# Phase I SED: Basic Issues & The Role of San Francisco

Chris Shutes California Sportfishing Protection Alliance December 16,2016

### **Presentation summary**

- Change the paradigm: unsustainable levels of water deliveries from the San Joaquin tributaries
- San Francisco and Bay Area water agencies must do their fair share
- Wrap-up

California has an unsustainable agricultural business model

- Boom and bust cycle built on overallocation of water: too much delivery in good years creates crisis after 2-3 dry years
- System is only semi-functional by diverting water needed for public trust resources and/or over-pumping groundwater
- Restoration of protective flows for rivers and SGMA are not the cause of overallocation: they just daylight it

## Unsustainable level of deliveries

Watershed	Median /average annual runoff (TAF)	Average annual agricultural deliveries (TAF)	Average Annual M&I deliveries
Merced	721/884	445 (Merced ID)	
Tuolumne	1514/1851	757 (TID+MID)	30 (MID)
			~225 (SFPUC, BAWSCA)
Stanislaus	922/1100	445 (SSJID+OID) Up to 49 (CSJWCD); may vary	30 (SEWD); may vary

Source: SED. Merced: p. 2-16 Tuolumne: pp. 2-18 to 2-20. Stanislaus : pp. 2-27 to 2-33 Note: does not include riparian diversions

# No basis for 40% Feb-June unimpaired Block or Budget

- The science says 40% is not enough
- Block loses variability: go back to 7-day running average
- Flow shifting steals winter/spring water to solve summer/fall problems: budget enough to do the job
- If spring flow increases water temperature in summer, don't say it "could" be fixed. Own it.

# Need rules in SED Analyze real alternatives for:

- Adjusting flows to water year types
- Reduced irrigation deliveries
- Carryover storage (numbers, please)
- Default triage in CD years and drought sequences based on specific functions
- Export operations
- San Francisco contribution to flow

#### No punting to adaptive management

#### Two major agreements must change

- 1988 Stipulation Agreement on Stanislaus between BOR and OID/SSJID
  600 TAF/year to 2 districts too much draw
- 1966 Fourth Agreement between TID/MID and SFPUC makes SFPUC ~50% responsible for flow increases on Tuolumne
  - Formula falls apart with needed magnitude of flow increase: SF gives up an amount that would be greater than its annual demand
- Board must reduce draw on both rivers, and most of that draw is from senior diverters

## **Conservation disparities**

- San Francisco per capita water use among lowest in state
- BAWSCA agencies less efficient, has improved
- MID/TID service areas still use extensive flood irrigation, which is the overwhelming source of water for groundwater recharge

# SFPUC and BAWSCA deserve credit for reducing demand, but not a free pass

- SFPUC and BAWSCA should look for solutions consistent with Bay Area conservationist values
- SFPUC and BAWSCA must invest in alternative dry year supplies such as
  - Storage in Los Vaqueros (EBMUD did it)
  - > Treatment infrastructure to use Delta water
  - > Change in POD to allow some Delta capture
  - Long-term transfers from north (PCWA, YCWA)

## Bay Area should invest in reliability

- Investments in Bay Area conservation
- Investments in system efficiencies
- Investments in Valley agricultural efficiencies
- Investments in Valley recharge infrastructure
- Bay Area legislators should support Valley investment in reduced agricultural water demand: end the us vs. them paradigm

Summary (1) Final SED must define the alternatives and shows the analysis for:

- 1. Sustainable deliveries
- 2. Carryover storage requirements
- 3. Flows adequate to achieve doubling
- 4. Reduced flow duration in dry years
- 5. Defined triage in droughts
- 6. Export operations

# Summary (2) Bay Area role consistent with values

- 1. Board not bound by water user agreements that depend on water at expense of rivers
- 2. San Francisco and Bay Area proactive on drought planning and management
- 3. Bay Area makes broad investments in diversified water supply reliability