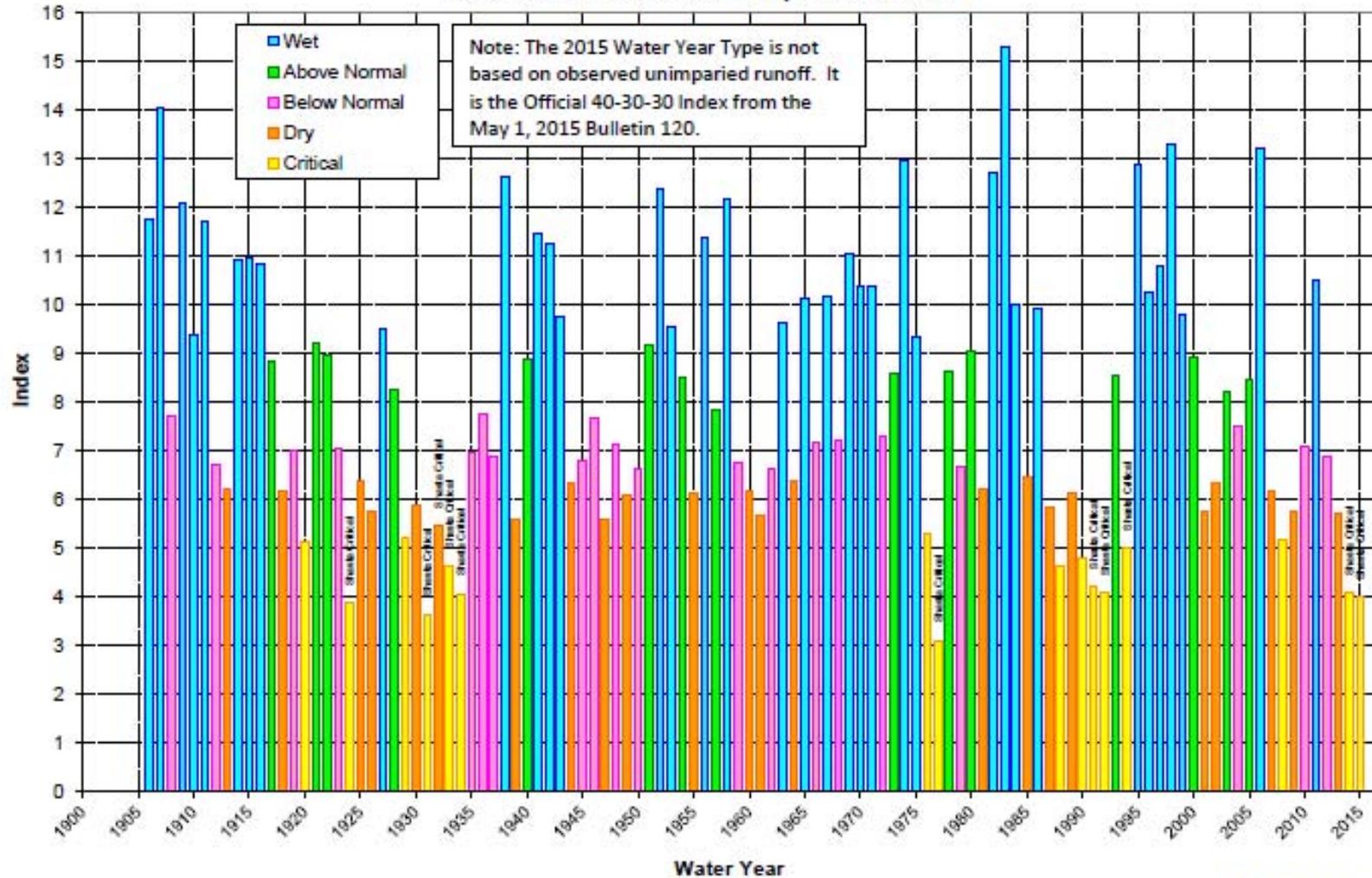
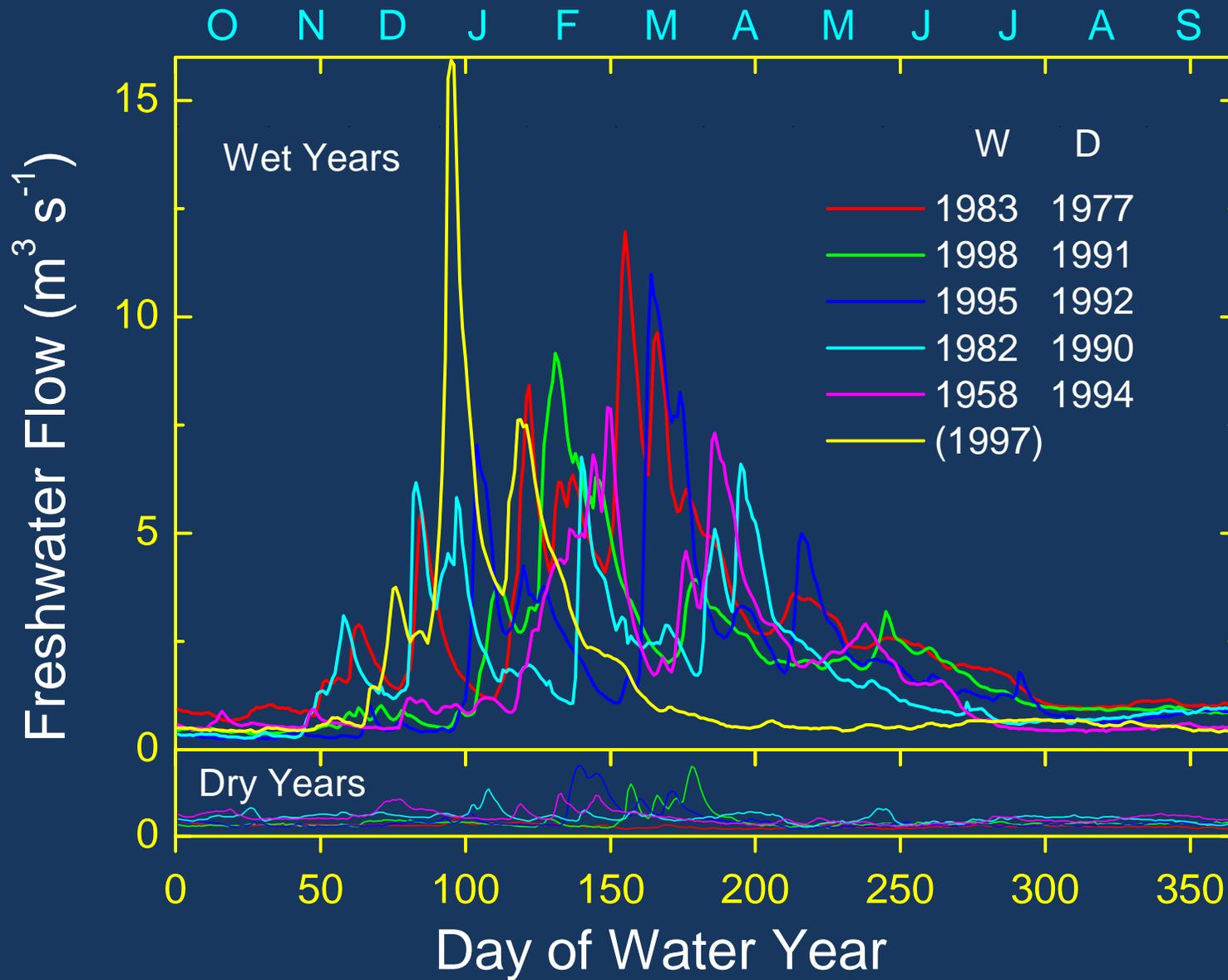


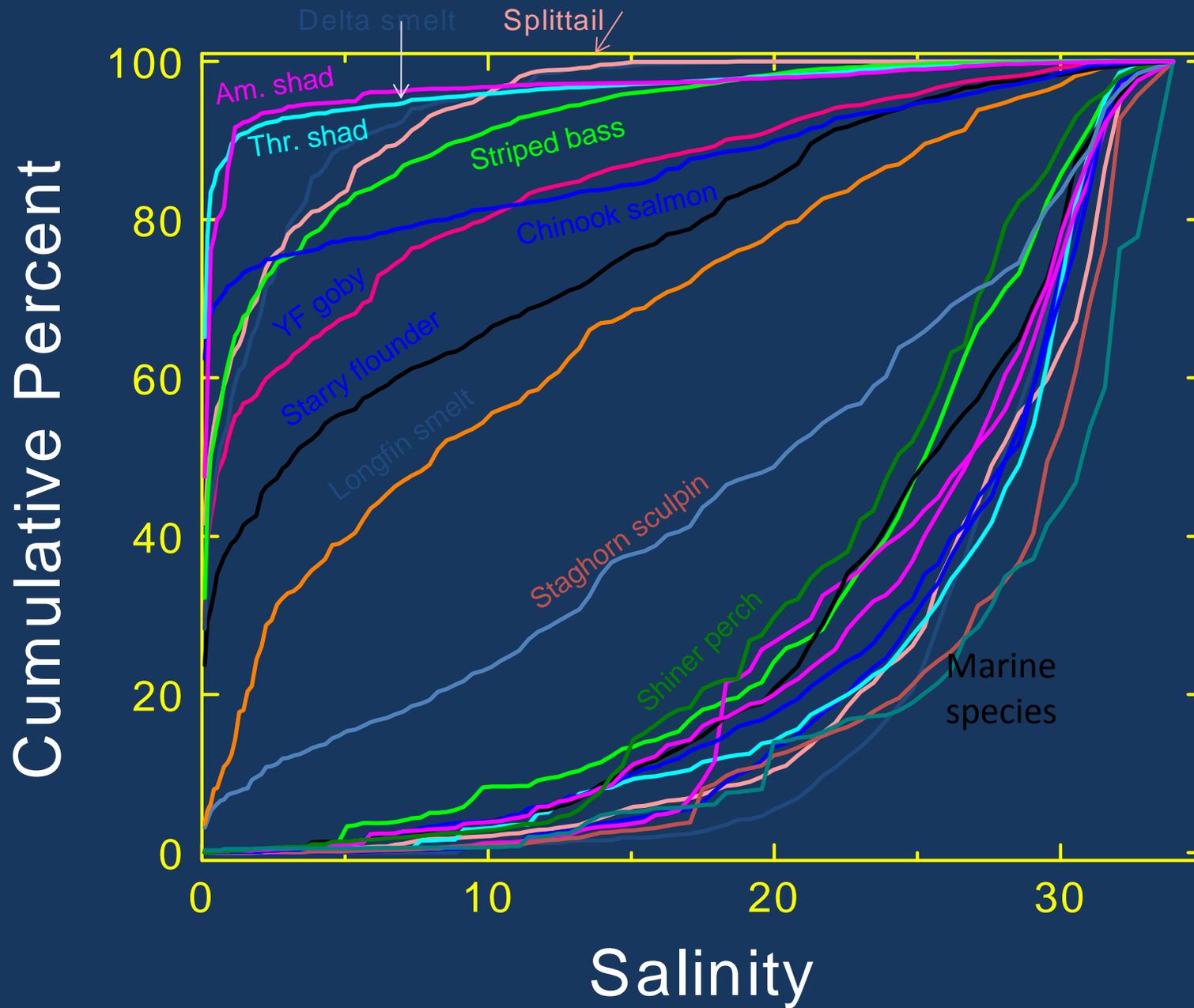
Sacramento Valley Water Year Type Index (40-30-30) 1906 - 2014

Based on Observed Unimpaired Runoff

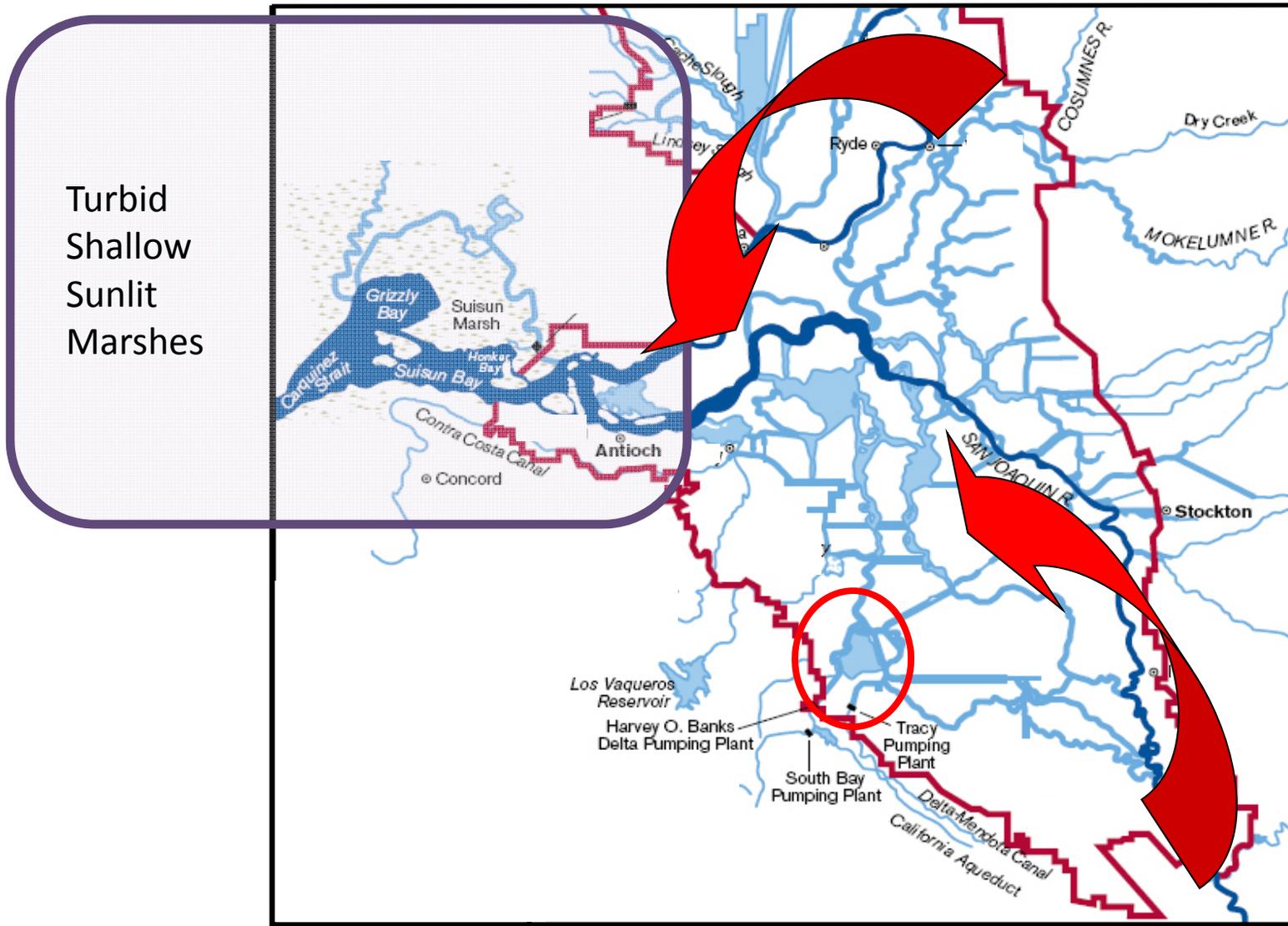




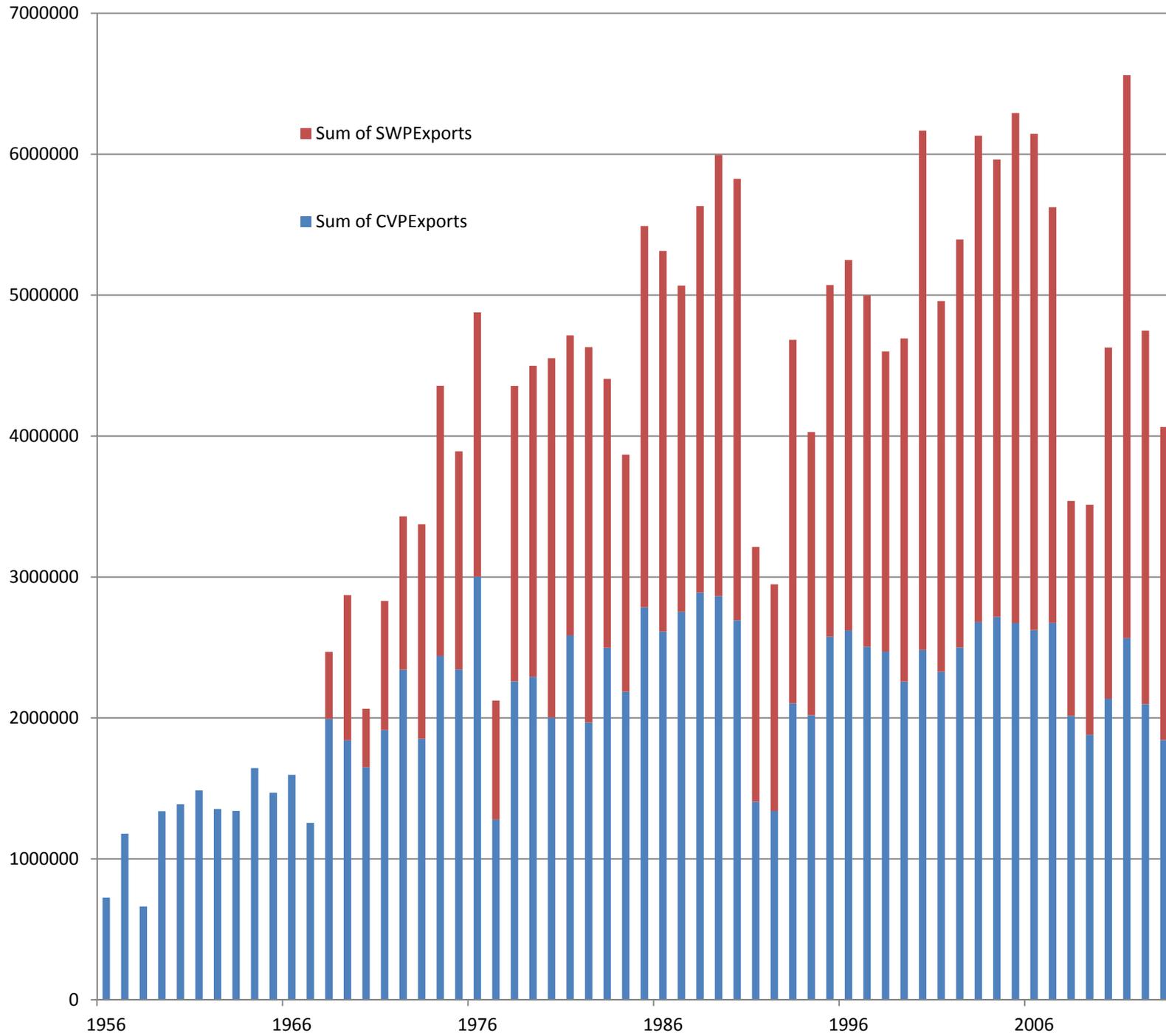
Most fishes follow salinities

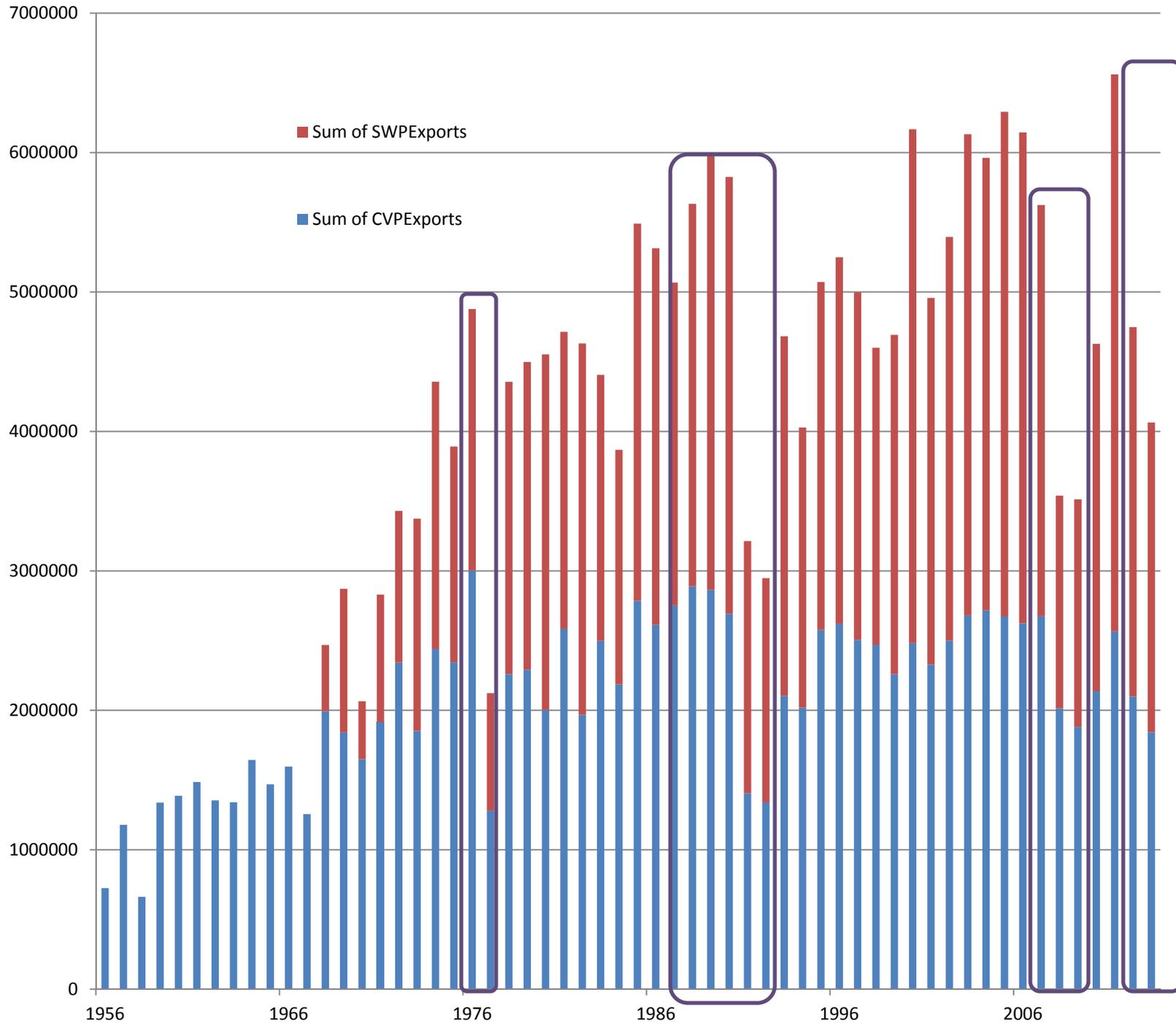


[Kimmerer 2004](#)



Turbid
Shallow
Sunlit
Marshes





Water Transfer Impacts

- All occur when fish populations are lower, less dispersed, and more at risk.
- Changes in delta ops unlikely to increase salvage, but could expose more to higher risks
- Some involve no change in operations so no change in impact
- Some affect upstream flow patterns, which can strand salmon young or change stream temperatures

Single Year Transfer Recommendations

- Don't do them – spread the risk to fish and water supply over multiple years
- Critical years are usually the initiation of drought of unknown duration
- Conserving storage across years increases reliability and reduces impacts – addressing both co-equal goals
- Link like kidney transplants – conserve water where more storage will benefit salmon