

## GAME X – YEAR 1 OF STAGE 1

### THEMES

- I. Focus more on using assets in drier years and gaining assets in wetter years.
- II. Further limit exports particularly in drier years to protect fish by developing EWA assets, debt capacity, and collateral.
- III. Enhance natural river flow and Delta outflow pulses in winter/spring of dry years by allowing some reservoir inflow to be released from NOD storage and further limiting exports from Delta.
- IV. Increase NOD storage in early summer of dry years of multiyear droughts to ensure adequate storage for late summer and fall fish-releases (AFRP flows) and summer cool-water releases.
- V. Balance NOD reservoir storage and releases for fish benefits using EWA assets and capacities.

### EWA WATER USE ACTIONS

- 1) Limit export of dry year winter natural flow pulses by taking on debt in San Luis using EWA groundwater, NOD, and SOD storage, and water purchase options as collateral.
- 2) Cut back dry to normal year exports in late spring and early summer by taking on debt in San Luis and backing water up into NOD storage EWA accounts. Groundwater SOD and export water purchase options serve as collateral for debt in San Luis, and can be used as necessary to maintain SOD demands and San Luis storage levels if necessary.
- 3) Increase river flows by releasing EWA NOD water, taking on debt in NOD storage using EWA assets, purchasing or borrowing water from NOD diverters (e.g., GCID, ACID, City and County of Sacramento, TID, Stockton East, etc.).
- 4) Increasing Delta outflow by increasing river flows (inflow) and/or reducing exports using EWA assets.
- 5) Balance NOD reservoir storage and releases for fish by transferring EWA assets among storage reservoirs within constraints.

## **EWA WATER GENERATING ACTIONS**

- 1) Allow expanded Banks use in late spring and summer of wetter years. If exports are not restricted by E/I ratio, then EWA retains ½ of the yield of expanded Banks water – to be held in San Luis, placed in groundwater bank, or sold to water users SOD. If exports are restricted by E/I ratio, then EWA could relax standard and export all used expanded Banks capacity to EWA San Luis account, EWA groundwater accounts, or sold to SOD water users. (Note: smelt and salmon salvage risk would have to be minimal.)
- 2) Allow relaxation of E/I to export water for EWA purposes (pay debts, place water into EWA groundwater and SOD surface water accounts, back up water in EWA NOD storage accounts, or sell water to water users). Option would depend on environmental conditions (e.g., delta smelt distribution) in Delta and Bay.
- 3) Back up water into NOD storage EWA accounts by relaxing storage release and E/I standards, taking on debt SOD, or purchasing NOD or SOD water.

## **POTENTIAL PROBLEMS**

- 1) San Luis low point problem potential is increased in dry to normal years.
- 2) Reduced storage particularly carryover storage in NOD and SOD reservoirs.
- 3) Insufficient water generating capacity.
- 4) Insufficient debt capacity and collateral assets.
- 5) Insufficient storage and conveyance capacity.
- 6) Risk to protected fish species could preclude actions.
- 7) Risk to water supply by foregoing exports in any year type.