

EXHIBIT 13-C
MPWMD Comparative Matrix, Part II, Projects Other Than Desalination

	A	B	C	D
1	FINAL for 10/16/06 Meeting		MPWMD Comparative Matrix, Part II, Projects Other Than Desalination	
2				
3				
4	DECISION ELEMENT	PHASE 1 AQUIFER STORAGE AND RECOVERY (Seaside Basin)	REGIONAL URBAN WATER AUGMENTATION PROJECT (RUWAP)	SEASIDE BASIN GROUNDWATER REPLENISHMENT PROJECT (GRP)
5	PROPONENT/SPONSOR	MPWMD	MCWD for desal project; MCWD and MRWPCA for recycled water project	MRWPCA
6	PROJECT DESCRIPTION	Divert treated excess Carmel River winter flow via existing Cal-Am pipelines (and those planned up Gen Jim Moore Blvd) to ASR wells in Seaside Basin. Phase 1 is second well at existing Santa Margarita test site. Phases 2 and 3 to be considered in future.	Desalinated water provided for potable uses. Reclaimed wastewater provided for nonpotable irrigation in Marina, Ord Community, Seaside, Del Rey Oaks and Monterey. Reclaimed water in first phase: 1,500 AFY; possible second phase: 3,300 AFY total, including Phase 1. Surface storage reservoir, ASR and/or tank needed to meet peak demand in Phase 2.	Repurified water from the MRWPCA reclamation plant provided to Seaside GW Basin to help recharge it. Initial project size estimated at 2,400 AFY.
7	Pilot Project	Successful pilot and full-scale test wells since 1998; annual reporting to SWRCB and MPWMD.	MCWD Desal Plant built in 1997. Salinas Valley Reclamation Project completed in 1997 providing irrigation water to agriculture. Pilot recycled project in progress on Seaside golf course.	Pilot testing (treatment and percolation) anticipated in 2007
8	PROJECT YIELD	Maximum CR diversion and injection is 2,420 AFY; maximum extraction from Seaside is 1,500 AFY; average annual yield is 920 AFY based on August 2006 computer modeling.	Desal component: 1,500 AFY. 1,200 AFY is available for the Ord Community and 300 AFY will replace MCWD's existing desalination plant. Reclaimed water: Phase 1 - 1,500 AFY, of which 1,200 AFY will be used in the Ord Community and 300 AFY will be available for the Monterey Peninsula. Possible Phase 2 - 3,300 AFY total, including Phase 1. Surface storage reservoir, ASR and/or tank needed to meet peak demand in Phase 2.	2,400 AFY in initial project, possibly expandable in the future
9	Comply with Order 95-10? Water for Seaside Basin?	No, unless teamed with other large project(s); up to 2,420 AFY injected into Seaside Basin	300 AFY to the Monterey Peninsula for irrigation use; see Line 8.	No, unless teamed with another large project; up to 2,400 AFY recharged into Seaside Basin
10	Future Mont. Penin. Needs?	No, unless teamed with other large project(s)	No; see Line 8.	No, unless teamed with another large project
11	Future Non-MP Needs	None	Desal project: 1,200 AFA. Reclaimed project: 1,200 AFY (Phase 1) ; 3,000 AFY (Phase 2 - includes Phase 1 amount)	None
12	TOTAL YIELD	See line 8; 920 AFY average annual yield.	Desal project: 1,500 AFY. Reclaimed project: 1,500 AFY (Phase 1); 3,300 AFY (Phase 2 - includes Phase 1 amount)	2,400 AFY in initial project, possibly expandable in the future
13	Yield Phasing to Mont Penin	No phasing; build facilities	Desal project: None currently identified. Reclaimed project: 300 AFY (Phase 1)	2,400 AFY in initial project, possibly expandable in the future
14				
15	PROJECT COST	Costs for Phase 1 Project only		
16	Capital - see lines 77-106	\$3,255,600 (year 2005 dollars)	Desal project: TBD. Reclaimed project: Phase 1 - \$54 mil; Phase 2 - not yet determined	\$41.2 mil
17	Amortized Cap. Cost (\$/yr)	\$261,100/yr (amortized at 5% for 20 yrs)	Desal project: TBD. Reclaimed project: costs not yet determined	Not yet determined - depends on availability of Prop. 50 grants and other funding sources
18	O&M - see lines 108-112	\$300,000/yr	Not yet determined	\$1,325,000/yr
19	Assumed energy cost (\$/kwh)	\$0.10/kwh	Not yet determined	\$0.11/kwh
20	Total Annual Cost	\$561,100/yr	Not yet determined	Not yet determined - depends on availability of Prop. 50 grants and other funding sources
21	Time frame for estimates	2005	Aug. 2006	Aug. 2006

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22	COST TO PENINSULA			
23	Share of total project cost	Entire cost to be paid by Peninsula consumers.	Desal project: TBD. Reclaimed project water users to pay estimated \$1,100/AF (cost based on no connection fees)	Not yet determined
24	How share determined	N/A	Prorata share	Not yet determined
25	Cost sharing of existing vs. future Cal-Am ratepayers	New users pay connection fee similar to current system	Recycled water users will pay for their share of the recycled water.	Not yet determined
26	Cost of Water (\$/AF)	\$610/AF based on 920 AFY average yield	Not yet determined. Financing will determine cost.	Not yet determined, but goal is \$1,200/AF
27	Impact to Cal-Am Bill	Ordinance 123 authorized 1.2% user fee added to Cal-Am bill to construct Phase 1 ASR; assumes payoff of future pooled debt issuance.	No impacts anticipated.	Not yet determined
28				
29	FINANCING ASSUMPTIONS	pursuant to District Law		
30	Interest rate (%)	5%	3% (assume SRF loan)	Assume either Prop. 50 grant, 3% SRF loan, or both.
31	Term (yrs)	20 years	20 years	20 years if SRF loan
32	Public vote required?	No	No	No
33	Grants (describe)	Applied for Prop 50 grant; top priority project.	A Prop 50 grant application was submitted, but not approved. No grants currently anticipated.	Have applied under Prop. 50
34				
35	TIMELINE			See MRWPCA materials.
36	Draft EIR (and/or EIS)	DEIR/EA issued March 2006.	DEIR distributed June 04.	Pilot facility - start in late 2006 and be completed in early 2007. Full facility - start in late 2008.
37	Certify FEIR (EIS ROD)	FEIR/EA certified August 2006	EIR certified in October 2004; no info on NEPA	Anticipate this to occur in mid 2009
38	Obtain key permits	Summer/Fall 2006 (3-6 mos from FEIR/EA)	2006/2007	Anticipate this to be complete in late 2009
39	Secure financing	Late 2006 (concurrent with permits)	2006/2007	Anticipate this to occur by 2008
40	Secure ROW/property access	Summer/Fall 2006 (US Army)	2006/2007	Anticipate this to be complete in late 2009
41	Start construction	Late 2006	Desalination project: 2008. Reclaimed project: 2007	Anticipate starting construction of full scale-project in early 2010
42	Commence water delivery	Late 2007 (assume 1 yr for all tasks)	Desalination project: 2009. Reclaimed project: Phase 1 in 2008; Phase 2 TBD	Anticipate completion of construction in late 2010 with commencement of delivery of water immediately thereafter
43	Total time to water delivery	1+ years from Sep 2006	Desalination project: 3 years from Sep 2006. Reclaimed project: 2 years from Sep 2006.	Approximately 4-1/2 years from Sep 2006

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44				
45	PERMITS/REGS			
46	Federal Agencies	US Army Ft Ord; amend existing easement agreement to add second well site	USACOE; USBR; other federal agencies possible as part of NEPA review	U.S. Bureau of Reclamation, U.S. Army Base Realignment and Closure (BRAC), U.S. Bureau of Land Management (BLM)
47	EIS needed?	NEPA review; Army will use combined EIR/EA	NEPA review required but EIS not anticipated (tier off EIR)	Unknown. Will depend on where recharge facilities are sited.
48	Fed lead agency?	US Army	USBR assumed	USBR assumed.
49	Sanctuary permit?	No	none expected to be required	none expected to be required
50	State Agencies	SWRCB, RWQCB, CDFG, DHS	DHS, RWQCB, CCC anticipated	DHS, RWQCB
51	CPUC approval?	N/A	N/A	Not anticipated.
52	EIR lead agency	MPWMD	MCWD	MRWPCA
53	SWRCB/Water Rights	Yes, diversion of Carmel River; Petition for Change	N/A	
54	Regional Agencies	none	MPWMD, MBUAPCD, FORA	FORA, MPWMD, Cal-Am, PG&E
55	Monterey County	MCEH	MCPW, MCPBI, MCEH, MCWRA	MCEH, P&B, MCWRA
56	Local Agencies	Construction and use permits within jurisdictions to receive federal land (Seaside)	Marina, Seaside, Del Rey Oaks, Monterey	Seaside, MCWD
57				
58	SITE CONTROL			
59	Confirmed site?	Current 50-year easement with US Army at present site of full-scale test well.	Desal project: Yes. Reclaimed project: Treatment facilities, yes. ROW will be needed.	No. Still investigating site locations. Likely on former Fort Ord east of Gen. Jim Moore Blvd., possibly in PG&E right-of-way.
60	Alternative sites and projects?	Contiguous and non-contiguous injection well locations and alternative projects evaluated in pending EIR/EA	N/A	None planned at present.

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61				
62	OPERATIONS/OTHER			
63	Technical, Managerial and Financial Capabilities (TMF) to meet DHS standards	Cal-Am and MPWMD are developing a long-term management and operations agreement for ASR.	MRWPCA and MCWD are established and certified water system and reclamation plant operators.	MRWPCA is an established and certified reclamation system operator.
64	Water production interruptions (e.g., power or intake water)	Back-up generators	Desal plant and related pump stations will have back-up generators.	Pump stations will not have back-up generators.
65				
66	PROJECT PARTICIPANTS			
67	Overview	Funded by MPWMD via methods allowed by MPWMD Law; possible public-private partnership or JPA.	Desalination project: Participants TBD. Reclaimed water: possible areas identified in EIR.	Previous agreements spell out MRWPCA recycled water entitlements.
68	MPWMD participation	MPWMD envisioned as sole sponsor in coordination with Cal-Am.	No MPWMD participation required. Possible co-sponsorship through agreement with project proponents.	Close coordination with MPWMD due to proximity of MPWMD's ASR wells to the proposed recharge sites, and due to MPWMD's water management role in the Cal Am service area.
69	Other entities participation	ASR could be coordinated with any other larger water supply project to meet community needs.	None anticipated at this time.	MCWD, Cal-Am, Seaside, and others possible
70				
71	PUBLIC INVOLVEMENT			
72	Outreach programs	Monthly or quarterly updates; oral reports Board meetings.	Anticipated in 2006; budget of \$250,000. Golf courses would be largest customers of Reclaimed Project.	Began outreach to community leaders in 2005 with trips to view similar projects. Outreach to general public to begin in late 2006 or early 2007.
73				
74	INFORMATION SOURCES	MPWMD staff and consultant technical reports and memoranda (Padre Consultants, 2005; Jones & Stokes Associates, 2006)	Regional Urban Recycled Water Distribution Project, July 2003; MCWD Regional Urban Water Augmentation Project EIR, October 2004	Materials submitted by Bob Holden, Water Recycling Projects Coordinator
75				

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76				
77	CAPITAL COST DETAIL			
78	DESALINATION			N/A
79	Intake	N/A	N/A	N/A
80	Pre-treatment	N/A	N/A	N/A
81	Desal Plant	N/A	N/A	N/A
82	Post-treatment	N/A	N/A	N/A
83	Brine discharge	N/A	N/A	N/A
84	Storage	N/A	N/A	N/A
85	Transmission Pipelines	N/A	N/A	N/A
86	Pump stations	N/A	N/A	N/A
87	Energy facilities	N/A	N/A	N/A
88	DESAL SUBTOTAL	N/A	N/A	N/A
89				
90	ASR CONSTRUCTION	\$1,815,000	N/A	N/A
91	RECYCLED WATER COSTS	N/A	Breakdown of costs not provided	\$37.4 mil
92	OTHER WATER SOURCES	N/A	N/A	N/A
93				
94	ADDL CAPITAL COSTS			
95	Pilot Plant	MPWMD plant already operational	N/A	\$500,000
96	Distribution system improvements	N/A	N/A	Included in line 91
97	Right-of-way	\$10,000	Breakdown of costs not provided	Not yet determined
98	Envtl review, permits, etc.	\$117,600	Breakdown of costs not provided	Not yet determined
99	Engineering	\$535,000	Breakdown of costs not provided	\$3,000,000
100	Construction Management	included in engineering	Breakdown of costs not provided	\$50,000
101	Admin/legal	\$310,000	Breakdown of costs not provided	\$200,000
102	Mitigation measures	none anticipated in addition to project description	Breakdown of costs not provided	None anticipated
103	Contingencies	\$468,000	Breakdown of costs not provided	Included in line 91
104	SUBTOTAL	\$1,440,600	Breakdown of costs not provided	\$3,750,000
105				
106	TOTAL CAPITAL COST	\$3,255,600	Desal project: TBD. Reclaimed project: Phase 1 - \$54 mil; Phase 2 - not yet determined	\$41.2 mil
107				
108	ANNUAL O&M COST DETAIL			
109	Energy	\$200,000	Not yet determined	\$281,000
110	Facilities O&M	\$100,000	Not yet determined	\$1,044,000
111	Mitigation O&M	none anticipated	none anticipated	None anticipated
112	TOTAL O&M (\$/yr)	\$300,000	Not yet determined	\$1,325,000
113				
114				
115	SOURCES FOR COSTS	MPWMD staff and consultant technical memoranda, 2005.	Regional Urban Recycled Water Distribution Project, Prepared for MCWD and MRWPCA, July 2003, RBF Consulting, pp 6-3 and 6-9; Marc Lucca, MCWD General Manager, Aug 2006; RMC Water and Environment, Sep 2006.	CDM draft memo dated August 2, 2006

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116				
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	BRAC	Base Realignment and Closure Office (US Army)		
125	BRDEIR	Board Review Draft EIR on MPWMD Water Supply Project (interim draft, Dec 2003)		
126	Cal-Am	California American Water		
127	CalTrans	Cal. Dept. of Transportation		
128	CAW	California American Water		
129	CCC	California Coastal Commission		
130	CDFG	Cal. Dept. Fish & Game		
131	CDM	Camp Dresser & McKee, Inc		
132	CDTS	Cal. Dept. of Toxic Substances		
133	CEC	California Energy Commission		
134	CEQA	California Environmental Quality Act		
135	COP	Certificate of Participation		
136	CPUC	Cal. Public Utilities Commission		
137	CR	Carmel River		
138	CSD	Community Services District		
139	CWP	Coastal Water Project		
140	DBO	design-build-operate		
141	DEIR	Draft EIR		
142	DHS	Cal. Dept. of Health Services		
143	DPR	Cal. Dept. of Parks & Recreation		
144	Duke	Duke Energy Corporation		
145	DWR	Cal. Dept. of Water Resources		
146	EA	Environmental Assessment (federal)		
147	EIR	Environmental Impact Report		
148	EIS	Environmental Impact Statement		
149	FEIR	Final EIR		
150	FORA	Fort Ord Reuse Authority		
151	GRP	Seaside Basin Groundwater Recharge Project		
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	MCWD	Marina Coast Water District		
160	MCWRA	Monterey County Water Resources Agency		
161	MLHD	Moss Landing Harbor District		
162	MoCo	Monterey County		
163	MP	Monterey Peninsula		
164	MPWMD	Monterey Peninsula Water Management District		
165	MRWPCA	Monterey Regional Water Pollution Control Agency		
166	N/A	not applicable		
167	NEPA	National Environmental Policy Act		
168	NMCDP	North Monterey County Desalination Project		
169	NOAA Fish	National Marine Fisheries Service (part of Natl Oceanic and Atmospheric Administration)		
170	NOP	Notice of Preparation		
171	NorCo	North Monterey County		
172	O&M	operations and maintenance		
173	PEA	Proponent's Environmental Assessment		
174	P&B	Monterey County Dept. Planning & Building Inspection		
175	P/SM	Pajaro/Sunny Mesa Community Services District		
176	RBF	RBF Consulting, Inc		
177	ROD	Record of Decision		
178	ROW	right-of-way		
179	RWQCB	Regional Water Quality Control Board		
180	RUWAP	Regional Urban Water Augmentation Project		
181	SLC	State Lands Commission		
182	SRF	State Revolving Fund, a loan administered by SWRCB		
183	SWRCB	State Water Resources Control Board		
184	TBD	to be determined		
185	USACOE	US Army Corps of Engineers		
186	USBLM	US Bureau of Land Management		
187	USBR	US Bureau of Reclamation		
188	USCG	US Coast Guard		
189	ESEPA	US Environmental Protection Agency		
190	USFWS	US Fish & Wildlife Service		