

POSSIBLE FUNDING SOURCES FOR EARLY STAGE 1 ASSETS

Draft Work-in-Progress

October 12, 1999

D-055324

ASSET	ASSET DESCRIPTION	COST ESTIMATE (\$ thousands)	POTENTIAL FUNDING (\$ thousands)	POTENTIAL FUNDING SOURCES & DESCRIPTION	FUNDING GAP (\$ thousands)
SOURCE SHIFTING	<ul style="list-style-type: none"> ◆ <u>MWD</u>: 60,000 af (2000 Ops), continue for potentially for 5-10 yrs ◆ <u>Groundwater Substitution</u>: Shift surface water users to groundwater ◆ <u>Crop shifting in Delta</u>: Shift to less water intensive crops during certain time periods 		◆ \$2,500	<ul style="list-style-type: none"> ◆ Possible funding in USBR's Office of Water Conservation? (\$2.5 million in FY00). ◆ Possible funding in Four Pumps? (Example Deer Creek Water Exchange Project) 	

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ASSET	ASSET DESCRIPTION	COST ESTIMATE (\$ thousands)	POTENTIAL FUNDING (\$ thousands)	POTENTIAL FUNDING SOURCES & DESCRIPTION	FUNDING GAP (\$ thousands)
<p>GROUNDWATER STORAGE SOUTH OF THE DELTA / WATER ACQUISITION</p>	<ul style="list-style-type: none"> ◆ <u>Kern Water Bank</u>: Potential for <=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 <p><u>Options</u>: Acquire options on water north and south of the Delta</p>		<ul style="list-style-type: none"> ◆ \$200,000 ◆ \$30,000 ◆ \$17,100 ◆ \$88 ◆ \$214 ◆ \$1,673 ◆ 2,200 ◆ \$150 	<p>(the following is a list of groundwater programs that may or may not have funding available for water acquisition)</p> <p>Proposed Water Bond:</p> <ul style="list-style-type: none"> ◆ Groundwater Storage Program, Conjunctive Use Subaccount (Chapter 9, Article 2) ◆ Water Conservation Program, Water Conservation Account (Chapter 8, Article 4): Groundwater Recharge Facilities Program <p>Other Potential Funding Sources:</p> <ul style="list-style-type: none"> ◆ Prop 204, Groundwater Recharge (Chapter 6, Article 3). Kern County Water Agency and Kern Water Bank Authority have each applied for loans. \$17.1 million is available. ◆ Central California Water Management Program (DWR): \$88k in FY 99-00 for Central California Groundwater Resources Investigations. ◆ San Joaquin District Water Management Program (DWR): \$214k in FY 99-00 for San Joaquin Valley groundwater. ◆ State Water Project Future Supply (DWR): \$1.6 million in FY99-00 for groundwater development. ◆ Integrated Storage Investigations (DWR): \$2.2 million in FY99-00 for groundwater conjunctive use investigations. (\$20 million in State funding is expected in FY00-01 for the ISI). ◆ Stockton Metro, Groundwater Recharge and Wetlands, Farmington (COE): \$150k in FY00. 	

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ASSET	ASSET DESCRIPTION	COST ESTIMATE (\$ thousands)	POTENTIAL FUNDING (\$ thousands)	POTENTIAL FUNDING SOURCES & DESCRIPTION	FUNDING GAP (\$ thousands)
LAKE ALMANOR RELEASES	<ul style="list-style-type: none"> ◆ 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 			<ul style="list-style-type: none"> ◆ No funding needed 	
RESERVOIR REOPERATION	<ul style="list-style-type: none"> ◆ Coordinate/optimize operation of reservoirs to increase overall system flexibility 				
ACCESS TO SURPLUS CVP/SWP STORAGE CAPACITY ACCESS TO UNUSED DELTA PUMPING CAPACITY	<ul style="list-style-type: none"> ◆ Access to San Luis and upstream reservoirs ◆ Includes JPOD and EWA access to Banks and Tracy 			<ul style="list-style-type: none"> ◆ No funding needed 	
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 		<ul style="list-style-type: none"> ◆ \$10,000 ◆ \$400 	<ul style="list-style-type: none"> ◆ CVPIA Water Acquisition for refuges and fish & wildlife purposes (\$10 million available in FY00) ◆ Integrated Storage Investigations (DWR): \$400k in FY99-00 for hydro facilities reoperation investigation. (\$20 million in State funding is expected in FY00-01 for the ISI). 	

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SHASTA DAM EXPANSION	<ul style="list-style-type: none"> ◆ Addition of flash boards on Shasta Dam to increase storage capacity by 50 TAF 			<ul style="list-style-type: none"> ◆ CVP, Yield Feasibility Investigation (USBR)? 	
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 			<ul style="list-style-type: none"> ◆ Sacramento-San Joaquin Comprehensive Study (COE) ◆ Proposed Water Bond? ◆ Prop 204? 	
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 			<ul style="list-style-type: none"> ◆ Possible funding in DWR's Water Management activities? ◆ Proposed Water Bond? ◆ Prop 204? 	
INTERTIE	<ul style="list-style-type: none"> ◆ DMC capacity less than pumping capacity (by 400cfs) ◆ Need to determine real benefit of intertie when linked to other assets (i.e., JPOD, expanded Banks) ◆ When tied to increasing Banks capacity construction/use of intertie becomes a staging issue 				
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. 		<ul style="list-style-type: none"> ◆ \$10,000 ◆ \$2,500 	<ul style="list-style-type: none"> ◆ CVPIA Water Acquisition for refuges and fish & wildlife purposes (\$10 million available in FY00) ◆ Possible funding in USBR's & DWR's Office of Water Conservation? ◆ Funding in DFG for refuge management? 	

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ERP	◆ Integrate water acquired for ERP flows with WMS/EWA water			◆ No funding needed?	
ACQUISITION OF IN-DELTA ISLANDS FROM WILLING SELLERS	◆ Reduce application and subsequent run-off/seepage of pesticides			◆ Proposed Water Bond?	
MANAGE DISCHARGE FROM IN-DELTA ISLANDS	◆ Relocate/reroute Delta agricultural drains or hold water for discharge on outgoing tides or for high flow periods		◆ \$17,000 ◆	◆ Proposed Water Bond , Bay-Delta Multipurpose Water Management Program (Chapter 9, Article 3) ◆ Prop 204 , Drainage Management (Chapter 5, Article 4)	
MANAGE SALINITY AND SELENIUM INPUTS	◆ Relocate Delta agricultural drains (see above)		◆ \$17,000 ◆	◆ Proposed Water Bond , Bay-Delta Multipurpose Water Management Program (Chapter 9, Article 3) ◆ Prop 204 , Drainage Management (Chapter 5, Article 4)	
DELTA CROSS CHANNEL	◆ Operate to freshen Delta and to improve export water quality			◆ No funding needed	
CONTROL ALGAL GROWTH IN CCF	◆ Needs definition			◆	

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