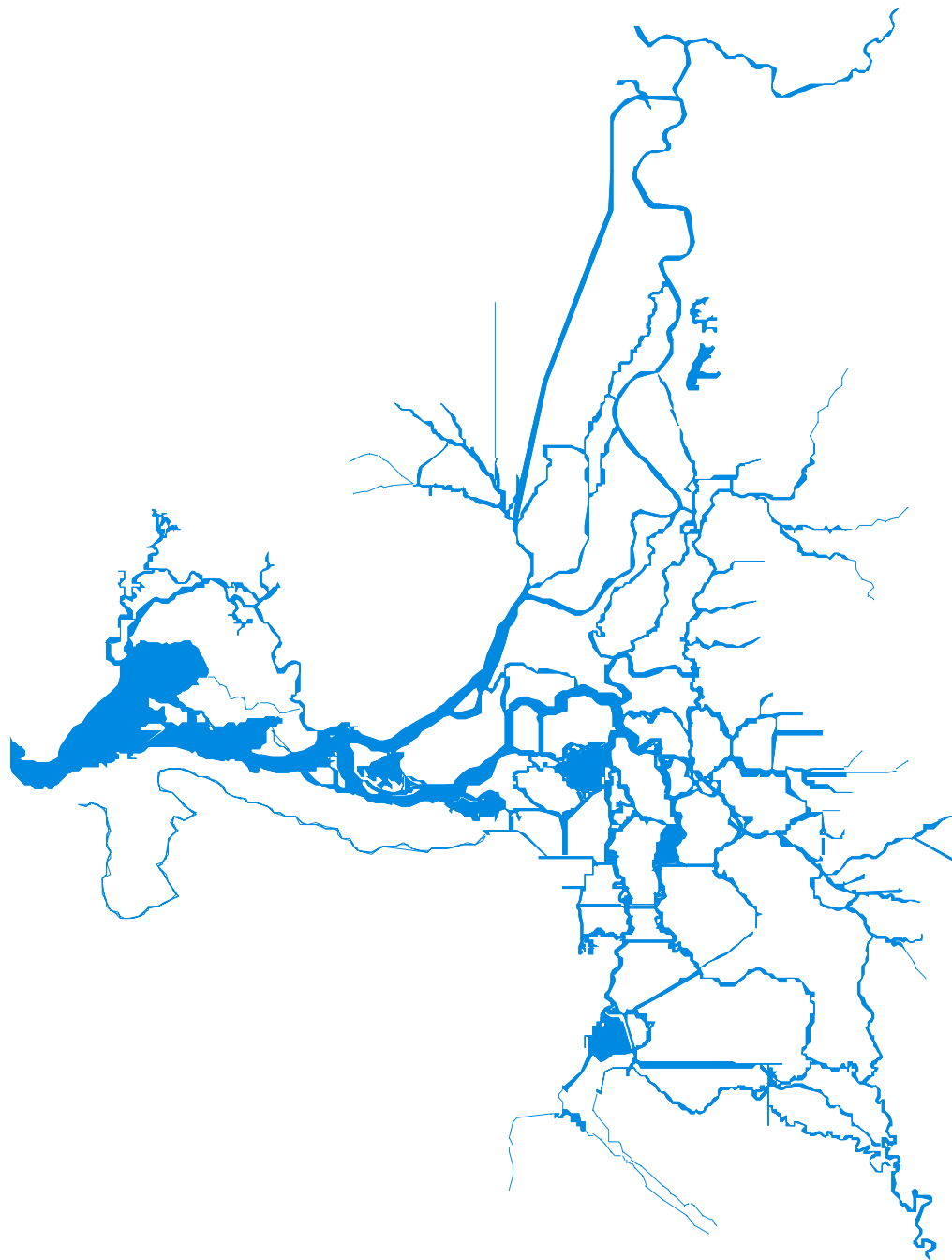
Water Quality and Exports in 2001

■ SWP/CVP Exports
 ● Holland Tract
 ■ Bethel Island
 ◆ Jersey Point

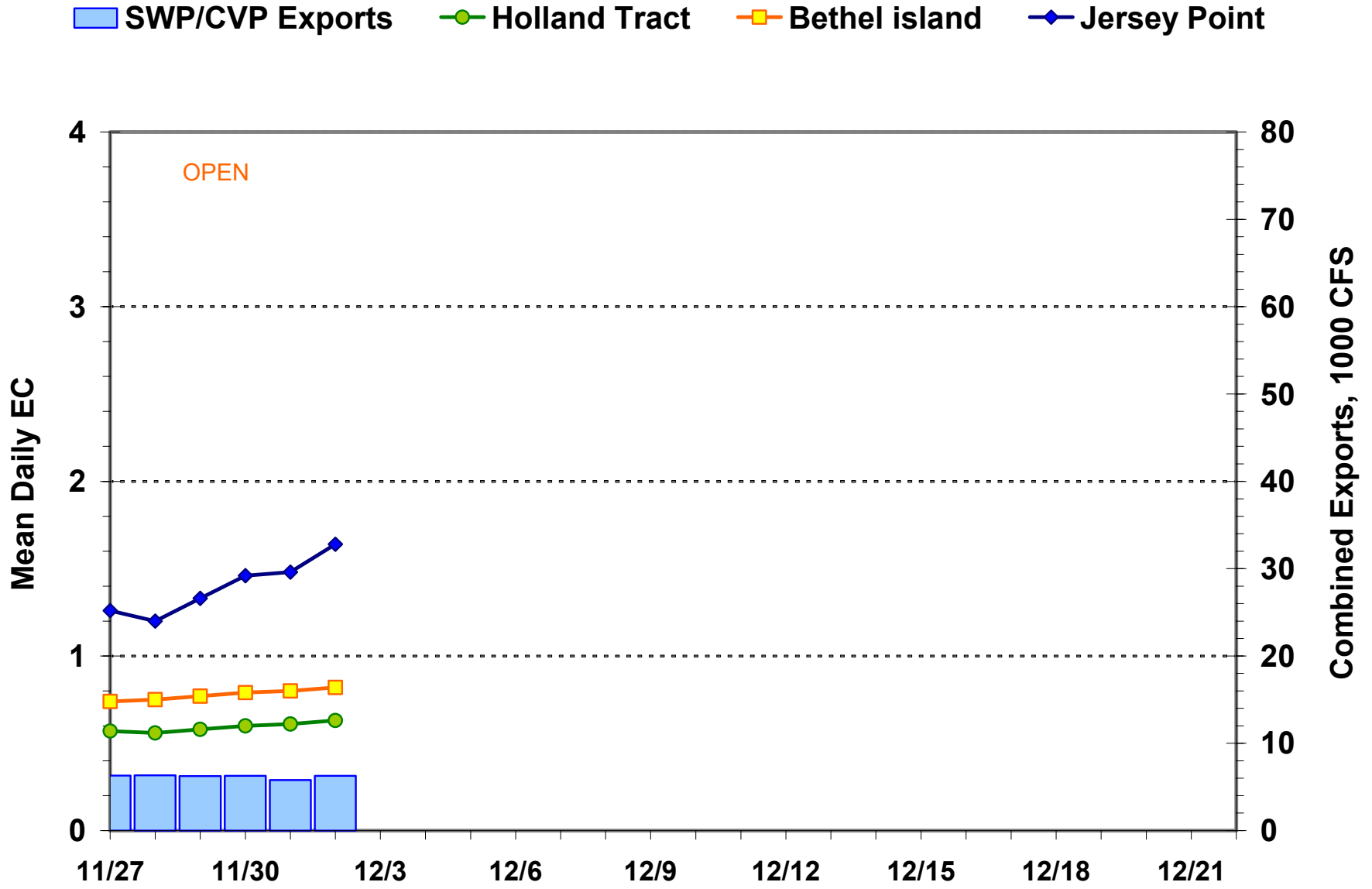


The End

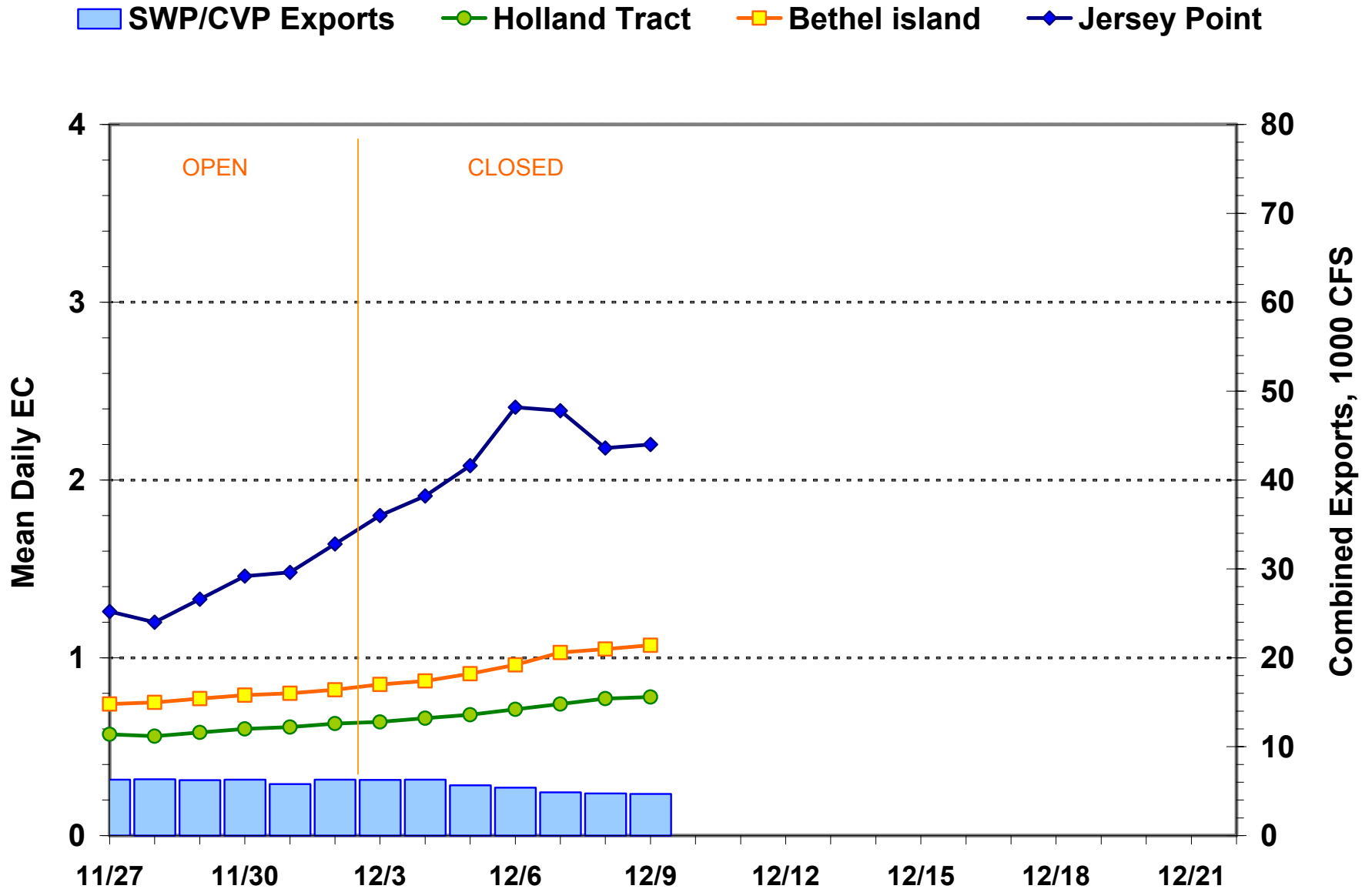




Water Quality and Exports in 2002



Water Quality and Exports in 2022



Water Quality and Exports in 2022

