

ASSETS FOR EARLY STAGE 1 SCENARIO DEVELOPMENT

ASSET	DESCRIPTION OF ASSET APPLICATION FOR SCENARIO DEVELOPMENT
SOURCE SHIFTING	<ul style="list-style-type: none"> ◆ <u>MWD</u>: 60,000 af (2000 Ops), may continue through Stage 1 ◆ <u>Groundwater Substitution</u>: Shift Sacramento Valley surface water users to groundwater ◆ <u>Crop shifting in Delta</u>: Shift to less water intensive crops during certain time periods
GROUNDWATER STORAGE SOUTH OF THE DELTA / WATER ACQUISITION)	<ul style="list-style-type: none"> ◆ <u>Kern Water Bank</u>: Potential for $\leq 90,000$ af on annual basis for three years if first years of a drought; 90,000 af in years that KCWA gets 100% allocation in wetter years. ◆ <u>Vidler Water Company</u>: Lease of groundwater storage space (49,000 af), and water acquisition (6.300 af) ◆ <u>Semitropic Storage Capacity</u>: Sublease 100 af usable storage ◆ <u>Options</u>: Acquire options on water north and south of the Delta
LAKE ALMANOR RELEASES	<ul style="list-style-type: none"> ◆ Approximately 100 kaf per year March-May Feather River flows
INCREASED BANKS PUMPING CAPACITY	<ul style="list-style-type: none"> ◆ Increase pumping capacity by 500 cfs in year 2000 (70,000-90,000 af) ◆ Increase pumping capacity to 6.6 kcfs to 8.5 kcfs July-September ◆ 6.6 ka + 1/3 SJR November-March

FLEXING E/I RATIO	<ul style="list-style-type: none"> ◆ Shift averaging period from 14 days to 3 days; or flex ratio
RESERVOIR REOPERATION	<ul style="list-style-type: none"> ◆ Coordinate/optimize operation of reservoirs to increase overall system flexibility (look for small reservoir opportunities)
ACCESS TO SURPLUS CVP/SWP STORAGE CAPACITY	<ul style="list-style-type: none"> ◆ Access to San Luis and upstream reservoirs
ACCESS TO UNUSED DELTA PUMPING CAPACITY	<ul style="list-style-type: none"> ◆ Includes JPOD and EWA access to Banks and Tracy
ACCESS TO UNUSED NON-PROJECT STORAGE	<ul style="list-style-type: none"> ◆ Assume Yuba and SJ tribs on no-harm basis
MARKETS (WILLING SELLER)	<ul style="list-style-type: none"> ◆ Acquisition of upstream water for multiple purposes ◆ Acquisition of in-Delta water ◆ Purchase PG&E reoperation water
SHASTA DAM EXPANSION	<ul style="list-style-type: none"> ◆ Addition of flash boards on Shasta Dam to increase storage capacity by 50 TAF
ALTER FLOOD CONTROL DIAGRAMS	<ul style="list-style-type: none"> ◆ May be limited to the San Joaquin and Stanislaus Rivers ◆ Pursue other small-scale projects in Stage 1 in addition to above efforts
PUMPING TO STORAGE	<ul style="list-style-type: none"> ◆ Good general strategy for expansion of conjunctive use opportunities by optimizing use of groundwater/surface water ◆ Would require additional facilities to maximize use otherwise benefits could be relatively small; could result in spilling of stored water
INTERTIE	<ul style="list-style-type: none"> ◆ 400cfs capacity ◆ Need to determine real benefit of intertie when linked to other assets - staging issue

ERP	<ul style="list-style-type: none"> ◆ Integrate water acquired for ERP flows with WMS/EWA water
SHIFTING REFUGE SUPPLIES	<ul style="list-style-type: none"> ◆ Diversify sources of water for refuges. ◆ Borrow acquired refuge water for EWA. ◆ Increase conveyance efficiency ◆ Use refuges as small-scale storage projects.
ACQUISITION OF IN-DELTA ISLANDS FROM WILLING SELLERS	<ul style="list-style-type: none"> ◆ Reduce application and subsequent run-off/seepage of pesticides
MANAGE DISCHARGE FROM IN-DELTA ISLANDS	<ul style="list-style-type: none"> ◆ Relocate/reroute Delta agricultural drains or hold water for discharge on outgoing tides or for high flow periods
MANAGE SALINITY AND SELENIUM INPUTS	<ul style="list-style-type: none"> ◆ Relocate Delta agricultural drains (see above)
DELTA CROSS CHANNEL	<ul style="list-style-type: none"> ◆ Operate to freshen Delta and to improve export water quality
CONTROL ALGAL GROWTH IN CCF	<ul style="list-style-type: none"> ◆ Needs definition