WATER & POWER

Serving Central California since 1887

Turlock Irrigation District and the SED

California State Board of Food and Agriculture

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The Tuolumne River

The Tuolumne River

- Turlock Irrigation District
- Our partners
- Don Pedro Reservoir
- FERC Relicensing initiated 2010

The FERC Process

- ILP, transparent and collaborative process
- Over 30 studies and a suite of models
- Resource agencies & NGO's & SWRCB input
- Significant improvements can be made based on science
- General commitment to water supply reliability & ecosystem health

The SED Process

- SWRCB spent over $50 million compiling SED
- 2016 SED developed in secret, while pledging transparency**
- Offers for assistance and data generally ignored
- After nearly 4 years to redo, offering 60 days for district review and hearings
- Over 3,800 pages

**SED Sept 2016, Section 3-5

The SED Contents

- SED claims best and latest science, ignores FERC & VAMP studies that SWRCB help shape
- Deals in means & averages, no model results to support numbers
- Identifies predation as a “major” stressor, offers control as a possible “additional” action
- “Offers voluntary settlements within 30% to 50% UIF
- Requires 40% UIF, Feb through June

SED Goals: Salmon & Salinity

- According to the SED total increase of adult FRCS under 40%UIF is 1,103 fish per year in regulated area (3 rivers)**
- 60% UIF would produce 738 more than existing**
- Desires to improve South Delta Salinity

** 2016 SED, Table 19-84

The Economics

- 2012 plan @ 35% UIF = 210,000 fallowed acres during multi year drought
- SED drought impacts in 2015 to TID only**
  - $1.6B economic output loss
  - $167M farm-gate loss
  - $330M labor income loss
  - 6,576 lost jobs
  - $10,666 per irrigated acre

** MID/TID Socioeconomic Model running
40% UIF – Not including Cold water pool

The Science

- FERC predation study, over 90% outbound Salmonids consumed before leaving the Tuolumne River
- Proposed second predation study
- FERC Salmon population model found that 10 percent non-native predation suppression = 35% UF
- VAMP study Susan Paulsen 2006 concludes 98% of SJ river outflows picked up by South Delta Pumps
- FERC Otolith study – No February or June

The Science

- *"Someone did a very elegant model and basically figured out how many pounds of fish the striped bass population needs to eat to survive every year, and that estimate was roughly on order of 25 million kilograms of fish that striped bass need to eat – crayfish, etc. to meet their energetic requirements every year. So working with juvenile salmon and having a rough estimate of the biomass of all the juvenile salmon in the Central Valley, I did a very conservatively high estimate and came up with a back of the envelope estimate of roughly 240,000 kilograms of juvenile salmon,* ***which means that if striped bass were to eat every single salmon in the Central Valley, it would meet 1% of their diet. This isn't an accusation of the bass; it's just saying they could easily account for all missing salmon in the Central Valley."***
- *"We're never going back to the way things were, but through creative use of existing habitat features there may be alternatives that could allow us to find balance between society's economic and human resource needs while preserving resources."*

-Dr. Sean Hayes, NOAA

The Science

- "The primary purpose of predatory fish control is to increase the survival of migrating salmonids and other native fishes through localized reductions of targeted predatory fishes and / or elimination or modification of habitat for predatory fishes at locations of high predation risks *(hotspots).* ***Predation by non-native striped bass, largemouth bass, and other warm-water species is identified as a major stressor for juvenile salmonids in the three eastside tributaries and mainstem LSJR*** *(NMFS 2014a, McBain and Trush 2002, Brown 2000, FishBio 2013)." ***
- "Juvenile Salmon are clearly consumed by fish predators and several studies indicate that **the population of predators is large enough to effectively consume all juvenile salmon production**." **

**Sept 2016 SED section 16.3.9

The Facts

- The Tuolumne River and Delta are a complex ecosystem that needs improvement
- Flow is an important component of a healthy ecosystem
- History shows that regulated blocks of water for the environment don’t deliver promised results
- We need Innovative Comprehensive Management, not yesterdays Flow for Flows sake.

Our View

- Voluntary settlements based on science are preferred
- We have solutions we can implement
- The SED does not provide a path
- Governor’s message being interpreted multiple ways
- Decades more before any improvements

Our View

- This SED is heavy handed, and ignores the State's commitment to Coequal Goals
- Will limit our ability to comply with SGMA
- Farmers are being asked to do more with less water, the state needs to do the same.
- SWRCB states "significant but unavoidable" human impacts – this is not balance.
- Is farming Sustainable in California?

Thank you

Questions?