

SACRAMENTO RIVER FALL CHINOOK WORKGROUP

FISHERY OVERVIEW

**SUSAN BISHOP
NMFS WCR SFD
1/30/2024**



Sacramento River Fall Chinook Ad Hoc Workgroup

Draft Terms of Reference and General Timeline

3. Milestones

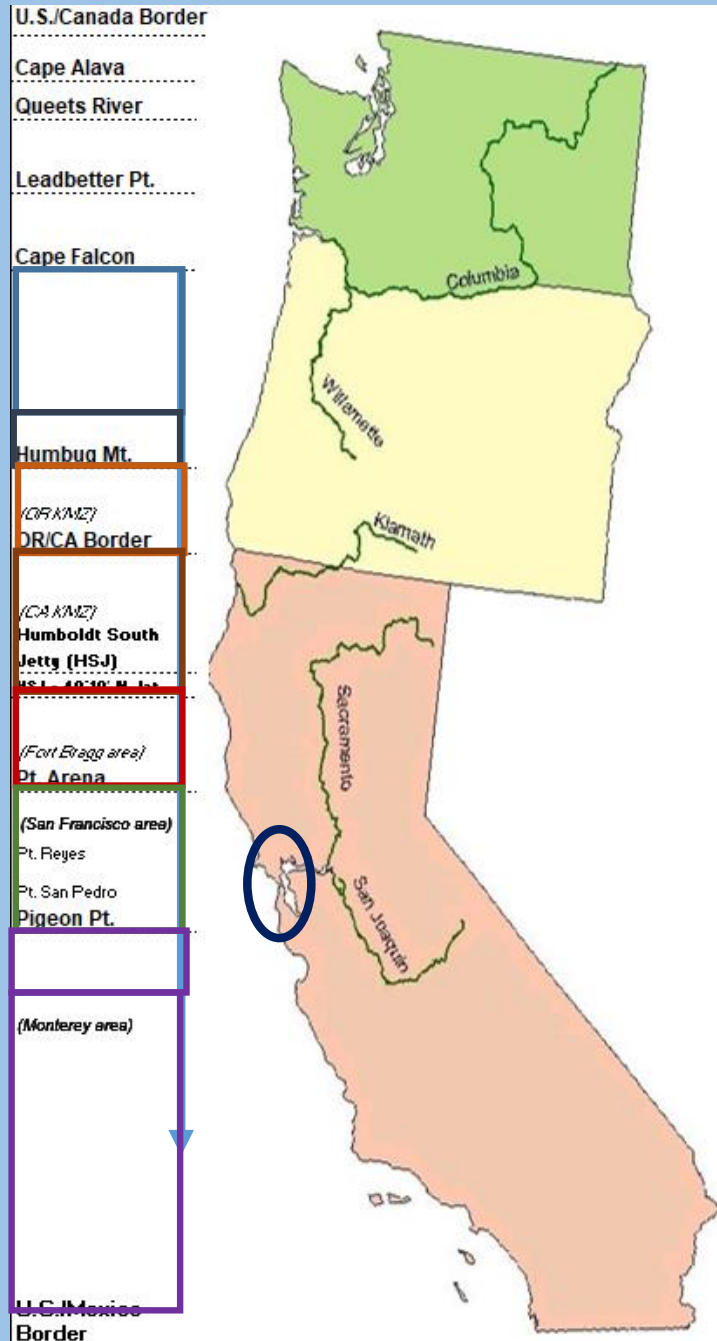
a. Collaborate with affected management entities and scientists to collectively identify the issues, data available and gaps, and timeframe needed to complete work associated with the issues identified.

b. Collect and summarize relevant information regarding the status of SRFC, biological characteristics, magnitude and distribution of fishing mortality, and marine and freshwater environmental indicators.

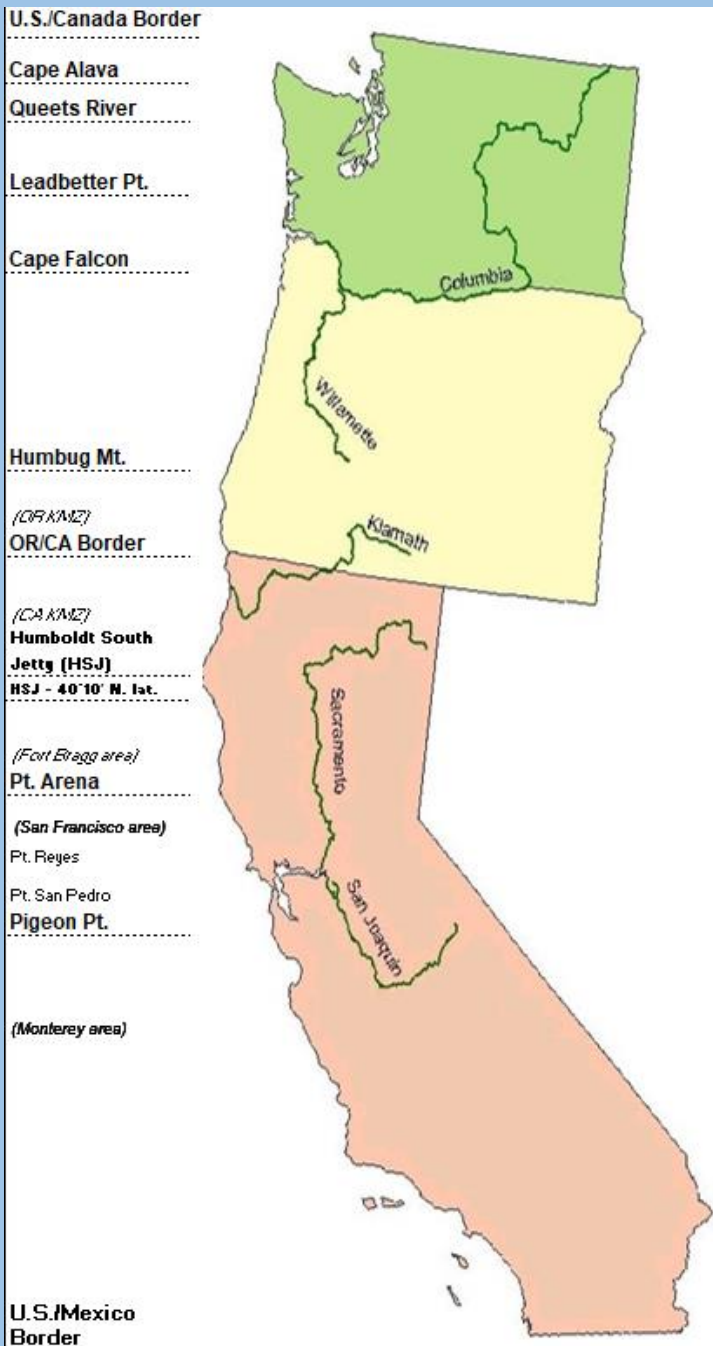
c. Based on the results of 3a and 3b, provide a report to the Council that includes an assessment of the suitability of current management measures (reference points, conservation objective, and harvest control rules), recommendations and a workplan/timeline for development of alternatives.

Fishery Overview: Magnitude and Distribution of Fishing Mortality

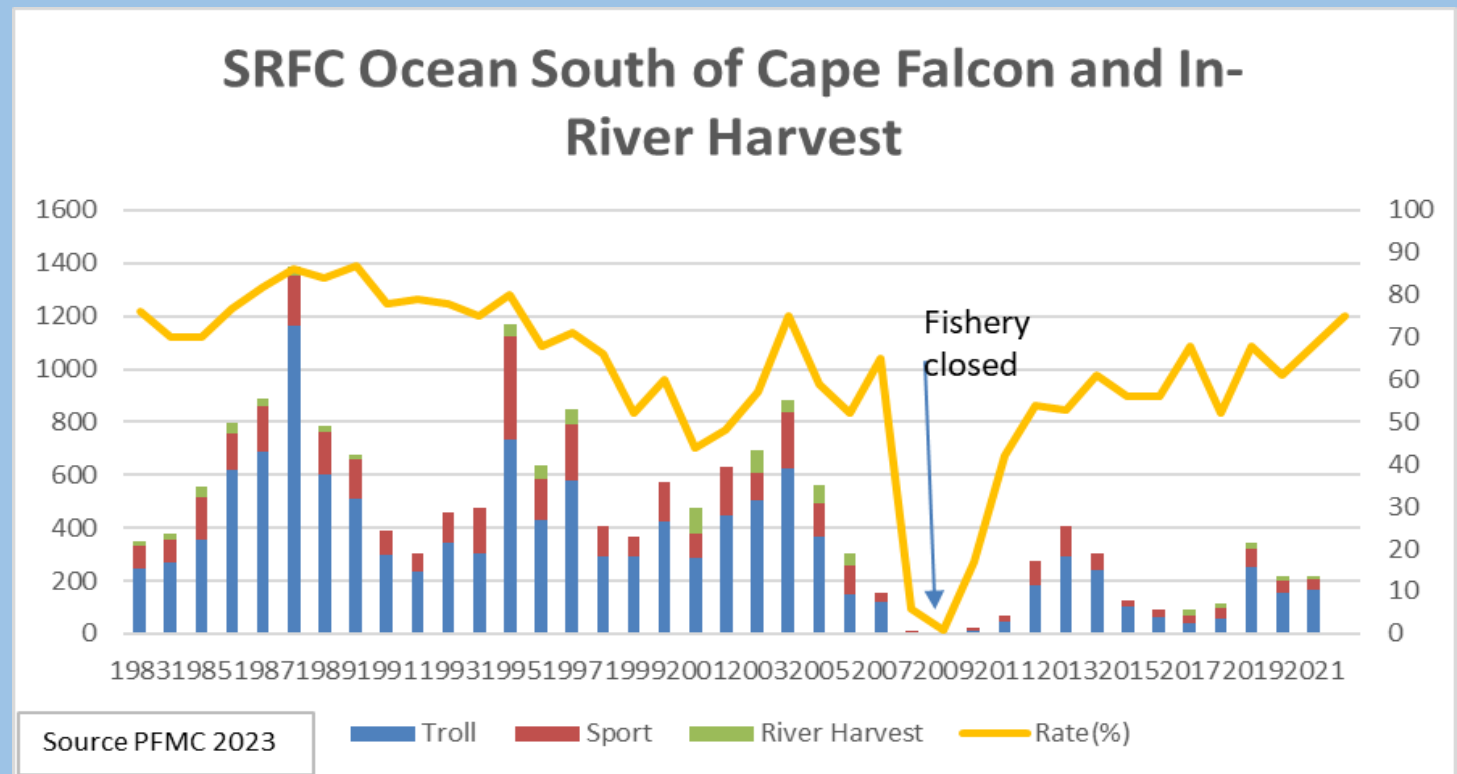
- Ocean Fisheries (Bishop, NMFS)
 - Management Areas
 - Fishing mortality distribution
 - Performance
- Central Valley Inland Fisheries (Purdy, CDFW)

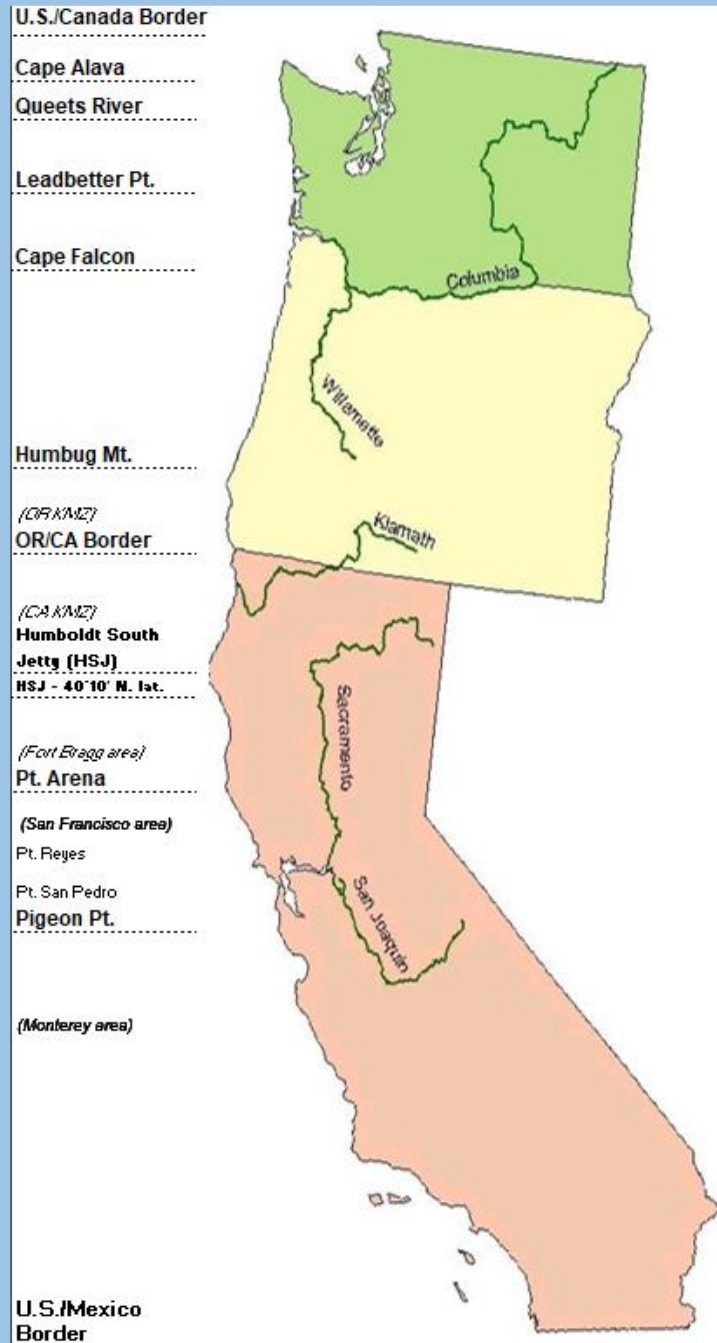


- SRFC are the largest contributing stock in California and Oregon ocean salmon fisheries.
- SRFC are primarily contacted in ocean salmon fisheries between Cape Falcon, OR and Pt. Conception, CA, with contact rates generally higher closer to San Francisco Bay.
- This includes the major management areas of
 - Cape Falcon to Florence south jetty
 - Florence south jetty to Humbug Mt.
 - the Oregon Klamath Management Zone (KMZ) (Humbug Mt. to the OR/CA border),
 - the California KMZ (OR/CA border to Horse Mt.),
 - Fort Bragg (Horse Mt. to Pt. Arena),
 - San Francisco (Pt. Arena to Pigeon Pt.),
 - Monterey North (Pigeon Pt. to Pt. Sur),
 - and Monterey South (Pt. Sur to the U.S./Mexico border).
- When SRFC abundance is projected to be low and is a constraining stock, fisheries in areas closer to San Francisco Bay (i.e., San Francisco, Fort Bragg, and Monterey areas) are the most affected.
- Fisheries are managed to achieve the objectives for all commingled stocks so other stocks may be the primary constraint on the fishery in a particular year, e.g., Klamath River, SWR or SONCC Coho.

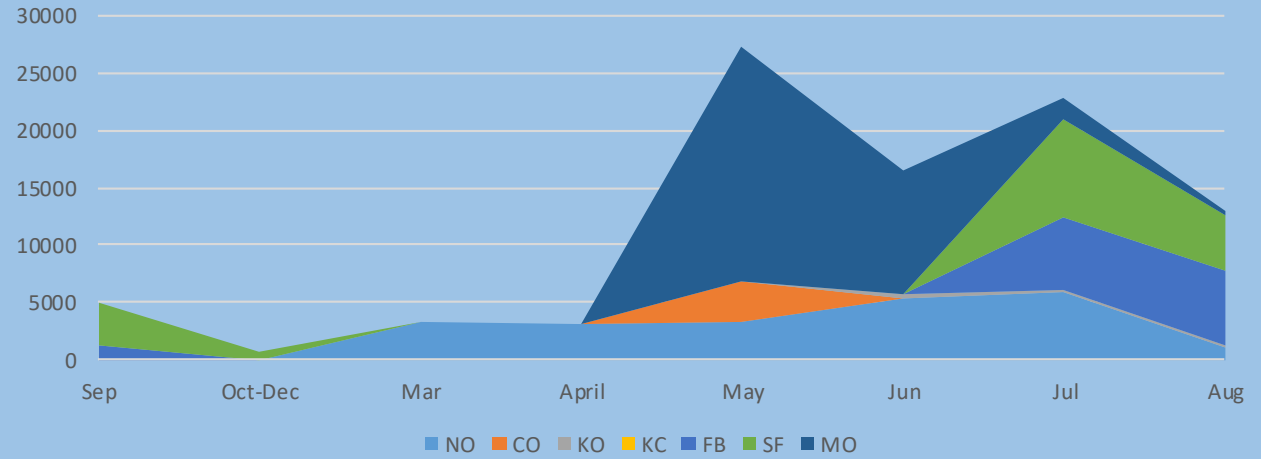


- Both commercial and recreational ocean salmon fisheries typically occur in all of these areas. The commercial fishery generally receives a larger share of the projected ocean harvest, but their seasons are usually shorter due to the greater fishing power of the commercial fleet and the high social value placed on recreational fishing.
- Fisheries in these areas have been managed under a season structure established pre-season. Recently, the Council adopted inseason management using landing limits and a catch ceiling.

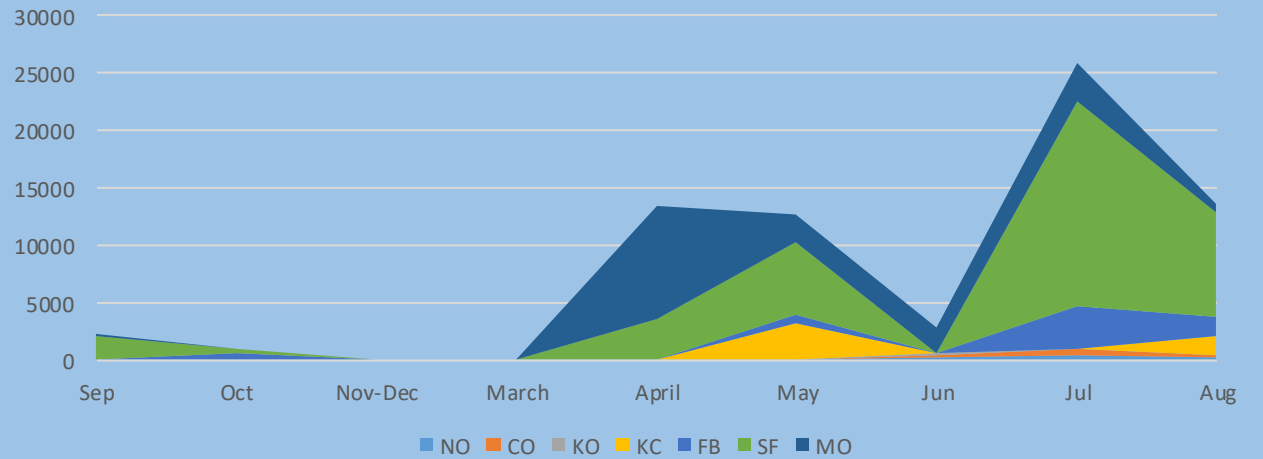


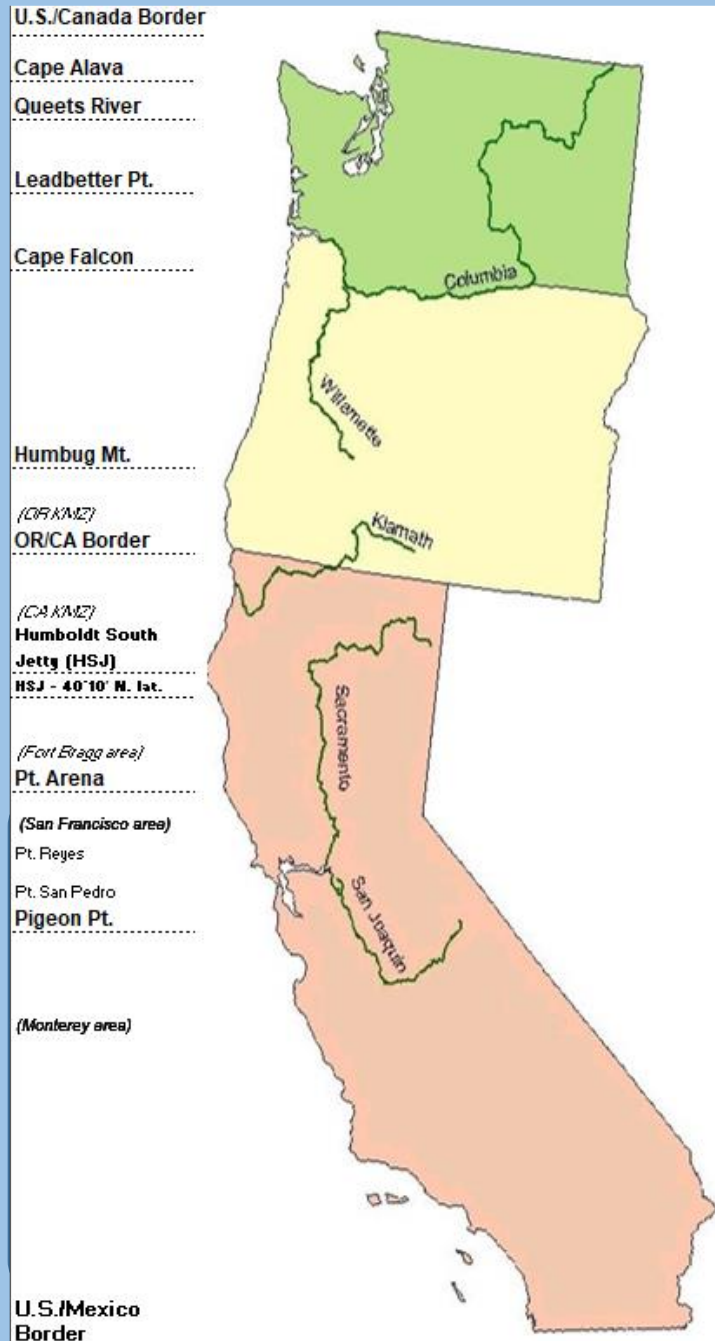


2022 SRFC Ocean Impacts Projected by Time and Area:
Troll

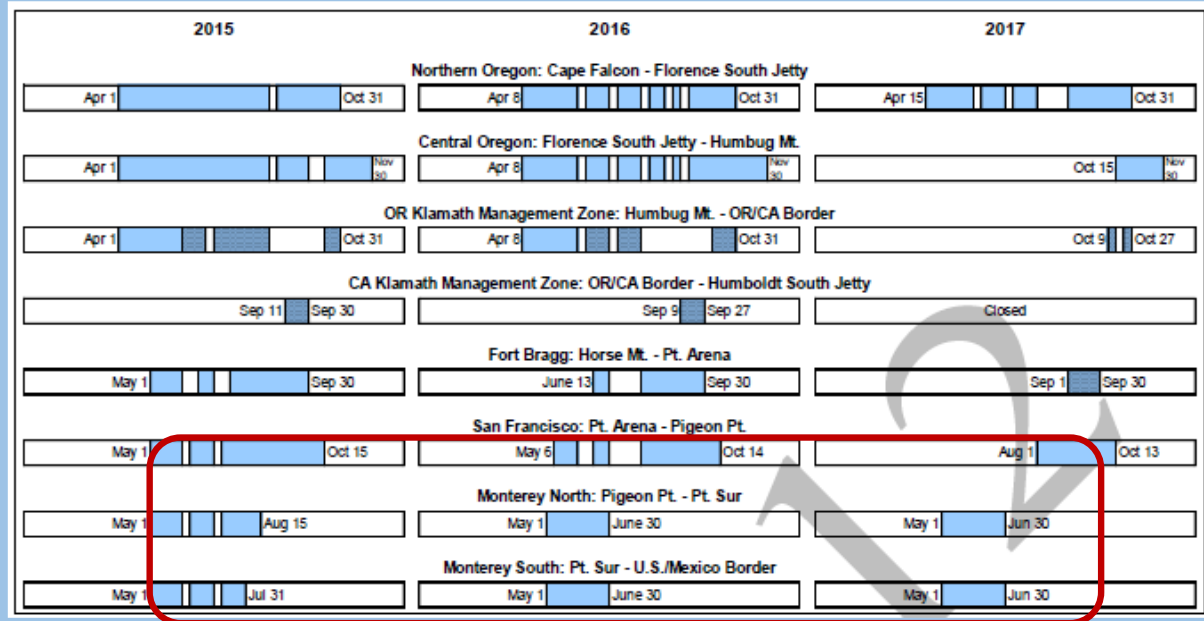


2022 SRFC Ocean Impacts Projected by Time and Area:
Recreational

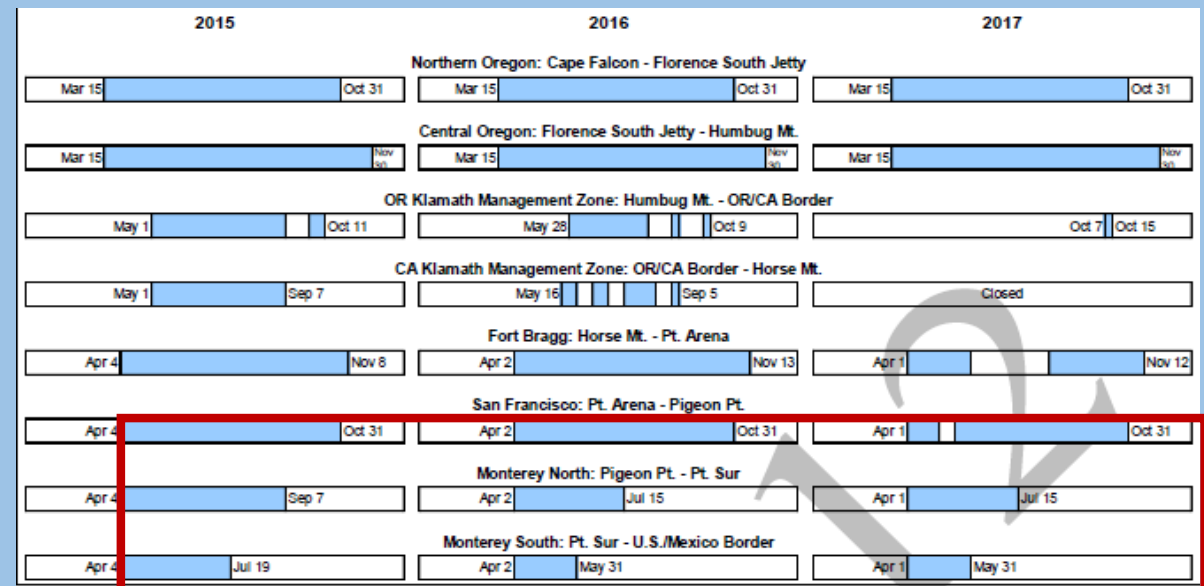




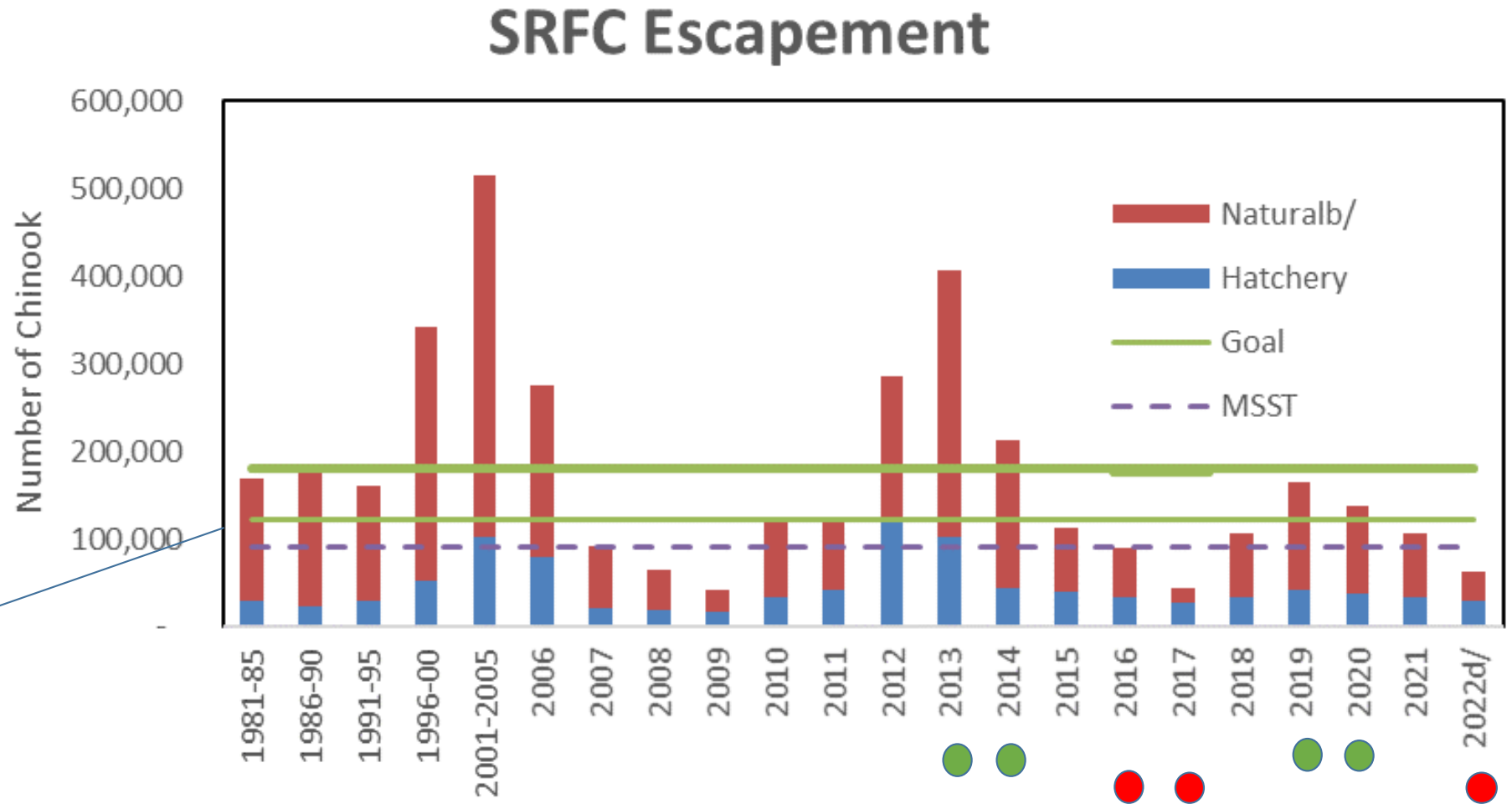
Commercial



Recreational

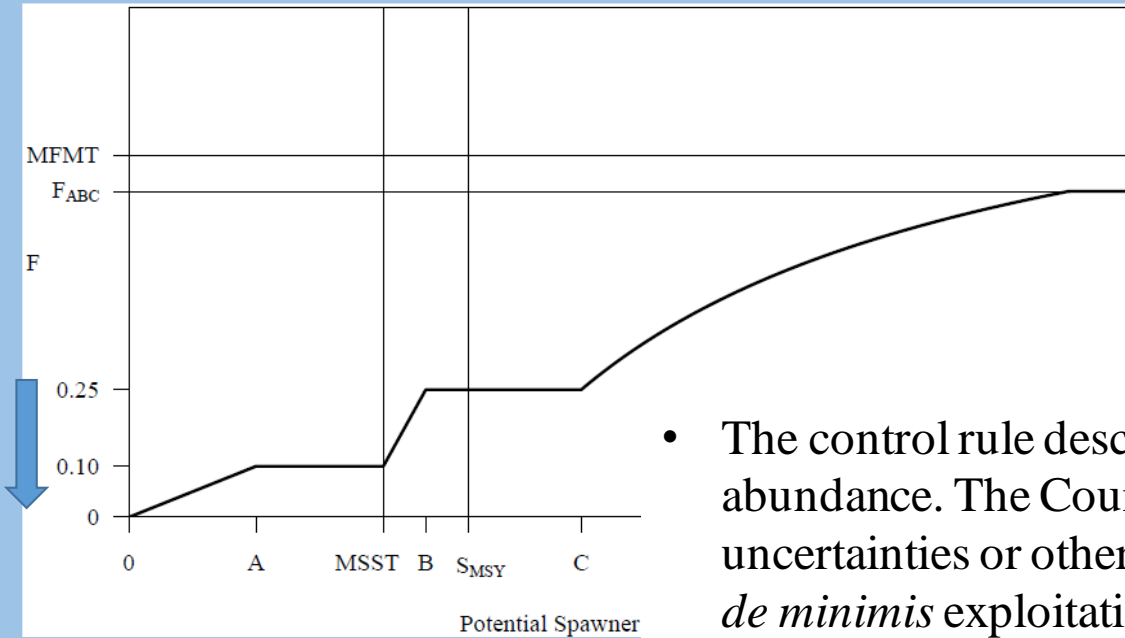


Performance:



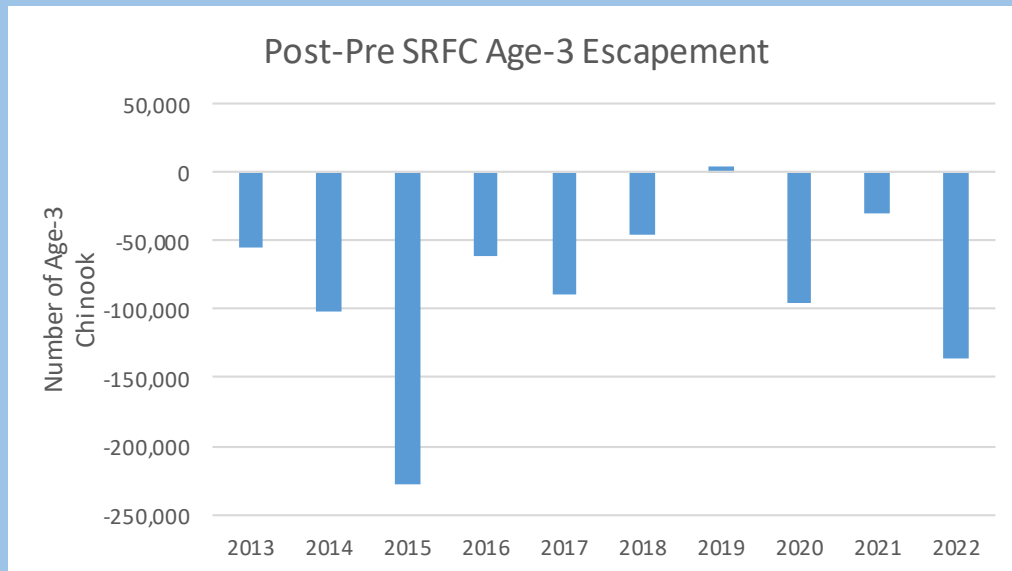
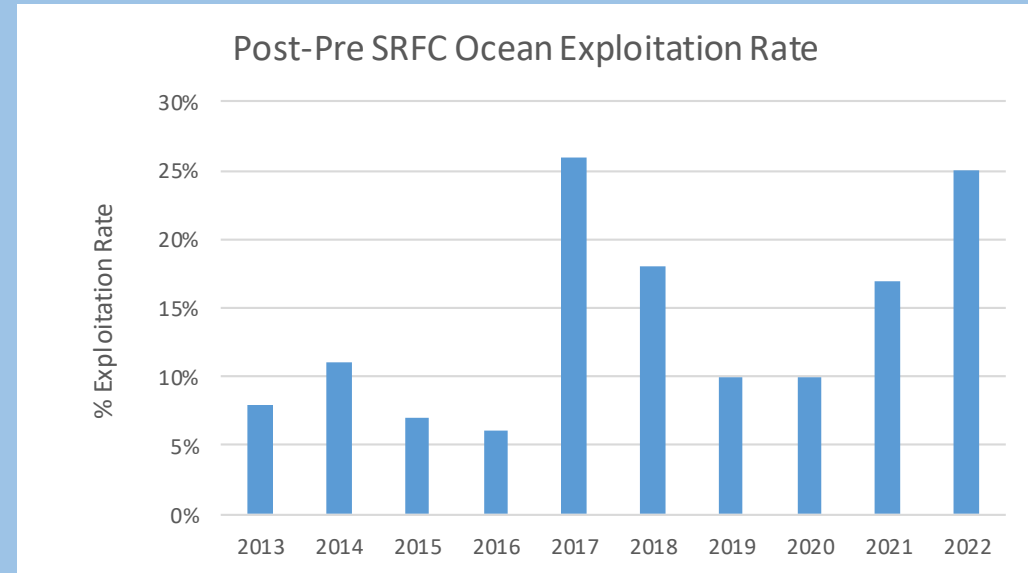
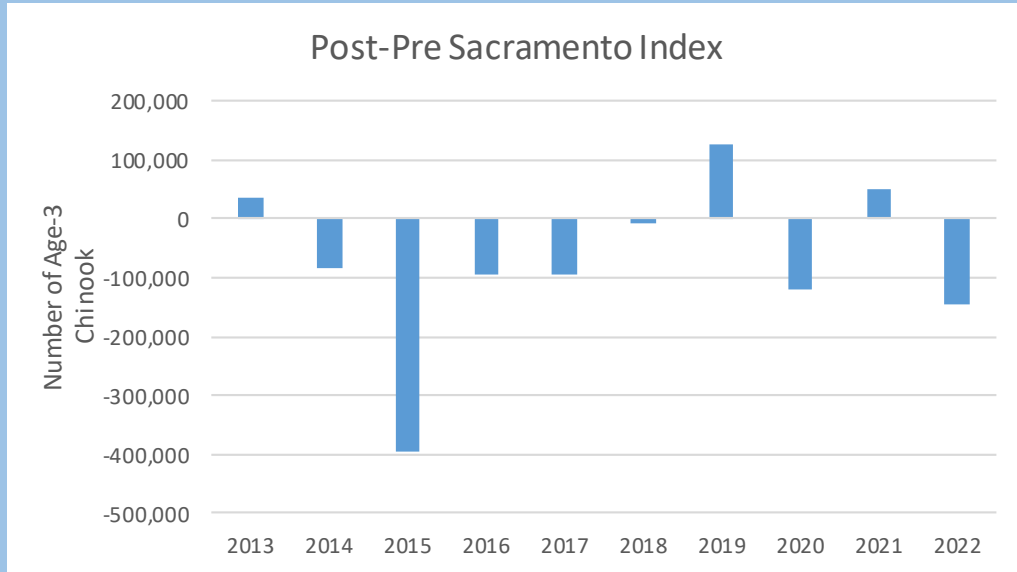
Escapement goal range = 122,000-180,000

b/ Fish spawning in natural areas are the result of hatchery and natural production; estimates generally based on carcass surveys.



- The control rule describes maximum allowable exploitation rates at any given level of abundance. The Council may recommend lower exploitation rates as needed to address uncertainties or other year specific circumstances. When recommending an allowable *de minimis* exploitation rate in a given year, the Council shall also consider the following circumstances:
 - The potential for critically low natural spawner abundance, including considerations for substocks that may fall below crucial genetic thresholds;
 - Spawner abundance levels in recent years;
 - The status of co-mingled stocks;
 - Indicators of marine and freshwater environmental conditions;
 - Minimal needs for tribal fisheries;
 - Whether the stock is currently in an approaching overfished condition;
 - Whether the stock is currently overfished;
 - Other considerations as appropriate.

Performance 2013-2022



SI abundance forecast and escapement have generally been overforecasted and overpredicted while exploitation rates were uniformly underestimated over the last 10 years.

In a Nutshell.....

- SRFC are a primary driver stock in setting fisheries off the CA coast and are widely distributed.
- The sport and troll fleets differ in distribution and magnitude of catch with highest impacts around San Francisco.
- Current control rules allow consideration of other factors at low abundances.
- SI abundance forecast and escapement have generally been overforecasted and overpredicted while exploitation rates were uniformly underestimated over the last 10 years.
- Fishery management changing toward more active, real time management that may reduce the uncertainty.
- Fishery responses can be significantly affected by ocean conditions affecting fish distribution.

Fishery Overview: magnitude and distribution of fishing mortality

- Ocean
 - Management Areas
 - Fishing mortality distribution
 - Performance
- Central Valley Freshwater
 - Management Areas
 - Harvest and fishing effort distribution
 - Key factors for freshwater fishery shaping