

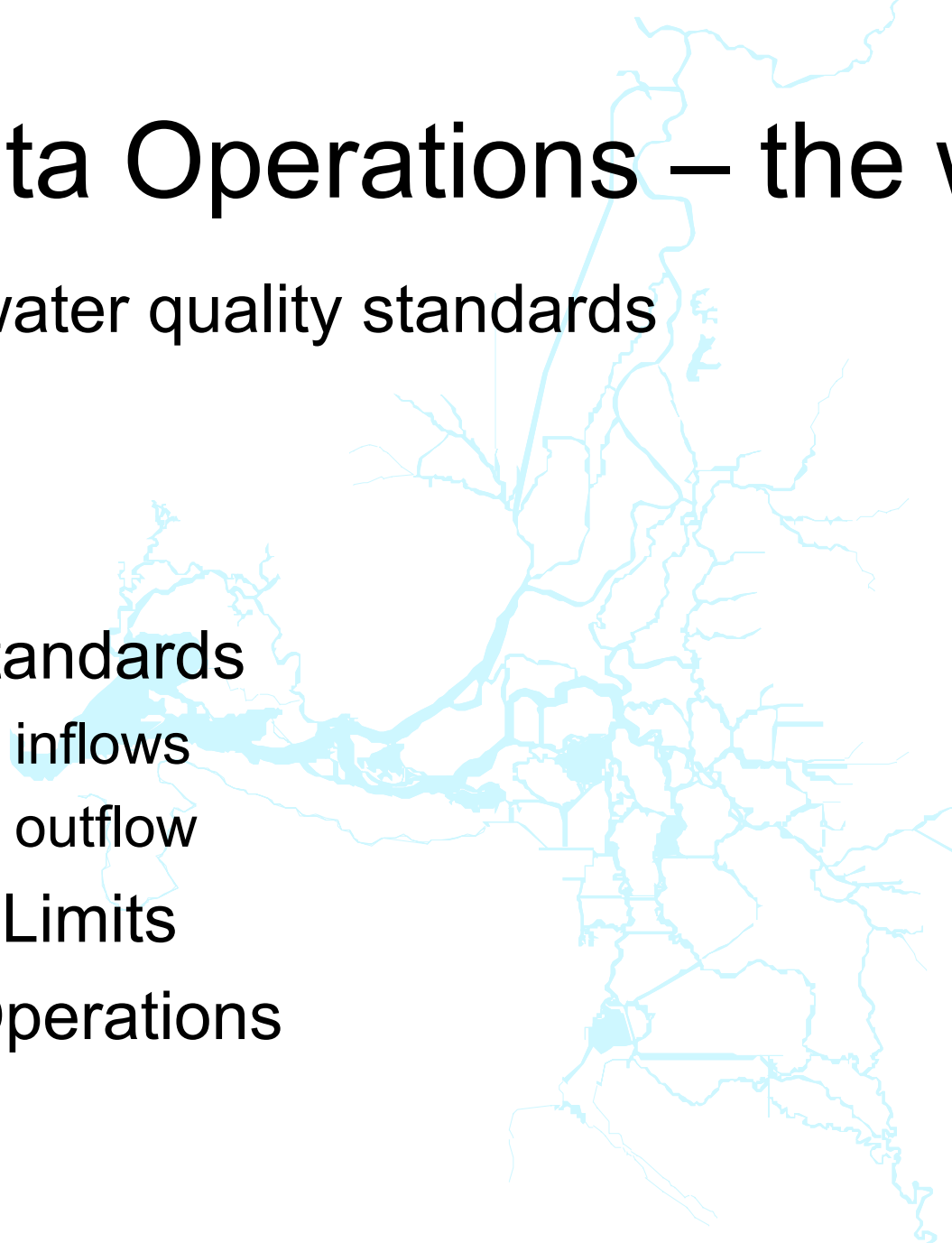
Delta Cross Channel Gate Operations for Water Quality

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



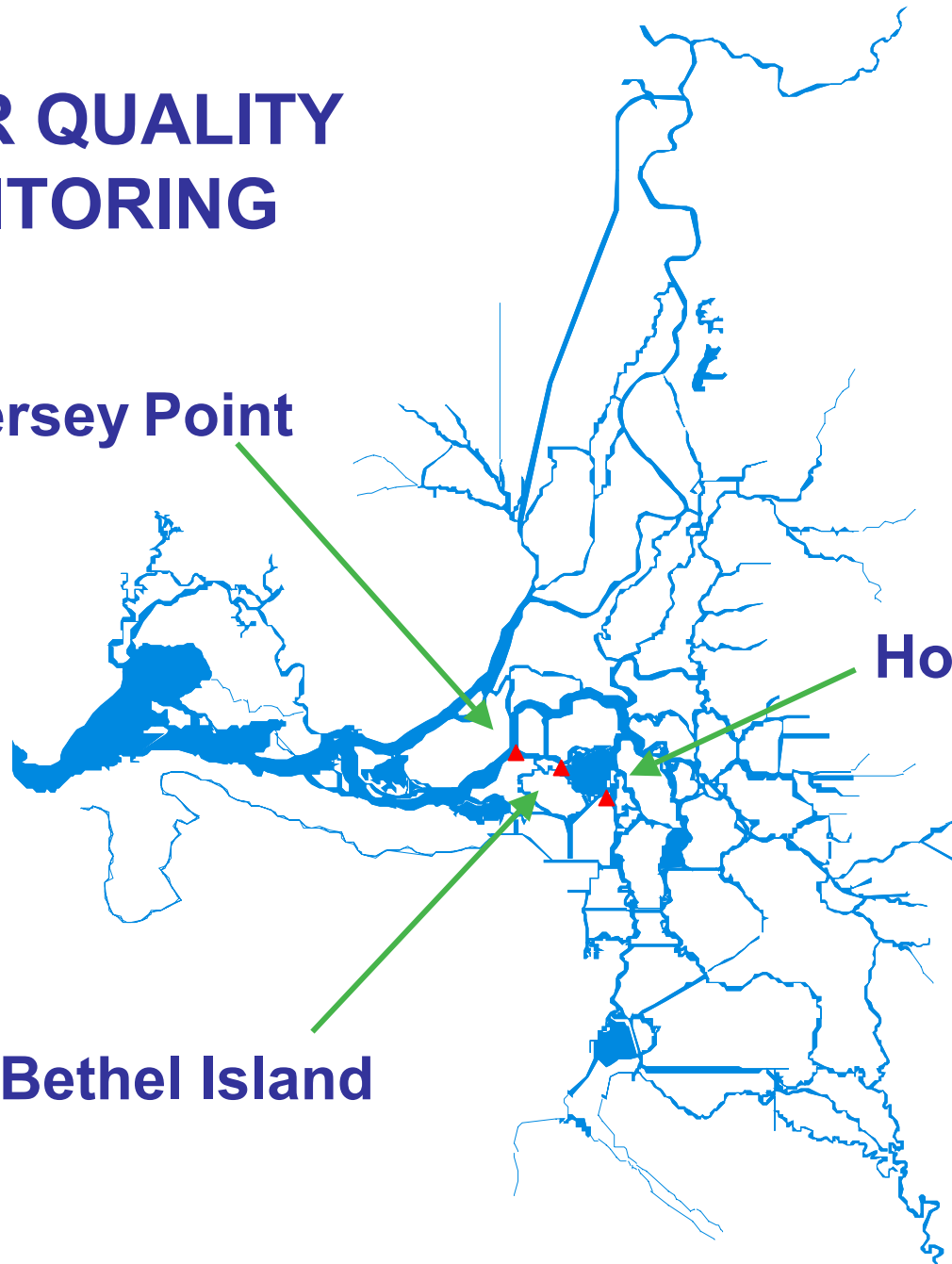
- Close:
 - Improve Sacramento River WQ (summer)
 - Improve Sacramento River flow (Rio Vista) (fall)
 - Reduce flood potential (fall & winter)
 - Improve juvenile salmon emigration (fall & winter)
- Open:
 - Improve SJ River WQ (summer)
 - Improve CCC WQ (fall)

WATER QUALITY MONITORING

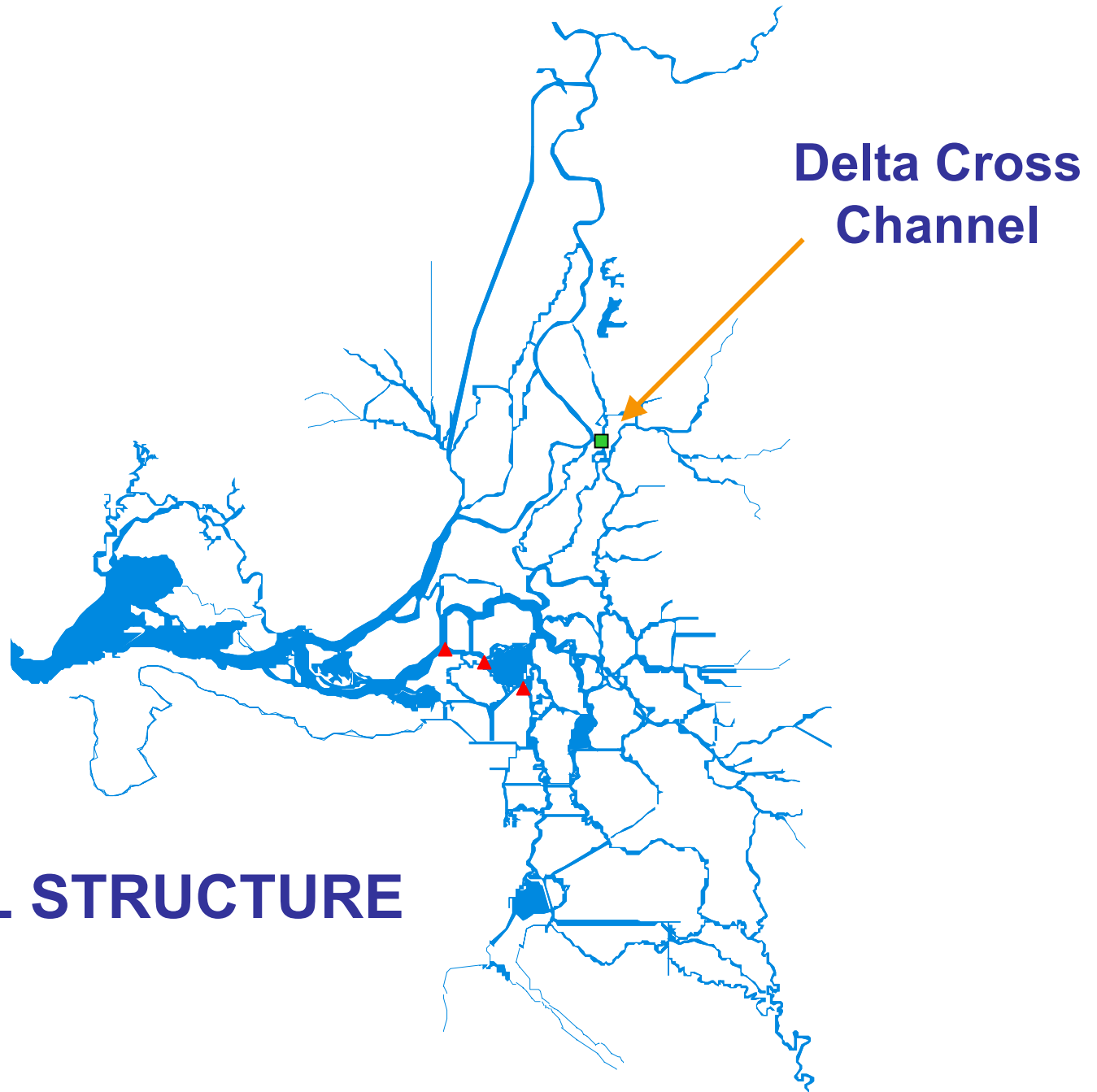
Jersey Point

Holland Tract

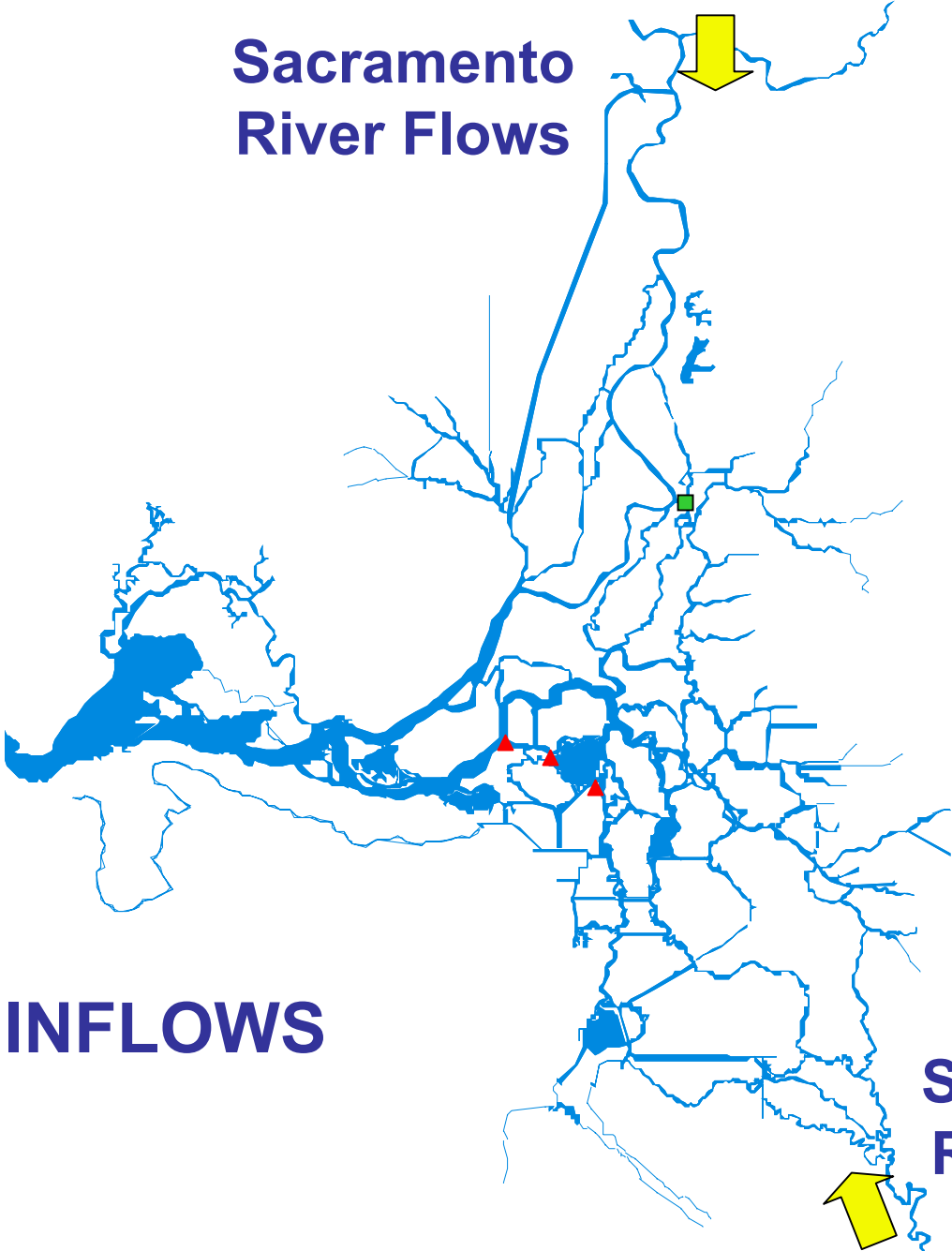
Bethel Island



CONTROL STRUCTURE

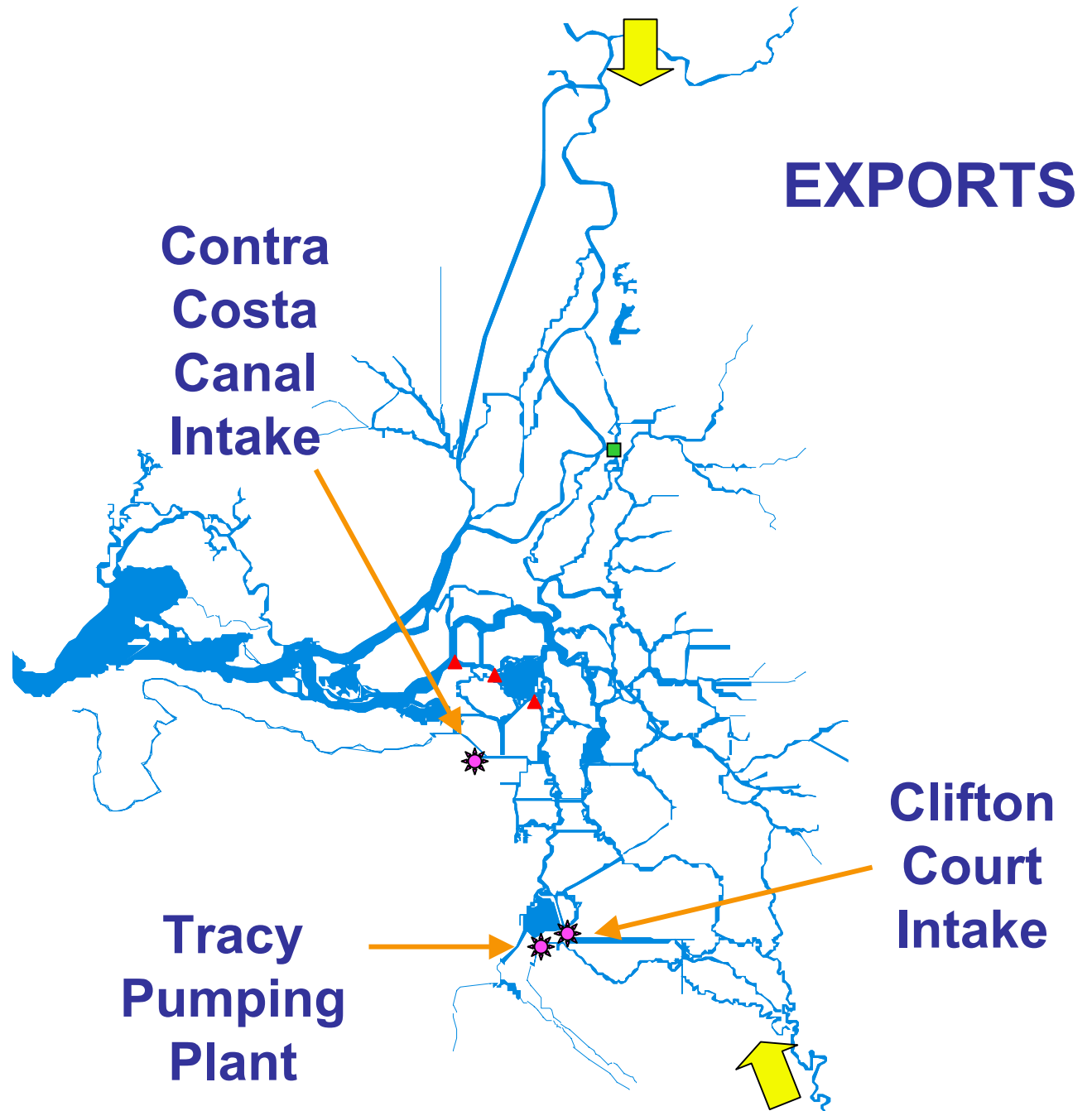


**Sacramento
River Flows**



DELTA INFLOWS

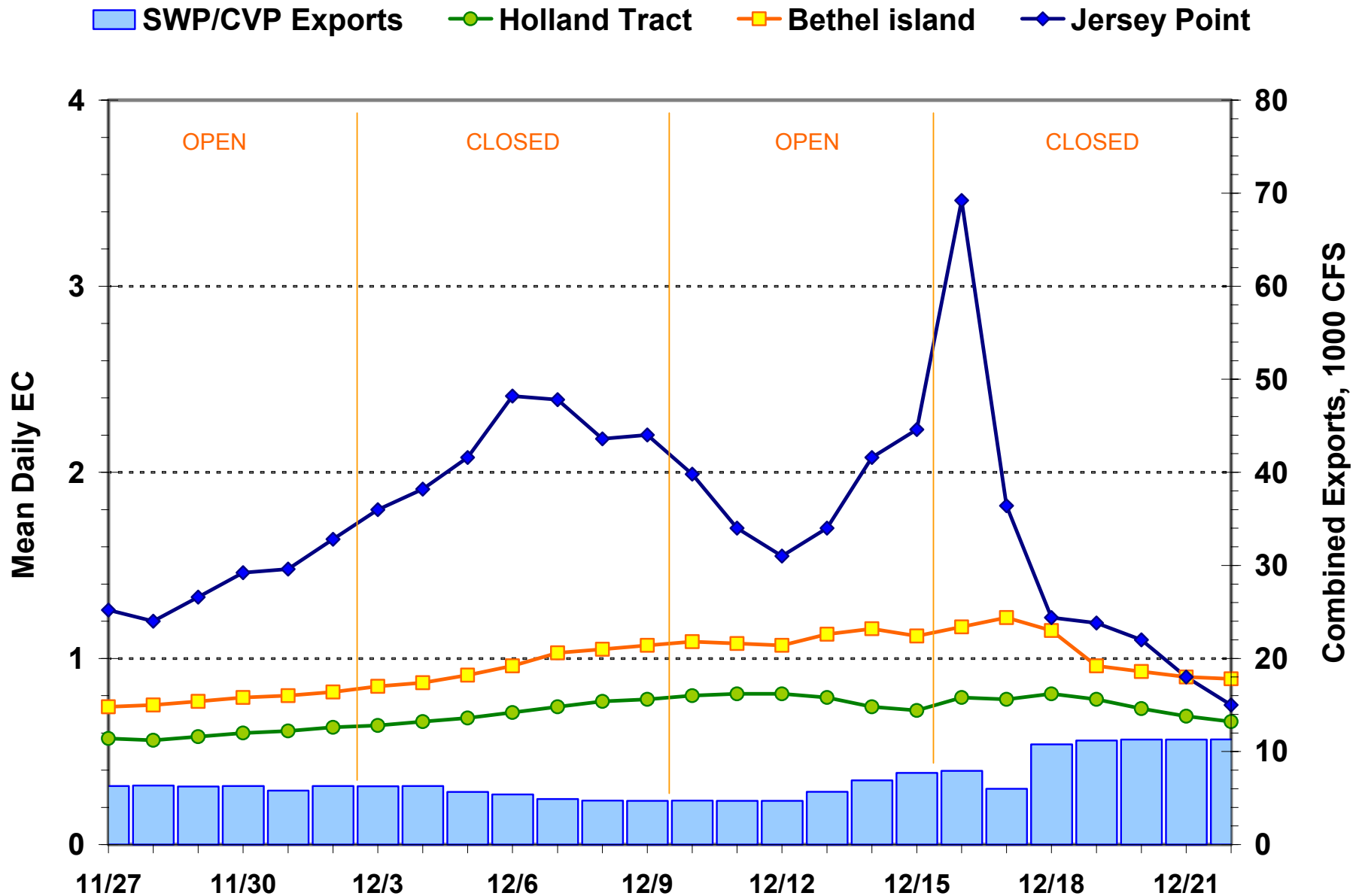
**San Joaquin
River Flows**



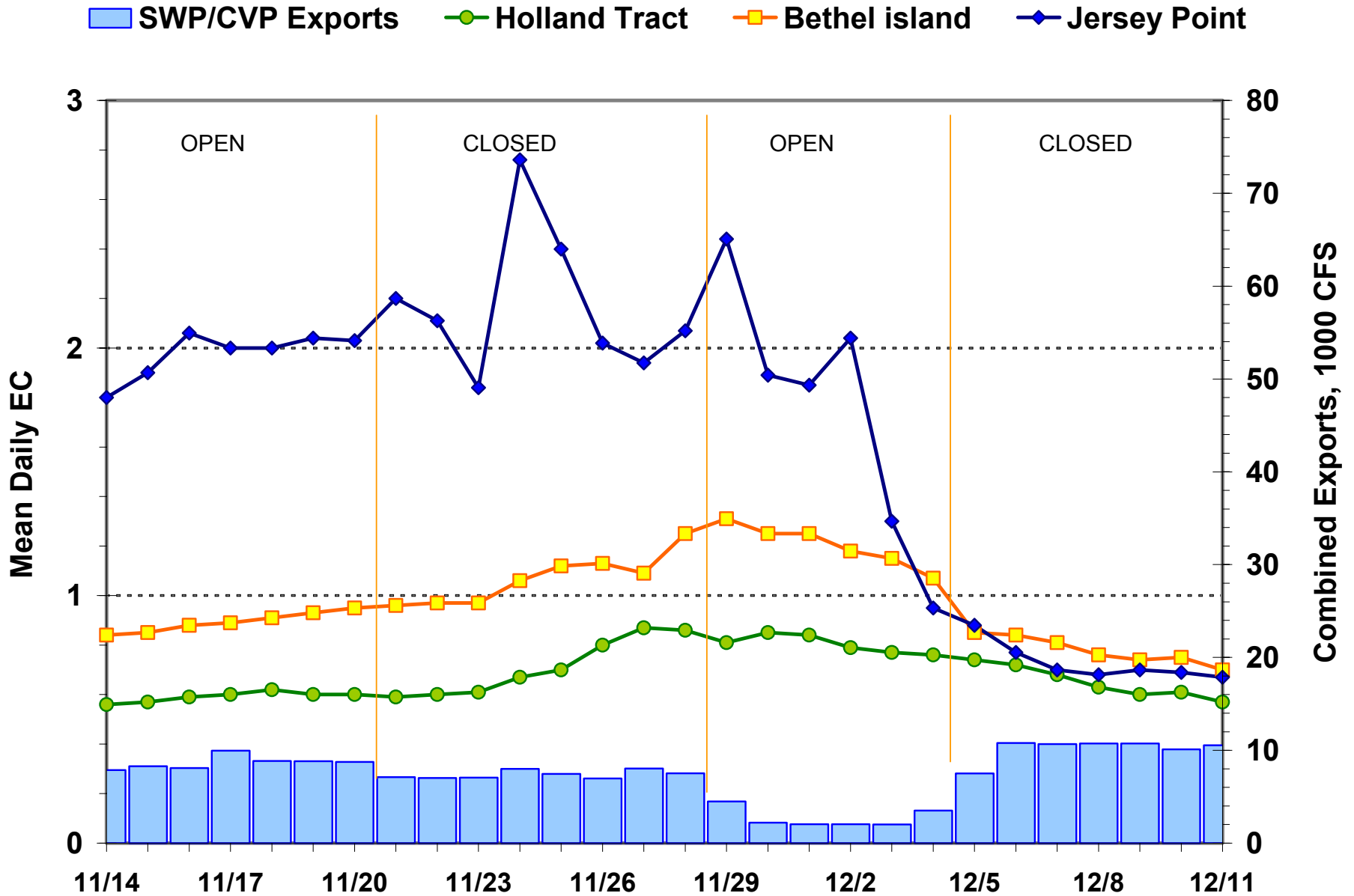


Example

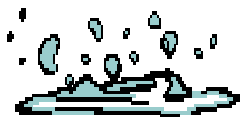
Water Quality and Exports in 2002

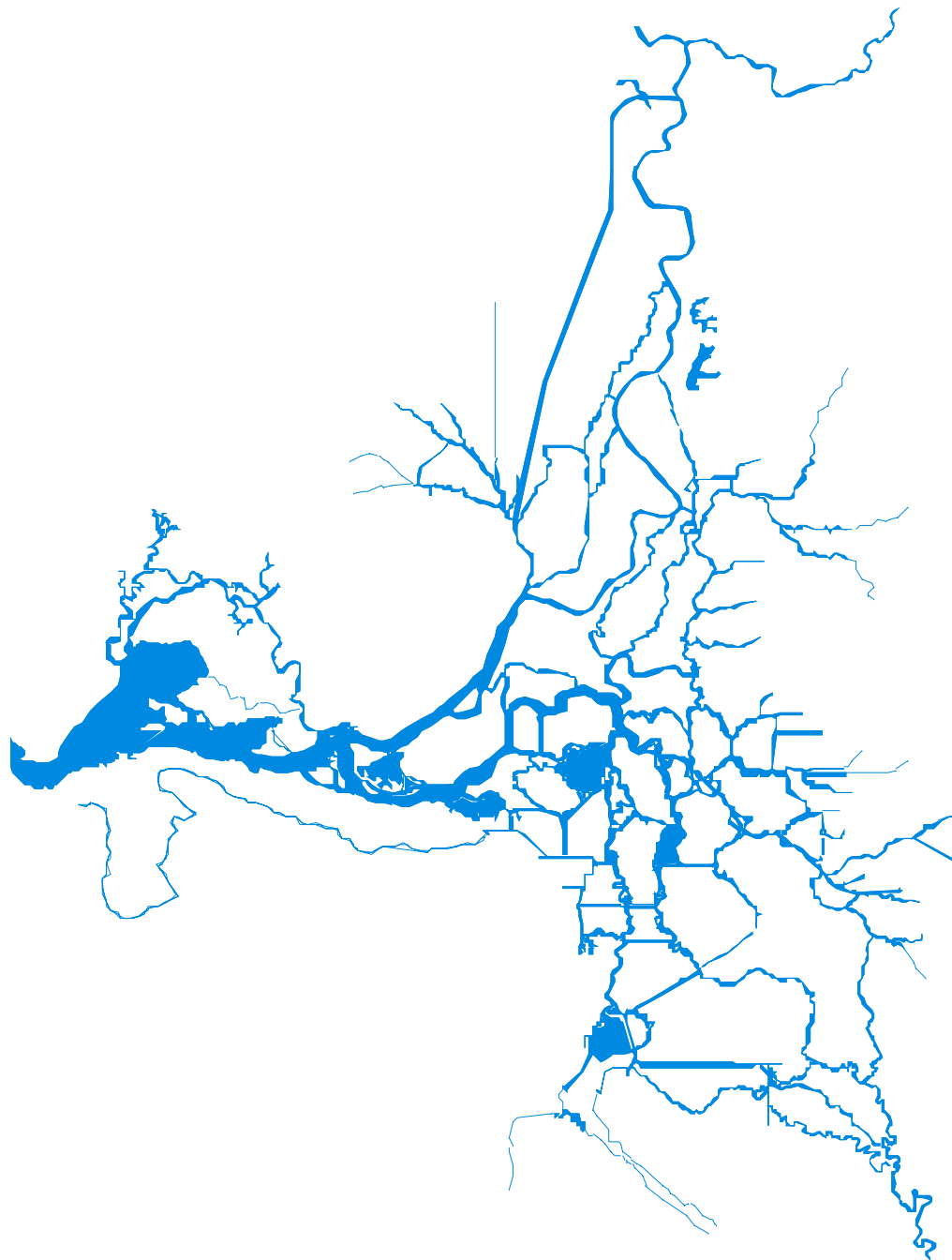


Water Quality and Exports in 2001

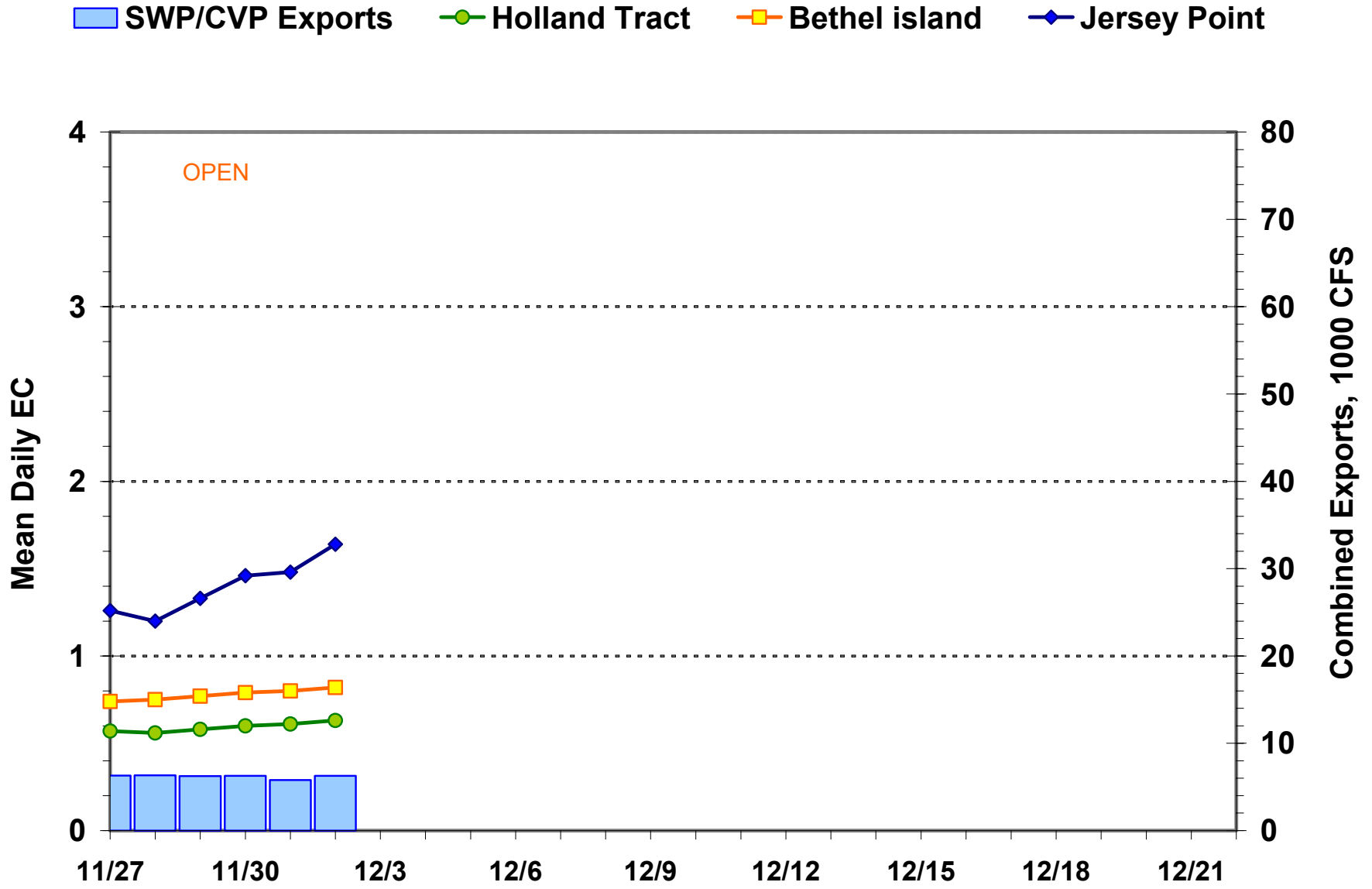


The End

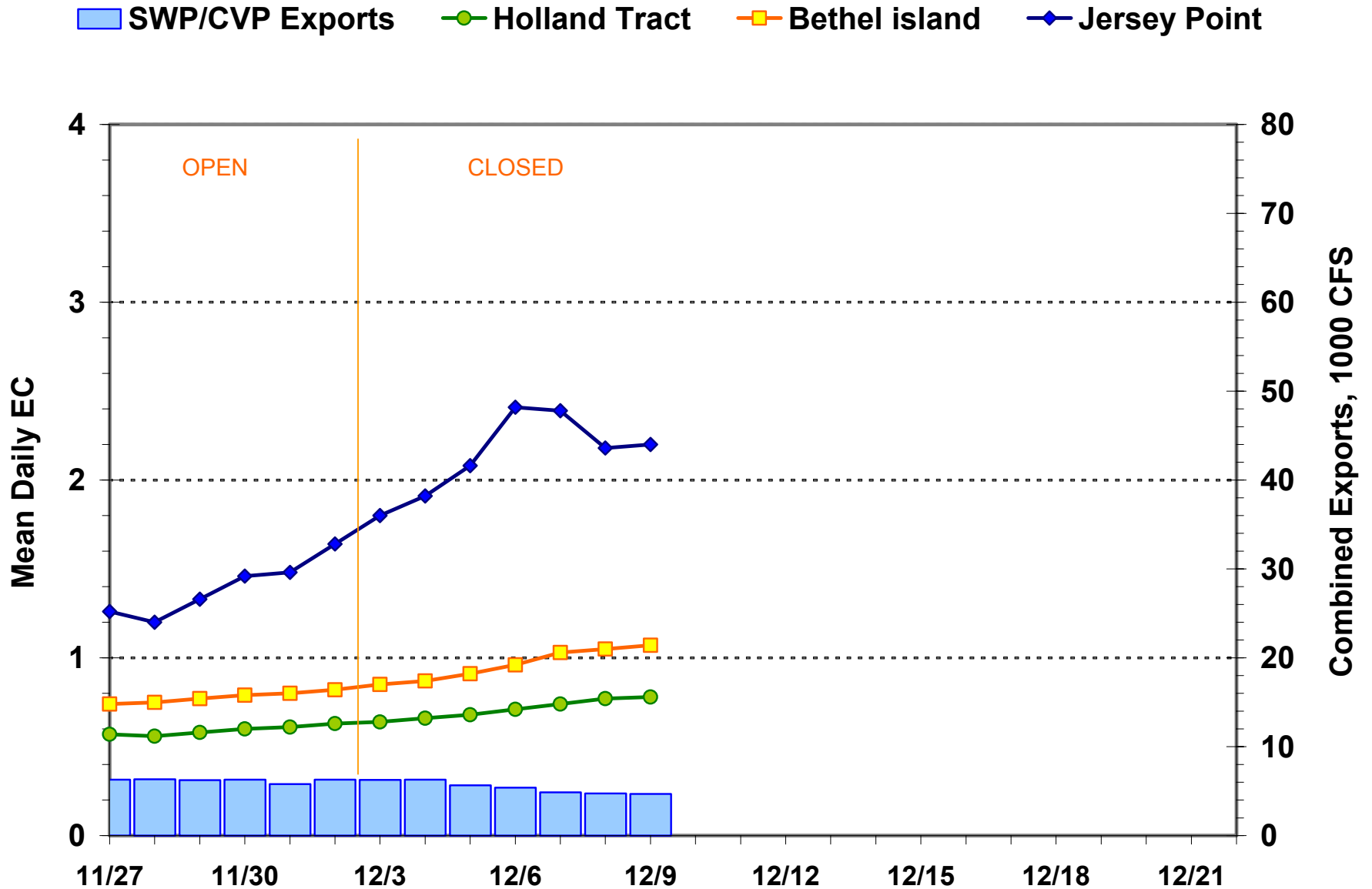




Water Quality and Exports in 2002



Water Quality and Exports in 2022



Water Quality and Exports in 2022

