NOAA FISHERIES

West Coast Region

Summary of Comments on Substitute Environmental Document for San Joaquin River Basin Flows of Bay-Delta Plan

January 3, 2017

NOAA Fisheries Role and the ESA

- NMFS is responsible for the administration of ESA with regards to listed anadromous fish species:
  a. California Central Valley steelhead and designated critical habitat 
  b. Central Valley spring-run Chinook salmon 

- Magnuson-Stevens Fishery Conservation and Management Act for essential fish habitat for Pacific Coast Salmon – Chinook salmon

- Reintroduction of Central Valley spring-run (Non-essential Experimental Population in SJRRP)

40% Default and 30-50% Range

- 60% UIF appears to provide the best biological and measurable benefits for fish and increases the chances of success and survival
- Recognize the Board has to balance with other beneficial uses…

  …however

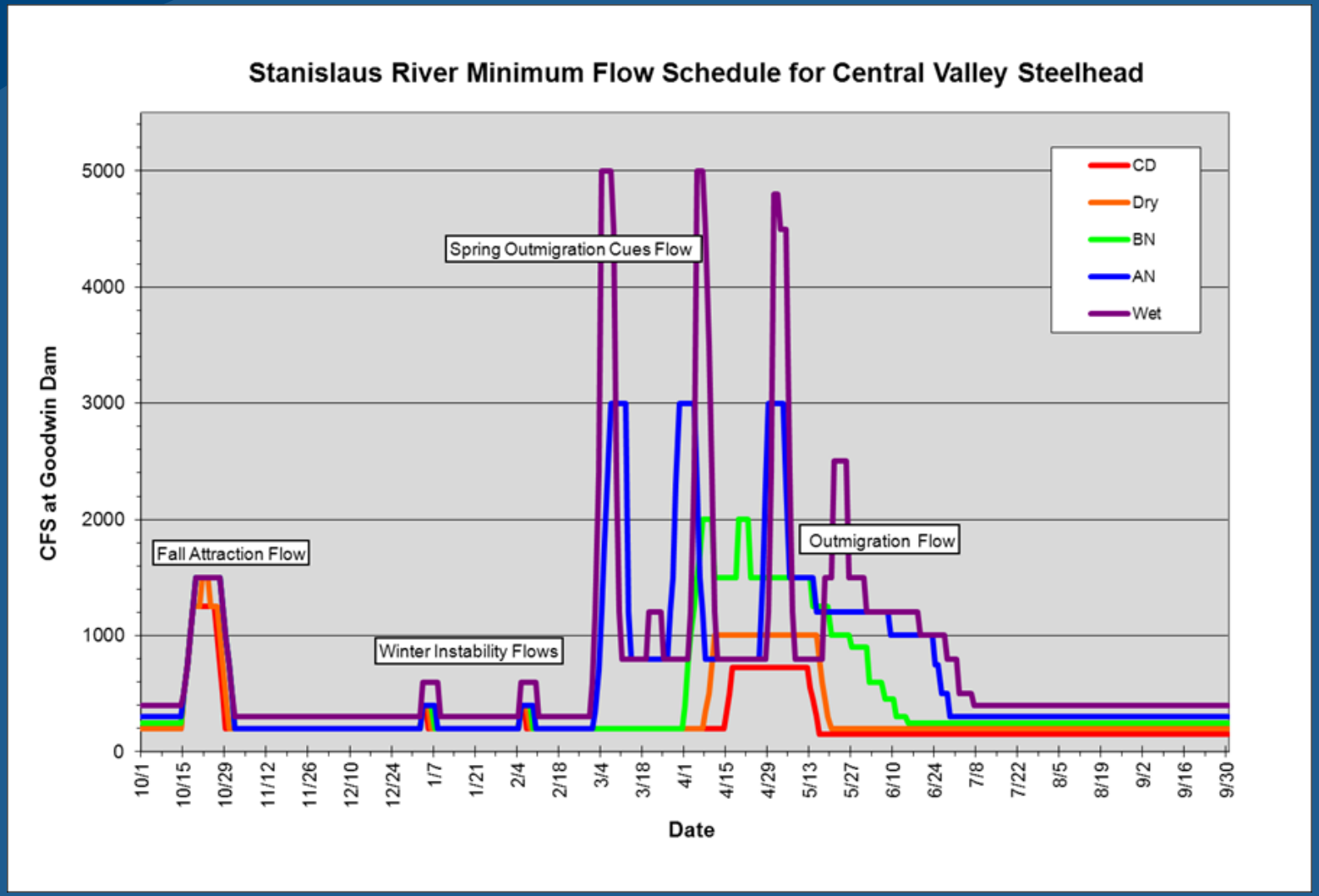
- 40% UIF does not achieve recovery
- 40% UIF slightly higher on Stanislaus River and appears to improve flows on Tuolumne and Merced rivers

Year-round Flow Schedule

- We recommend a year-round flow schedule for each tributary to be protective of all life stages of steelhead and salmon

- Recommend flow criteria at Vernalis

Example: 2-E Flow Schedule



Set Standards for Reservoir Constraints

Table F.1.2-23c. Minimum Diversion, Minimum September Carryover Guideline, Maximum Draw from Storage, and Flow Shifting for the Merced River

	Baseline	20% Unimpaired Flow	30% Unimpaired Flow	40% Unimpaired Flow	50% Unimpaired Flow	60% Unimpaired Flow
Minimum District Diversion (TAF, % of District Max)	0 TAF	78 TAF (15%)	78 TAF (15%)	78 TAF (15%)	78 TAF (15%)	78 TAF (15%)
Minimum September Carryover Guideline (TAF)	115 TAF	300	300	300	300	300
Maximum Storage Draw (% of Mar 1 minus Sep guideline)	80%	70%	60%	50%	45%	35%
Shifting to Fall[a]	NA	None	None	Yes	Yes	Yes
Drought End Storage Refill	NA	100%	100%	100%	50%	50%
Vernalis Minimum[b] Feb–Jun (cfs)	D-1641/ VAMP	1000	1000	1000	1000	1000

TAF = thousand acre feet

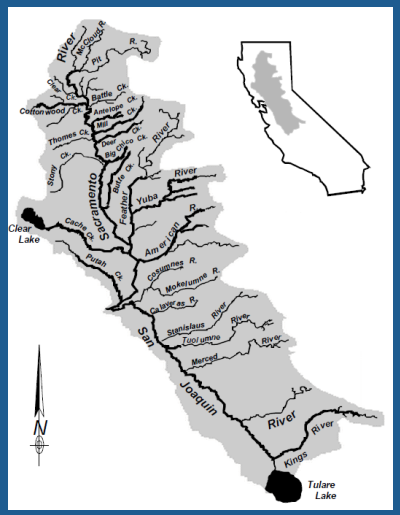
cfs = cubic feet per second

[a] In the alternatives, the shifting of a portion of unimpaired flow requirement was completed during wet years, designed to allow only a percentage of diversions in the qualifying years (if storage was within 10% of the guideline September storage and inflow was projected to be higher than average).

[b]For unimpaired flow alternatives, the Merced River is assumed to provide 24 percent of additional releases necessary to meet the Vernalis minimum flow requirement based on its long-term fraction of unimpaired flow among the three eastside tributaries.

Environmental Baseline

- Poor baseline conditions have led to decline of anadromous fish species
- Substantial efforts will be required in order to reverse these declining trends



Historic

Current

Figures from: McEwan (2001) -- Central Valley steelhead. Fish Bulletin 179, pages 1-43.

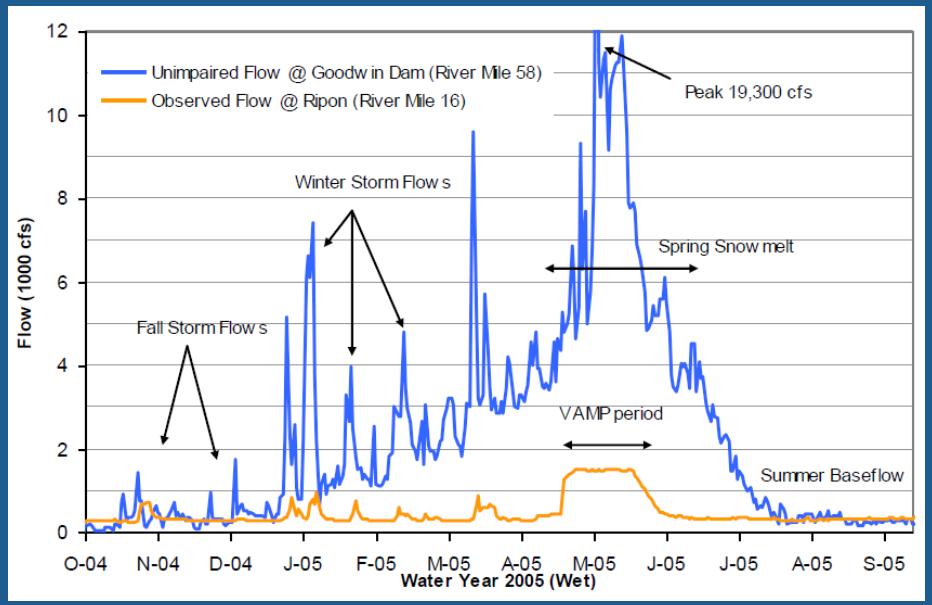


Figure from: Figure 19-3 from page 19-6 of the SED

Adaptive Management

- NMFS supports AM, but more direction and structure is needed

- Need clearer biological goals and objectives

- Any adjustment of protective measures linked to meet narrative fish and wildlife protection objectives

- NMFS does not have enough resources to participate

Protecting Flow through Delta

- Scientific basis for minimum base flow at Vernalis is unclear
- San Joaquin River and Delta are major migratory corridors for salmonids
- Protect UIF through San Joaquin River and Delta for the success and survival of anadromous fish species, and not diverted for other purposes

The State Water Board will exercise its water right and water quality authority to help ensure that the flows required to meet the LSJR flow objectives are used for their intended purpose and are not diverted for other purposes. In order to help ensure

Excerpt from Appendix K (p. 28)

Agricultural Economics

- Analysis states 40% UIF to environmental purposes would lead <3% change in regional economic output and employment

- SED analysis overestimates impacts to ag

- Context for the forecasted change within the regional economy is absent from the analysis

NMFS' Summary of Recommendations

- Need year-round flow schedule that will lead to recovery of listed anadromous fish
- Incorporate biological goals and objectives into UIF criteria
- Adaptive management needs clearer direction and structure
- Protect UIF through Delta for success and survival of anadromous fish