

EXHIBIT 13-B
MPWMD Comparative Matrix, Part I-B, Desalination Projects

	A	B	C	D	E	F
1	FINAL for 10/16/06 Meeting	MPWMD Comparative Matrix, Part I-A, Desalination Projects				
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3						
4	DECISION ELEMENT	Seawater Conversion Vessel				
5	PROPONENT/SPONSOR	Water Standard Company				
6	PROJECT DESCRIPTION	Completely self contained seawater desalination treatment plant installed on a ship. Electrical energy and propulsion will be provided by gas turbine engines fueled with Biodiesel. No seabed intake or outfall lines are required. Water produced on the ship will be shuttled to shore as required. Facilities required to distribute the water to customers on shore are unknown at this time but could be assumed to be similar to those required in the other alternatives. Size of project is unknown but assumed to be 20 MGD (approx 22,000AFY).				
7	Pilot Project	None planned. State currently requires pilot plans but that requirement was written around land based facilities. WSC sees no need to pilot the process since we have over 2,000 ships currently successfully treating seawater. Issues needs to be discussed with the State DOHS.				
8	PROJECT YIELD	Actual yield based on commitments of purveyor customers				
9	Comply with Order 95-10? Water for Seaside Basin?	Yes, and can easily meet all future needs				
10	Future Mont. Penin. Needs?	Could easily be sized for all future needs				
11	Future Non-MP Needs	Could easily be sized for all future needs				
12	TOTAL YIELD	Could easily be sized for all future needs				
13	Yield Phasing to Mont Penin	Phasing will be based on demands. Larger size initially is better.				
14						
15	PROJECT COST	Costs in 2006 dollars for 22,000 AFY (approx 20 MGD) project provided by WSC				
16	Capital - see lines 77-106	\$129,000,000 for 20 MGD SCV (with power plant). Distribution improvements unknown.				
17	Amortized Cap. Cost (\$/yr)	Information not provided				
18	O&M - see lines 108-112	Information not provided				
19	Assumed energy cost (\$/kwh)	\$0.05 / kwh (using Biodiesel with current US government rebate tax incentive)				
20	Total Annual Cost	Information not provided				
21	Time frame for estimates	2006, costs not escalated				

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22	COST TO PENINSULA					
23	Share of total project cost					
24	How share determined					
25	Cost sharing of existing vs. future Cal-Am ratepayers					
26	Cost of Water (\$/AF)	Cost of water produced on the SCV estimated to be less than \$1,000 AF. Costs for required distribution and pumping unknown				
27	Impact to Cal-Am Bill	N/A				
28						
29	FINANCING ASSUMPTIONS	WSC funding can be used. Prefer a public private partnership with MPWMD				
30	Interest rate (%)	80% at 7% interest and 20% at 12% if private, 7% if municipal				
31	Term (yrs)	20 years if private, 30 yrs if municipal				
32	Public vote required?					
33	Grants (describe)	Office of Emergency Services or other Homeland Security funding should be looked into. WSC has not done that.				
34						
35	TIMELINE					
36	Draft EIR (and/or EIS)	No actions taken on CEQA activities				
37	Certify FEIR (EIS ROD)					
38	Obtain key permits	none applied for at this time				
39	Secure financing	Upon municipal agency approval				
40	Secure ROW/property access	NA for SCV				
41	Start construction	Information not provided				
42	Commence water delivery	3 years after contractual arrangements				
43	Total time to water delivery	3 years after contractual arrangements				

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45	PERMITS/REGS					
46	Federal Agencies	Same as land based facility except Coast guard must review operational plans.				
47	EIS needed?					
48	Fed lead agency?	to be determined, if needed				
49	Sanctuary approval?	permit will be required. Not applied for yet				
50	State Agencies	same as any land based treatment palnt				
51	CPUC approval?	N/A				
52	EIR lead agency	MPWMD				
53	SWRCB/Water Rights	N/A				
54	Regional Agencies	None required for SCV				
55	Monterey County	None required for SCV				
56	Local Agencies	None required for SCV. Distribution system requiores construction and use permits within affected jurisdictions				
57						
58	SITE CONTROL					
59	Confirmed site?	Location doesn't really matter for the SCV itself. Shuttle ship off loading site must be selected depending on who the customers are.				
60	Alternative sites and projects?	No restrictions. No land required. SCV can be located anywhere.				

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62	OPERATIONS/OTHER					
63	Technical, Managerial and Financial Capabilities (TMF) to meet DHS standards	Assume implementing entity would operate desal plant with MPWMD oversight.				
64	Back-up; water production interruptions (e.g., power or intake water)	Redundant treatment equipment per State codes; back-up gas turbine planned				
65						
66	PROJECT PARTICIPANTS					
67	Overview	Willing to expand plant to meet needs of others such as FORA, MCWD and Monterey Peninsula. Shuttle ship concept may allow cities up and down the coast to participate.				
68	MPWMD participation	MPWMD currently envisioned as sole sponsor.				
69	Other entities participation	None specified; partnerships possible.				
70						
71	PUBLIC INVOLVEMENT					
72	Outreach programs	Presentations by WSC to MPWMD				
73						
74	INFORMATION SOURCES	Materials submitted by PBS&J				
75						

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77	CAPITAL COST DETAIL	Year 2006 costs				
78	DESALINATION	(assume 20 MGD facility)				
79	Intake	included in SCV cost				
80	Pre-treatment	included in SCV cost				
81	Desal Plant	Ship cost with retrofitting/conversion cost is \$41,000,000 + \$40,000,000 for all PALL process equipment + shuttle ship costs at \$33,000,000				
82	Post-treatment	included in SCV cost				
83	Brine discharge	included in SCV cost				
84	Storage	unknown				
85	Transmission Pipelines	unknown				
86	Pump stations	SCV seawater intake PS included				
87	Energy facilities	2 gas turbines for \$15,000,000 (most desal plants do not include a power plant)				
88	DESAL SUBTOTAL	\$129,000,000				
89						
90	ASR COSTS	N/A				
91	RECYCLED WATER COSTS	N/A				
92	OTHER WATER SOURCES	N/A				
93						
94	ADDL CAPITAL COSTS					
95	Pilot Plant	Need has to be resolved with State Health				
96	Distribution system improvements	none identified				
97	Right-of-way	N/A for SCV.				
98	Envntl review, permits, etc.	unknown				
99	Engineering	included in SCV cost				
100	Construction Management	included in SCV cost				
101	Admin/legal	included in SCV cost				
102	Mitigation measures	N/A for SCV.				
103	Contingencies	included in SCV cost				
104	SUBTOTAL					
105						
106	TOTAL CAPITAL COST	Capital costs for SCV are \$129,000,000.(including the power plant) Distribution system costs are unkown at this time				
107						
108	ANNUAL O&M COST DETAIL					
109	Energy	included in total O&M				
110	Facilities O&M	included in total O&M				
111	Mitigation O&M	N/A				
112	TOTAL O&M (\$/yr)	\$12,000,000				
113						
114						
115	SOURCES FOR COSTS	Total capital and O&M costs were provided by WSC based on detailed estimates from V Ship, Pall Corp, GE Energy				

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117	ACRONYMS					
118	\$/AF	cost per acre-foot				
119	\$/kwh-	cost per kilowatt-hour				
120	ac	acre				
121	AFY	acre-feet per year				
122	ARB	Air Resources Board				
123	ASR	aquifer storage and recovery				
124	B-E/GEI	Bookman-Edmonston/GEI Consultants				
125	BRAC	Base Realignment and Closure Office (US Army)				
126	BRDEIR	Board Review Draft EIR on MPWMD Water Supply Project (interim draft, Dec 2003)				
127	Cal-Am	California American Water				
128	CalTrans	Cal. Dept. of Transportation				
129	CAW	California American Water				
130	CCC	California Coastal Commission				
131	CDFG	Cal. Dept. Fish & Game				
132	CDM	Camp Dresser & McKee, Inc				
133	CDTS	Cal. Dept. of Toxic Substances				
134	CEC	California Energy Commission				
135	CEQA	California Environmental Quality Act				
136	COP	Certificate of Participation				
137	CPCN	Certificate of Public Convenience and Necessity				
138	CPUC	Cal. Public Utilities Commission				
139	CR	Carmel River				
140	CSD	Community Services District				
141	CWP	Coastal Water Project				
142	DBO	design-build-operate				
143	DEIR	Draft EIR				
144	DHS	Cal. Dept. of Health Services				
145	DPR	Cal. Dept. of Parks & Recreation				
146	Duke	Duke Energy Corporation				
147	DWR	Cal. Dept. of Water Resources				
148	EIR	Environmental Impact Report				
149	EIS	Environmental Impact Statement				
150	FEIR	Final EIR				
151	FORA	Fort Ord Reuse Authority				
152	HDD	horizontal directional drilling				
153	IS	Initial Study				
154	JPA	Joint Powers Authority				
155	K/J	Kennedy Jenks Engineers, Inc.				

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156	MBNMS	Monterey Bay National Marine Sanctuary				
157	MBUAPCD	Monterey Bay Unified Air Pollution Control District				
158	MCEH	Monterey County Environmental Health				
159	MCPBI	Monterey County Dept. Planning & Building Inspection				
160	MCPW	Monterey County Public Works				
161	MCWD	Marina Coast Water District				
162	MCWRA	Monterey County Water Resources Agency				
163	MLHD	Moss Landing Harbor District				
164	MLML	Moss Landing Marine Laboratory				
165	MLPP	Moss Landing Power Plant				
166	MoCo	Monterey County				
167	MP	Monterey Peninsula				
168	MPWMD	Monterey Peninsula Water Management District				
169	MRWPCA	Monterey Regional Water Pollution Control Agency				
170	N/A	not applicable				
171	NEPA	National Environmental Policy Act				
172	NMCDP	North Monterey County Desalination Project				
173	NOAA Fish	National Marine Fisheries Service (part of Natl Oceanic and Atmospheric Administration)				
174	NOP	Notice of Preparation				
175	NorCo	North Monterey County				
176	O&M	operations and maintenance				
177	PEA	Proponent's Environmental Assessment				
178	P/SM	Pajaro/Sunny Mesa Community Services District				
179	RBF	RBF Consulting, Inc				
180	ROD	Record of Decision				
181	ROW	right-of-way				
182	RWQCB	Regional Water Quality Control Board				
183	SHPO	State Historic Preservation Office				
184	SLC	State Lands Commission				
185	SRF	State Revolving Fund, a loan administered by SWRCB				
186	SWRCB	State Water Resources Control Board				
187	TAMC	Transportation Agency of Monterey County				
188	TBD	to be determined				
189	USACOE	US Army Corps of Engineers				
190	USBLM	US Bureau of Land Management				
191	USBR	US Bureau of Reclamation				
192	USCG	US Coast Guard				
193	ESEPA	US Environmental Protection Agency				
194	USFWS	US Fish & Wildlife Service				
195	CG	US Coast Guard				
196	SCV	Seawater Conversion Vessel				
197	WSC	Water Standard Company				
198	PBS&J	Post, Buckley, Schuh & Jernigan, Inc.				
199	V Ships	V Ships, Inc.				
200	Pall	Pall Corporation				
201						
202						