FORT ORD REUSE AUTHORITY

REGULAR MEETING
FORT ORD REUSE AUTHORITY (FORA) WATER/WASTEWATER OVERSIGHT COMMITTEE
Wednesday, April 11, 2018 at 9:30 a.m.
920 2nd Avenue, Suite A, Marina CA 93933 (FORA CIC)

AGENDA

1. CALL TO ORDER/ESTABLISHMENT OF QUORUM

2. PLEDGE OF ALLEGIANCE

3. ACKNOWLEDGEMENTS, ANNOUNCEMENTS AND CORRESPONDENCE

4. PUBLIC COMMENT PERIOD

Members of the public wishing to address the Committee on matters within its jurisdiction, but not on this agenda, may do so for up to 3 minutes and will not receive Committee action. Whenever possible, written correspondence should be submitted to the Committee in advance of the meeting, to provide adequate time for its consideration.

5. APPROVAL OF MEETING MINUTES

a. February 28, 2018 Meeting Minutes — ACTION

6. BUSINESS ITEMS

Business items are for Committee discussion, debate, direction to staff, and/or action. Comments from the public are not to exceed 3 minutes or as otherwise determined by the Chair.

a. 2018-19 Ord Community Draft Budget & CIP — INFORMATION/ACTION

b. Three Party Planning Water Augmentation Study Status — INFORMATION

7. ITEMS FROM MCWD

8. ITEMS FROM MEMBERS

Receive communication from Committee members as it pertains to future agenda items.

9. ADJOURNMENT

NEXT MEETING: April 25, 2018

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FORT ORD REUSE AUTHORITY
WATER/WASTEWATER OVERSIGHT COMMITTEE
MEETING MINUTES

920 2nd Avenue, Suite A, Marina CA 93933 | FORA CIC
9:30 a.m., Wednesday, February 28, 2018

1. CALL TO ORDER

Chair Riedl called the meeting to order at 10:00 a.m.

The following were present:
AR = After Roll Call

Committee Members:
Rick Riedl, City of Seaside
Steve Matarazzo, University of California Santa Cruz (UCSC)
Dino Pick, City of Del Rey Oaks
Mike Lerch, California State University Monterey Bay (CSUMB)

Other Attendees:
Derek Cray, Marina Coast Water District (MCWD)
Mike Wegley, MCWD
Patrick Breen, MCWD
Kelly Cadiente, MCWD
Doug Yount, Shea Homes

FORA Staff:
Steve Endsley
Jonathan Brinkman
Peter Said
Heidi Lizarbe

2. PLEDGE OF ALLEGIANCE led by City Manager Dino Pick

3. ACKNOWLEDGEMENTS, ANNOUNCEMENTS, AND CORRESPONDENCE

4. PUBLIC COMMENT PERIOD

5. APPROVAL OF MEETING MINUTES

a. MOTION: On motion by committee member Lerch moved to approve the February 14, 2018 Water/Wastewater Oversight Committee (WWOC) minutes. Seconded by committee member Matarazzo.
MOTION PASSED: UNANIMOUSLY

6. BUSINESS ITEMS

a. MCWD Master plan status and review of DRAFT 5-year CIP INFORMATION

Mike Wegley of MCWD reviewed the Master Plan and the Draft 5-year CIP, noting the Master Plan has yet to be completed and will be brought back to the Committee once completed. Mr. Wegley responded to questions and comments from the Committee in reference to capacity charges.

MOTION: On motion by committee member Lerch moved to have the Bartle Wells Associates Document included with the minutes for the WWOC. Seconded by committee member Pick.
MOTION PASSED: UNANIMOUSLY

Quorum was lost at 10:31am

b. MCWD Mid-Year INFORMATION

Kelly Cadiente of MCWD provided the Committee with a Mid-Year Budget Report. Ms. Cadiente responded to questions and comments from the Committee.

c. Three Party Planning Water Augmentation Study Status INFORMATION

Peter Said, Project Manager provided background and status on the item. The committee requested further review of the scope of work. Mr. Said responded to comments and questions from the Committee.

7. ITEMS FROM MCWD

None.

8. ITEMS FROM MEMBERS

9. ADJOURNMENT

Chair Riedl adjourned the meeting at 11:20 A.M.

NEXT MEETING: March 14, 2018

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

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Berkeley, CA 94703
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TO: Suresh Prasad
Marina Coast Water District

FROM: Tom Gaffney

DATE: June 14, 2005

SUBJ: Ord Community water and wastewater operating revenues, capacity charges and capital surcharges

MCWD currently finances Ord Community water and wastewater capital expenses on a pay-as-you-go basis funded by capital component surcharges to existing users. Current studies and discussions with FORA staff and consultants, developers, and local planning agency representatives have resulted in a proposed plan to finance all capital expenses with a combination of capacity charges, capital surcharges and operating rates. The capital expansion projects would be funded from a combination of capacity charges and capital surcharges to new development. The share of project costs related to repairs and replacements would be funded from operating revenues.

We proposed that the District wrap its current capital component charges into its operating rates. By doing so, the District is able to maintain its current operating rates without any increases for FY 2005/06. The current level of operating rates would continue and fund operation and maintenance including repairs and replacements. Eventually, rates and charges to all customers would require adjustments to account for cost escalation. Maintaining the current level of rates and charges and applying the full amount to operations gives the District flexibility to fund expenses as well as provide additional security and debt service coverage.

Citigroup has developed a capital financing program that relies on a combination of bond proceeds and pay-as-you-go financing. The District's water and wastewater operating rates would fund O&M and repairs and replacements. Expansion capital projects would be funded from capacity charges and capital surcharges to new development. The Citigroup projections are based on estimated annual growth rates developed by the local planning agencies and compiled by FORA. Citigroup has consistently stated that its analysis is very sensitive to annual growth projections. If growth does not follow these projections, the capacity charges and surcharges would need to be reviewed.

Note that the Citigroup financing projections include revenues from all three sources. Any adjustment to one of the sources would require compensating adjustments from either or both of the other revenue sources.

MEMORANDUM

Marina Coast Water District

DATE: June 14, 2005

TO: Board of Directors

CC: Mike Armstrong, General Manager

FROM: Suresh Prasad, Director of Finance

SUBJECT: Alternatives for Capital Project Revenues Study

Director Nishi requested a copy of the Alternatives for Capital Project Revenues Study on Ord Community prepared by Bartle Wells Associates (BWA). Attached is a copy of the BWA Study The Study was first provided to the MCWD Board on October 13 and then on October 27, Tom Gaffney from BWA presented the Study to the Board.

Since the meetings in October, staff and Bartle Wells Associates continued to test various assumptions and data and made several modifications to the (spreadsheets) tables included in the Study. Ultimately, the BWA information and data was provided to Citigroup and incorporated in the Citigroup Financing Study. The Citigroup study was presented to MCWD Board on May 25, 2005.

I will be happy to answer any additional questions you might have.

Attachments: Alternative for Capital Project Revenues, prepared by Bartle Wells Associates

DRAFT

Marina Coast Water District

Alternatives for Capital Project Revenues

October 2004

Bartle Wells Associates
1889 Alcatraz Ave.
Berkeley CA 94703
Tele: 510-653-3399

Introduction

The Marina Coast Water District (District) provides water and wastewater services within the Marina area and within the Ord Community (the former Fort Ord army base). The following discussion pertains only to the Ord Community service area.

The District does not presently generate capital revenues within the Ord Community service area for expansion projects through traditional means such as capacity charges to new development. Rather, the District uses a "pay-as-you-go, rate-based" model, assessing existing customers a "capital component charge" per each hundred cubic feet of water consumed, and a monthly flat rate on wastewater collection bills.

The current model was developed in response to the unique relationship between the District and the Fort Ord Reuse Authority (FORA). The District owns and operates the water and wastewater collection utilities in the Ord Community through an agreement between the two agencies. The current capital revenue generation model implements FORA's philosophy to encourage new development. The model relies on FORA growth projections and provides the financing needed for the projects necessary to support this growth.

Given the currently estimated compressed timeline of developer projects and the potential effect to Ord Community ratepayers, the District wants to review and assess its present situation and identify and evaluate alternative expansion capital generation strategies. This review will be presented to the District and FORA Boards of Directors for consideration and possible action.

The method for generating capital revenues must be:

- Appropriate for the District and FORA
- Able to generate sufficient capital for expansion projects
- Easy for District staff to administer; and
- Understandable to the community

The project cost estimates and cost allocations used to develop the capacity charge alternatives in this report are still under review and development by the District. The District's capital improvement programs will be completed within the next several months. In the meantime, preliminary project cost estimates and allocations among those benefiting are used in this report to demonstrate the impacts of expansion capital revenue alternatives. Once an alternative is selected the more refined capital costs and allocations will be used to establish the actual capacity charge.

Capacity Charges

Typically, capacity charges are levied to new customers to recover the capital costs for facilities needed to serve growth. Capacity charges recover costs for future projects that must be constructed to expand facilities, as well as the costs of capacity in existing facilities that is available to benefit and serve new customers. The charges must be reasonable and non-arbitrary, and based on facility capital costs, user demand, flows and loads, and system capacity. A variety of methods may be used to determine the appropriate capacity charge.

California Government Code Section 66013 deals with water and sewer capacity charges. The Code states that such fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fees or charges are imposed.

Capital Facilities

Establishment of an equitable capacity charge requires the District to identify the capital facilities required to serve a new user. Often new facilities also include capacity that will serve existing users. In this case the costs of such facilities would be shared among current as well as future users. Allocation of facilities to accommodate future demand should consider the following:

- The share and value of existing facilities available for use by future growth
- Cost of planned capital improvements providing additional capacity for future growth

- Special facilities that benefit only one or a few developers and don't provide general benefit throughout the service area.

In an effort to maintain, improve, and expand facilities in the Ord Community, the District is preparing a capital improvement program (CIP) for water and wastewater projects. The general categories of CIP projects are discussed below:

District-Wide General Benefit Projects – These projects serve both the Marina service area as well as the Ord Community service area. An example includes the corporation yard project. All current users as well as future users in both Marina and Ord Community would share costs for projects in this category.

Ord Community General Benefit Projects – Projects in this category provide a benefit to current and future users in the Ord Community. An example of a project in this group would be a well in the Ord Community service area. Project costs would be shared among current as well as future Ord Community area users.

Ord Community Limited Benefit Projects – Projects in this category provide a benefit only to future users in the Ord Community. Such projects also benefit all future users equally. An example of a project in this group would be a project adding capacity needed by future development, but not required by current users. Project costs would be shared only among all future Ord Community area users.

Ord Community Special Benefit Projects – These projects serve only a limited and identifiable number of development projects. An example would be the Del Rey Oaks water transmission line. Project costs would normally be funded by the development being served by the project.

In-Tract Projects – Includes infrastructure that is required to meet a development's requirements within the development service area including facilities such as sewer lines and manholes and water distribution lines and meters. These costs will be financed totally by developers.

Refurbishment and Repair Projects – This category of project is not included in the capacity charge alternatives. Such projects are funded by current users through rates on a pay-as-you-go basis. Refurbishment and replacement projects are operating costs of the District. If a replacement project also includes capacity for expansion required for development needs, then a proportionate share of project costs may be included as an integral part of capacity charge costs.

Reimbursement Agreements

A reimbursement arrangement is a useful method for a public agency to allow a developer to finance a special benefit or other project that the agency can not or should not finance. Often a public agency has a capital improvement program that is beyond the capabilities of current customers to finance. In addition, there may be scheduling reasons that effect the ability of current users to finance project expansions.

Reimbursement agreements are used to refund a portion of project costs funded by a developer or developers that will also serve other future users. The agency and developers agree to special capacity charges from future customers within a project's service area. The reimbursement agreement may require a developer to finance the entire project cost. Reimbursements would be collected for the share of project costs that serve other users.

Reimbursement agreement terms and conditions – A reimbursement agreement should establish a maximum term. A limit of ten years is a sufficient term to allow reimbursements. Reimbursements extending any longer would be fully discounted. Reimbursements should be funded from a surcharge applied only to new development served by the project. The surcharge would be collected from future developers at the time of development certification and not from individual homes or users. Or, the surcharge could be collected from future benefiting customers as they connect in the form of a capacity charge surcharge or as a surcharge to water and wastewater rates. Reimbursements back to the initial developer would not include any interest component. If possible the initial developer should establish an agreement with other nearby developers to share the initial project costs. This would

eliminate or greatly reduce the need for reimbursement agreements. After the agreement term (ten years) the agreement would expire and reimbursements would no longer be collected.

Capital Revenue Generation Alternatives

We have identified several alternatives in addition to the present pay-as-you-go method. These alternatives show the impact of capital improvements on current customers and future customers.

1. **Baseline:** This alternative demonstrates the impact to water and wastewater rates for current customers using the current pay-as-you-go, rate based financing method. The District uses a rate model to determine the amount of the capital component surcharge on water rates and sewer charges to fund the current year's capital projects. The capital rate component was developed as an alternative to the levy of a capacity charge to new customers. The capital charge portion of water and wastewater rates may adjust annually as needed and is generally set up to fund a pay-as-you-go capital program. Expensive projects may be funded over a longer-term period or funded with debt.

   In addition to the capital rate component that applies to all current users, new customers are subject to an additional one-time charge. An equalization charge is levied to new users to recover the past revenue that would have been generated from the capital rate component. Each year the equalization charge is adjusted to include the prior year's capital component amount. This insures that new users will pay the same amount of capital charges as existing users

2. **Uniform Capacity Charge:** This capital revenue alternative creates a uniform capacity charge to fund all projects allocated to future development over the entire Ord Community service area. Revenues from the charge would provide funding for general, limited, and special benefit facilities.

3. **General Benefit Capacity Charge:** This alternative creates a capacity charge for funding projects that provide capacity and/or benefit for all new development. In developing this charge, projects also benefit current users so costs are shared between future and current users. Such a charge would be levied over the entire Ord Community service area. The general benefit capacity charge would not include funding for special benefit projects. Special benefit projects would be funded by the developers.

4. **Uniform Capacity Charge and Reimbursements:** This alternative is essentially the same as a previous scenario, but also includes a reimbursement provision to the developer or development group for capital funding provided to fund certain limited benefit and special benefit projects. The plan would provide for a developer or development group to fund a share or all of limited and special benefit project costs, which the District identifies. In these cases the projects are required prior to any offsetting development for funding. These projects would be difficult for the District to fund without outside capital. A reimbursement procedure would be established to repay the initial developer/development group. Reimbursement would come from future developers or from future benefiting customers depending on the terms of the reimbursement arrangement.

The matrix below summarizes the source of income for the various capacity charge alternatives.

Alternative	**Type of CIP Project**				
	R&R	General Benefit Projects	Limited Benefit Projects	Special Benefit Projects	In-Tract Projects
Baseline	rates	rates	rates	rates	developer
Uniform Capacity Charge	rates	Uniform Capacity Charge	Uniform Capacity Charge	Uniform Capacity Charge	developer
General Benefit Capacity Charge	rates	General Benefit Capacity Charge	General Benefit Capacity Charge	developer	developer
Uniform Capacity Charge – with Reimbursement	rates	Uniform Capacity Charge	Uniform Capacity Charge Or, developer with Reimburse-ment	developer with reimbursements	developer

Calculation of Alternatives

The alternatives are based on new development paying for their share of project costs that provide system capacity and service. These capacity charges are calculated as follows: Total project costs are determined, costs are allocated among those receiving benefit and a unit capacity charge is determined.

Table 1 shows the current and design capacities of the District's Ord Community water and wastewater facilities. These capacities are used to allocate facility costs between current and future users.

Table 2 lists the value of existing facilities within the Ord Community service area. System facilities constructed by the Department of Defense (DOD) are net of depreciation. District capital improvements are at original cost. The DOD developed valuations for capacity rights and real property.

Table 3 shows the share of water facilities costs assigned to future development based on estimated capacity uses of the system. Certain facilities (district-wide general benefit) such as the corporation yard will serve the entire District service area including both Marina and Ord Community. These costs would be shared proportionally among current and future users in both service areas. Certain Ord Community general benefit facilities serve current and future users in the service area. Costs for these facilities are allocated between current and future Ord Community users. Other Ord Community facilities are required to serve an identifiable development project or area (special benefit projects). There are two alternative for allocating special benefit project costs. All costs are allocated either uniformly among all new development or general costs are allocated to all new development and special benefit costs are allocated only to those developments served.

Table 4 shows the results of the cost allocation plan. At present, the only district-wide general benefit project is the corporation yard. Ord Community general benefit projects include a wide range of new projects and a proportionate share of expansion, replacement, and upgrade facilities. Also many of the new projects are sized for expansion and serve identifiable areas. Virtually every area of the Ord Community area is served by certain special benefit projects.

Table 5 determines the amount of the capacity charge alternatives based on the proceeding discussion. The estimated applicable project costs are divided by the capacity receiving benefit. A capacity charge of over $7,300 per acre-foot is required to fund general benefit

projects. Assuming special benefits are approximately equal for new users in the Ord Community service area results in an average special benefit of an additional $2,370 per acre-foot. If certain development programs require more special benefit projects, then this charge could be much higher for those developments.

The wastewater alternatives are determined in exactly the same manner as that for water. Table 6 shows the share of wastewater facilities costs assigned to future development based on capacity uses of the system. The corporation yard is a district-wide general benefit project and will serve the entire District service area including both Marina and the Ord Community. Ord Community general benefit projects serve current and future users in the service area. Costs for these facilities are allocated between current and future Ord Community users. Other special benefit projects are required to serve an identifiable development project or area. Special benefit project costs may be allocated uniformly among all future development or directly allocated only to those developments served.

Table 7 shows the results of the cost allocation plan. The only district-wide general benefit project is the corporation yard. Ord Community general benefit projects include a wide range of new projects and a proportionate share of expansion replacement and upgrade facilities. Also many of the new projects are sized for expansion and serve identifiable areas. Virtually every area of the Ord Community area is served by certain special benefit projects.

Table 8 determines the amount of the wastewater capacity charge alternatives based on the proceeding discussion. The applicable project costs are divided by the capacity benefiting. A wastewater capacity charge (for 250 gallons per day of capacity) of about $1,260 is required to fund general benefit projects. Assuming special benefit are approximately equal for new users in the Ord service area results in an average special benefit of an additional $170 for 250 gpd of capacity.

Current Financing Method

For the Ord Community service area, the District does not currently employ a capacity charge for financing system expansions. In accordance with the agreement with FORA, the

District finances future expansion projects as well as current refurbishment and repairs from revenues collected from the current and future rate base capital charge component. New connections to the system pay an equalization charge to "catch-up" with current users that have already paid into the system's improvements.

The District employs rate models to determine the amount of the capital charge component to water and wastewater users to fund annual project capital costs. Capital charges are determined annually based on the amount of projects required. This method requires dual approvals from both the FORA and District boards and also requires a public hearing to set rates, which frequently require adjustment because of varying annual capital requirements.

Table 9 shows the present water rate model and Table 10 shows the present wastewater rate model including all of the CIP costs listed in the earlier tables. The model shows the assumptions used in developing the capital charge component.

Summary of Capital Revenue Alternatives

Table 11 summarizes the water capital revenue alternatives for the Baseline, General Benefit, Uniform, and Uniform with Reimbursement capacity charge s. Table 12 provides the same summary for wastewater capacity charges.

Table 1
Marina Coast Water District - Ord Community
Flows and Capacity

Water

Ord Community		
Current use	2,200	acre-feet
Current design flow	6,800	acre-feet
Future design flow	9,000	acre-feet

Wastewater

Ord Community		
Current use	1.40	mgd
Current design capacity	4.30	mgd
Future design flow	5.70	mgd

Source: District information and records **Wastewater NOT verified**

Table 2
Marina Coast Water District - Ord Community
Existing Ord Community Facilities Valuation

Water		
System facilities - DOD	$1,600,000	(1)
District capital improvements	1,000,000	
Water rights - DOD	57,200,000	
Real property, right of way, easements - DOD	14,100,000	
Total valuation	73,900,000	
Wastewater		
System facilities - DOD	1,278,000	(1)
District capital improvements	1,000,000	
Wastewater capacity - DOD (2.2 mgd)	15,300,000	
Real property, right of way, easements - DOD	10,800,000	
Total valuation	28,378,000	

Source: District and DOD records
1 - After depreciation

Table 3

Marina Coast Water District - Ord Community

Future Development's Share of Water Project Costs

Ord Community projects

General Benefit Projects (projects benefit current users and future development)

Future Ord Community design water capacity	9,000	acre-feet
Ord Community future development capacity	6,800	acre-feet
Development's share of Ord Community general benefit projects	75.6%	

Limited Benefit Projects (projects benefit only future development)

Fort Ord future development capacity	6,800	acre-feet
Development's share of Fort Ord limited benefit projects	100.0%	

Special Benefit Projects (projects benefit only certain development areas)

Special benefit capacity	}	Varies, depending on development and project configuration.
Special benefit share	}	

Source: Prepared by Bartle Wells Associates from District information.

Table 4
Marina Coast Water District - Ord Community
5-Year Water Facilities Capital Improvement Program

		Project Share			Future Development Project Cost Share		
		General benefit	Limited benefit	Special benefit	General benefit	Limited benefit	Special benefit
		Shared with current users	Shared among all future development	Shared among some future development	75.6%		
Ord Community water projects							
FY 2003/2004							
Corp Yard Phase 1 (Master Plan)	$845,000	100.0%			$845,000	$0	$0
Deep Monitoring Well No. 2	300,000	100.0%			300,000	0	0
Construct Well 33 (Design)	75,000	100.0%			75,000	0	0
Construct Well 33	1,000,000	100.0%			1,000,000	0	0
Rehab Reservoir B & F	50,000	100.0%			50,000	0	0
Replace D & E Reservoir (Design)	171,000	100.0%			171,000	0	0
Replace PRV's and Valves (Local Share)	815,000	100.0%			815,000	0	0
2nd Avenue Pipeline (12" from 12th to 8th)	378,000	100.0%			378,000	0	0
2nd Avenue Pipeline (12" from 8th to Lighlighter)	663,000	100.0%			663,000	0	0
Corp Yard Phase 1 (Master Plan)	845,000	100.0%			845,000	0	0
Demolition of Ft. Ord WWTP	25,000	100.0%			25,000	0	0
Disinfection Station - Equipment Upgrade	11,000	100.0%			11,000	0	0
JM Boulevard Pipeline Project (Design)	10,000	20.0%		80.0%	2,000	0	8,000
FY 2003/2004 totals	5,188,000				5,180,000	0	8,000
FY 2004/05							
Well 33 (design & construct)	1,100,000	20.0%	80.0%		220,000	880,000	0
Replace D & E Reservoir (Design)	488,000	20.0%	80.0%		98,000	390,000	0
Replace Reservoir C2 (Design)	410,000	20.0%	80.0%		82,000	328,000	0
Well Field Booster (Design & Construct)	424,000	20.0%	80.0%		85,000	339,000	0
Corp Yard Phase 1 (Demo/Abatement)	360,000	100.0%			360,000	0	0
Corp Yard Phase 1 (Design/Fees)	480,000	100.0%			480,000	0	0
Disinfection Station - Equipment Upgrade	15,000		100.0%		0	15,000	0
18" UCMBEST MMP	10,000		100.0%		0	10,000	0
Security Fence at FT. Ord WWTP	40,000		100.0%		0	40,000	0
FY 2004/05 totals	3,327,000				1,325,000	2,002,000	0
FY 2005/06							0
Replace D & E Reservoir (Construction)	4,880,000	20.0%		80.0%	976,000	0	3,904,000
Well Field Reservoir and Booster Station(Construc	2,512,000	20.0%		80.0%	502,000	0	2,010,000
Replace Reservoir C2 (Construct)	4,100,000	20.0%		80.0%	820,000	0	3,280,000
Corp Yard Phase I (Construction)	2,700,000	100.0%			2,700,000	0	0
Demolition Intermediate F & Airport Reservoirs	290,000		100.0%		0	290,000	0
Calif. Street Booster	160,000		100.0%		0	160,000	0
Fire Flow Improvements	325,000		100.0%		0	325,000	0
Patton School Intertie	124,000		100.0%		0	124,000	0
JM Boulevard Pipeline (Construction)	504,000	20.0%		80.0%	101,000	0	403,000
FY 2005/06 totals	15,595,000				5,099,000	899,000	9,597,000
FY 2006/07					0	0	0
Rehabilitate Well 31	785,000	20.0%	80.0%		157,000	628,000	0
Master Plan Update	100,000	20.0%	80.0%		20,000	80,000	0
Zone C Transmission	3,425,000	20.0%	80.0%		685,000	2,740,000	0
Demolish Bayview Reservoir	100,000	20.0%	80.0%		20,000	80,000	0
Zone C Booster from C2 to C1	272,000	20.0%	80.0%		54,000	218,000	0
Del Rey Oaks Transmission Line	1,969,000			100.0%	0	0	1,969,000
Intergarrison Rd Pipe Replacement	249,000			100.0%	0	0	249,000
Corp Yard Phase 2 (Design/Fees)	795,000	100.0%			795,000	0	0
FY 2006/07 totals	7,695,000				1,731,000	3,746,000	2,218,000
FY 2007/08					0	0	0
Rehabilitate Well 29	772,000	20.0%	80.0%		154,000	618,000	0
Transmission Line upgrades	5,093,000	20.0%		80.0%	1,019,000	0	4,074,000
Imjim Stage II (2,800 lf of 16")	346,000	25.0%	75.0%		87,000	260,000	0
8th Street Upgrades	772,000		100.0%		0	772,000	0
Blanco/Imjin Connector	473,000		100.0%		0	473,000	0
Parker Flats Transmission Line	217,000			100.0%	0	0	217,000
Corp Yard Phase 2 (Demo/Abatement)	395,000	100.0%			395,000	0	0
Regional water augmentation (additional)	10,000,000		100.0%		0	10,000,000	0
FY 2007/08 totals	18,068,000				1,655,000	12,123,000	4,291,000
FY 2008/09							
Golf Boulevard Transmission Line	647,000	50.0%	50.0%		324,000	324,000	0
Replace C Reservoir	7,810,000	20.0%	80.0%		1,562,000	6,248,000	0
Replace B Reservoir	1,760,000	20.0%	80.0%		352,000	1,408,000	0
Rehabilitate D Booster	300,000	20.0%	80.0%		60,000	240,000	0
Fire Flow Improvements	765,000	20.0%	80.0%		153,000	612,000	0
Additional D/E Reservoir (Design & Construct)	3,500,000	20.0%	80.0%		700,000	2,800,000	0
Gigling Transmission from D Booster to JM Blvd	66,000	50.0%	50.0%		33,000	33,000	0
Corp Yard Phase 2 (Construction)	4,600,000	100.0%			4,600,000	0	0
Rehabilitate D Booster Pump	300,000	20.0%	80.0%		60,000	240,000	0
FY 2008/09 totals	19,747,000				7,844,000	11,905,000	0
Totals	69,620,000				22,834,000	30,675,000	16,114,000

Source: Marina Coast WD (ENR-CCI, 20-City ave. = 6,825)

Table 5
Marina Coast Water District - Ord Community
Water Capacity Charge Determination

	Valuation	Acre-feet Benefitting	Value per Acre-foot
Ord Community General Benefit Capacity Charge			
Basic capacity charge for infill development			
Existing water system facilities	$1,600,000	9,000	$180
Existing District capital improvements	1,000,000	9,000	110
Ord Community general benefit facilities	22,834,000	9,000	2,540
Ord Community limited benefit facilities	30,675,000	6,800	4,510
Ord Community General Benefit Capacity Charge per acre-foot			$7,340
Ord Community Uniform Capacity Charge			
All costs assigned to future development are funded equally by development			
Existing water system facilities	$1,600,000	9,000	$180
Existing District capital improvements	1,000,000	9,000	110
Ord Community general benefit facilities	22,834,000	9,000	2,540
Ord Community limited benefit facilities	30,675,000	6,800	4,510
Ord Community special benefit facilities	16,114,000	6,800	2,370
Ord Community Uniform Capacity Charge per acre-foot			$9,710
Ord Community Uniform Capacity Charge with Reimbursement			
Special benefit costs are not shared uniformily and are subject to reimbursement arrangements			
Existing water system facilities	$1,600,000	9,000	$180
Existing District capital improvements	1,000,000	9,000	110
Ord Community general benefit facilities	22,834,000	9,000	2,540
Ord Community limited benefit facilities	30,675,000	6,800	4,510
Ord Comm. Uniform Capacity Charge w/ Reimbursement			$7,340
Average additional reimbursement (amount would vary for each development)	16,114,000	6,800	$2,370

Source: Prepared by Bartle Wells Associates from District information.

Table 6

Marina Coast Water District - Ord Community

Future Development's Share of Wastewater Project Costs

Ord Community projects

General Benefit Projects (projects benefit current users and future development)		
Total Ord Community design wastewater capacity	5.7	mgd
Ord Community future development capacity	4.3	mgd
Development's share of Ord Community general benefit projects	75.4%	
Limited Benefit Projects (projects benefit only future development)		
Ord Community future development capacity	4.3	mgd
Development's share of Fort Ord limited benefit projects	100.0%	
Special Benefit Projects (projects benefit only certain development areas)		
Special benefit capacity	}	Varies, depending on development and project configuration.
Special benefit share	}	

Source: Prepared by Bartle Wells Associates from District information.

Table 7
Marina Coast Water District - Ord Community
5-Year Wastewater Capital Improvement Program

		Project Share			Future Development Project Cost Share		
		General benefit	Limited benefit	Special benefit	General benefit	Limited benefit	Special benefit
		Shared with current users	Shared among all future development	Shared among some future development	75.4%		
Ord Community wastewater projects							
FY 2003/2004							
Lift Stations and Abrams Road Improvs.	1,008,000	100.0%			$1,008,000	$0	$0
2nd Avenue Upgrades	112,000	100.0%			112,000	0	0
Update Wastewater Master Plan	50,000	100.0%			50,000	0	0
Corp Yard Phase 1 (Master Plan)	845,000	100.0%			845,000	0	0
FY 2003/2004 totals	2,015,000				2,015,000	0	0
FY 2004/2005							
Lift Stations and Abrams Road (construct)	2,300,000	20.0%	80.0%		460,000	1,840,000	0
Corp Yard Phase 1 (Demo/Abatement)	360,000	100.0%			360,000	0	0
Corp Yard Phase 1 (Design/Fees)	480,000	100.0%			480,000	0	0
Main Garrison Sewer Pipe Project (Design)	90,000	33.3%	66.7%		30,000	60,000	0
Main Garrison Sewer Meter Rehab	100,000	100.0%			100,000	0	0
FY 2004/2005 totals	3,330,000				1,430,000	1,900,000	0
FY 2005/2006							
Replace Trunck Sewers and Force Mains	239,000	50.0%	50.0%		120,000	120,000	0
Corp Yard Phase 1 (Construction)	2,700,000	100.0%			2,700,000	0	0
Additional Lift Station Rehab	380,000	20.0%	80.0%		76,000	304,000	0
Misc Lift Station Upgrades	36,000	20.0%	80.0%		7,000	29,000	0
Main Garrison Sewer Pipe Project	802,000	33.3%	66.7%		267,000	535,000	0
FY 2005/2006 totals	4,157,000				3,170,000	988,000	0
FY 2006/2007							
8th Street Upgrades	239,000	100.0%			239,000	0	0
Del Rey Oaks, Transmission to Seaside SD	1,962,000			100.0%	0	0	1,962,000
Corp Yard Phase 2 (Design/Fees)	795,000	100.0%			795,000	0	0
Misc Pump Station Upgrades	36,000	100.0%			36,000	0	0
FY 2006/2007 totals	3,032,000				1,070,000	0	1,962,000
FY 2007/2008							
Replace Truck Sewers and Force Mains	239,000	50.0%	50.0%		120,000	120,000	0
Imjin Stage II	206,000	50.0%		50.0%	103,000	0	103,000
Corp Yard Phase 2 (Demo/Abatement)	395,000	100.0%			395,000	0	0
MRWPCA Buy-In	8,292,000	100.0%			8,292,000	0	0
Parker Flats Transmission Line	10,000			100.0%	0	0	10,000
Eliminate Neeson LS, Install gravity line	678,000	100.0%			678,000	0	0
FY 2007/2008 totals	9,820,000				9,588,000	120,000	113,000
FY 2008/2009							
Corp Yard Phase 2 (Construction)	4,600,000	100.0%			4,600,000	0	0
Marina Hotel/Golf Course/Airport	899,000			100.0%	0	0	899,000
Replace Truck Sewers and Force Mains	239,000	50.0%	50.0%		120,000	120,000	0
Additional Lift Station Rehab	380,000	50.0%	50.0%		190,000	190,000	0
FY 2008/2009 totals	6,118,000				4,910,000	310,000	899,000
Totals	28,472,000				22,183,000	3,318,000	2,974,000

Source: Marina Coast WD (ENR-CCI, 20-City ave. = 6,825)

Table 8
Marina Coast Water District - Ord Community
Wastewater Capacity Charge Determination

	Valuation	Gallons/day Benefitting	Value per gallon/day	Value for 250 gpd
Ord Community General Benefit Capacity Charge Basic connection charge for infill development				
Existing wastewater system facilities	$1,278,000	5,700,000	$0.22	$60
Existing District capital improvements	1,000,000	5,700,000	0.18	40
Ord Community general benefit facilities	22,183,000	5,700,000	3.89	970
Ord Community limited benefit facilities	3,318,000	4,300,000	0.77	190
Ord Community General Benefit Capacity Charge			$5.06	$1,260
Ord Community Uniform Capacity Charge All costs assigned to future development are funded equally by development				
Existing water system facilities	$1,278,000	5,700,000	$0.22	$60
Existing District capital improvements	1,000,000	5,700,000	0.18	40
Ord Community general benefit facilities	22,183,000	5,700,000	3.89	970
Ord Community limited benefit facilities	3,318,000	4,300,000	0.77	190
Ord Community special benefit facilities	2,974,000	4,300,000	0.69	170
Ord Community Uniform Capacity Charge			$5.75	$1,440
Ord Community Uniform Capacity Charge with Reimbursement Special benefit costs are not shared uniformly and are subject to reimbursement arrangements				
Existing water system facilities	$1,278,000	5,700,000	$0.22	$60
Existing District capital improvements	1,000,000	5,700,000	0.18	40
Ord Community general benefit facilities	22,183,000	5,700,000	3.89	970
Ord Community limited benefit facilities	3,318,000	4,300,000	0.77	190
Ord Comm. Uniform Capacity Charge w/ Reimbursement			$5.06	$1,260
Average additional reimbursement (amount would vary for each development)	2,974,000	4,300,000	$0.69	$170

Source: Prepared by Bartle Wells Associates from District information.

TABLE 9

Marina Coast Water District - Ord Community

WATER RATE MODEL AND FINANCIAL PLAN (FORA PROJECTIONS)

ORD COMMUNITY WATER RATE MODEL

Inputs		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/010	2010/11
Beginning Year	2,004								
Input O&M Expenses (click right)									
Payments to FORA (click right)									
Fort Ord CIP - pay-as-you-go		0	0	0	0	0	0	0	0
Fort Ord CIP - bond financed		2,671,190	3,327,000	15,595,000	7,695,000	18,968,000	19,747,000	1,000,000	1,000,000
Revenue adjustment		245367	154,230	0	0	0			
Escalation factor @	3%	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23
Interest earnings rate	3%								
Bond interest earning rate	6%								
Bond term (years)	20								
Quarter bonds are issued	1								
Flat rate EDUs (2003/04)	2,716	2,716	1,466	1,466	1,466	1,466	1,466	1,466	1,466
Metered EDUs (2003/04)	2,700	2,720	2,783	3,693	4,876	6,145	6,836	7,406	7,641
Total customers	5,416	5,436	4,249	5,159	6,342	7,612	8,302	8,872	9,107
New flat rate EDUs per year			(1,250)						
New metered EDUs per year		20	63	910	1,183	1,270	690	570	235
Metered water usage (Enter Acre Ft)	850	370,260	378,836	502,710	663,746	836,624	930,551	1,008,142	1,040,131
Portion of usage billed in tier 1	50%								
Portion of usage billed in tier 2	30%								
Portion of usage billed in tier 3	20%								
Unmetered water usage (Enter Acre Ft.)	1,395	607,662	327,994	327,994	327,994	327,994	327,994	327,994	327,994
Charges									
Volume charge - base rate	$12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Increase applied to base rate		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Volume charge - 1st tier	$1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Increase applied to tier 1		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Volume charge - 2nd tier	$1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Increase applied to tier 2		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Volume charge - 3rd tier	$0.00	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38
Increase applied to tier 3		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Flate rate charge	$47.50	$47.50	$67.72	$87.42	$66.34	$80.38	$107.00	$102.14	$109.04
Capital component charge	$0.70	0.70	1.55	1.51	1.48	2.25	3.71	3.44	3.82
Equalization charge	$210.00	210	336	594	842	1,073	1,417	1,978	2,496

Available Funds									
Beginning Year Balance	$ -	$ -	$ 354,000	$ (75,000)	$ (262,000)	$ (114,000)	$ 573,000	$ 1,749,000	$ 3,025,000
End Balance		$ 354,000	$ (75,000)	$ (262,000)	$ (114,000)	$ 573,000	$ 1,749,000	$ 3,025,000	$ 4,416,000
Debt service coverage		2.58	0.15	0.90	1.06	1.17	1.21	1.22	1.24

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/010	2010/11
Beginning balance*	$ -	$ 354,000	$ (75,000)	$ (262,000)	$ (114,000)	$ 573,000	$ 1,749,000	$ 3,025,000
Revenues								
Flat rate accounts (not incl cap charge)	$ 1,132,000	$ 778,000	$ 775,000	$ 763,000	$ 924,000	$ 1,230,000	$ 1,174,000	$ 1,253,000
Metered rate	408,000	417,000	554,000	731,000	922,000	1,025,000	1,111,000	1,146,000
Metered volume	373,000	562,000	746,000	984,000	1,241,000	1,380,000	1,495,000	1,543,000
Capital charge components	676,000	900,910	1,266,000	1,455,000	2,601,000	4,638,000	4,571,000	5,196,000
Equalization charge	4,000	(398,910)	541,000	996,000	1,362,000	977,000	1,128,000	587,000
Other fees and charges	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Interest earnings	-	9,000	-	-	-	14,000	44,000	76,000
Bond proceeds	2,671,190	3,327,000	15,595,000	7,695,000	18,068,000	19,747,000	1,000,000	1,000,000
Total	$5,289,000	$5,620,000	$19,502,000	$12,649,000	$25,143,000	$29,036,000	$10,548,000	$10,826,000
Expenses								
Operating Expenses								
Administration	$ 453,000	$ 483,406	$ 498,000	$ 513,000	$ 528,000	$ 544,000	$ 560,000	$ 577,000
Operation and maintenance	991,000	905,547	933,000	961,000	990,000	1,020,000	1,051,000	1,083,000
Laboratory	106,000	135,757	140,000	144,000	148,000	152,000	157,000	162,000
Conservation	63,000	137,445	142,000	146,000	150,000	155,000	160,000	165,000
Engineering	129,000	240,267	247,000	254,000	262,000	270,000	278,000	286,000
Capital improvement projects	2,671,190	3,327,000	15,595,000	7,695,000	18,068,000	19,747,000	1,000,000	1,000,000
Debt service	224,000	502,000	1,807,000	2,451,000	3,963,000	5,615,000	5,699,000	5,783,000
Payment to FORA								
Reim. to land use agency (5% of OR)	124,000	132,896	137,000	141,000	145,000	149,000	153,000	158,000
FORA Admin/Liaison fees	25,000	25,000	26,000	27,000	28,000	29,000	30,000	31,000
Reim. to FORA (5% of OR)	124,000	132,896	137,000	141,000	145,000	149,000	153,000	158,000
Mmbrshp on FORA BOD (1% of OR)	25,000	26,579	27,000	28,000	29,000	30,000	31,000	32,000
Total	$ 4,935,000	$ 6,049,000	$ 19,689,000	$ 12,501,000	$ 24,456,000	$ 27,860,000	$ 9,272,000	$ 9,435,000
Net revenue	$ 354,000	$ (429,000)	$ (187,000)	$ 148,000	$ 687,000	$ 1,176,000	$ 1,276,000	$ 1,391,000
Ending balance	$ 354,000	$ (75,000)	$ (262,000)	$ (114,000)	$ 573,000	$ 1,749,000	$ 3,025,000	$ 4,416,000
Capital Component Excess	$ 452,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Operating Revenue Excess	$ (98,000)	$ (429,000)	$ (187,000)	$ 148,000	$ 687,000	$ 1,176,000	$ 1,276,000	$ 1,391,000

*Estimated share of District reserves
Source: Prepared by Bartle Wells Associates

TABLE 10
Marina Coast Water District - Ord Community
WASTEWATER RATE MODEL AND FINANCIAL PLAN (FORA PROJECTIONS)
ORD COMMUNITY WASTEWATER RATE MODEL

Inputs		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/010	2010/11
Beginning Year	1905								
Input Expenses (click right)									
Interest earnings rate	2.00%								
Bond interest earning rate	6.00%								
Bond term (years)	20								
EDUs (2003/04)	4,723	4,723	4,786	5,696	6,879	8,149	8,839	9,409	9,644
New EDUs per year	0	20	63	910	1,183	1,270	690	570	235
Escalation factor @	3%	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23
Annual revenue adjustment		102000	87,000						
Fort Ord CIP - bond financed		1,013,394	3,330,000	4,157,000	3,032,000	9,820,000	6,118,000	1,000,000	1,000,000
Debt Asuumptions									
Quarter bonds are issued	1								
Issuance factor	1.00								
Fort Ord CIP - pay-as-you-go									
Flat rate increase		0%	17%	3%	3%	16%	1%	0%	0%

Charges (% increase click right)									
Monthly flat rate billing-$/EDU	11.00	$ 11.00	$ 12.87	$ 13.26	$ 13.65	$ 15.84	$ 16.00	$ 16.00	$ 16.00
Monthly capital charge-$/EDU	6.00	6.00	8.39	7.10	6.92	13.20	16.62	17.78	20.07
		6.00	6.41	7.10	6.92	13.20	16.62	17.78	20.07
Total monthly charge - $/EDU		17.00	21.26	20.35	20.57	29.04	32.62	33.78	36.07
Annual equalization charge-$/EDU	109.00	$ 109.00	$ 181.00	$ 281.70	$ 396.84	$ 449.85	$ 508.28	$ 831.72	$ 1,045.13

Available Funds									
Beginning balance	0								
Less incumbrances	0								
Total available funds	0	$ -	$ 204,398	$ 265,574	$ 463,574	$ 864,574	$ 1,672,574	$ 2,620,574	$ 3,672,574
Ending balance		$ 204,398	$ 265,574	$ 463,574	$ 864,574	$ 1,672,574	$ 2,620,574	$ 3,672,574	$ 4,765,574
Debt service coverage		3.32	1.16	1.27	1.40	1.43	1.40	1.42	1.43

	Budget 2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/010	2010/11
Revenues								
Flat rate revenue	$ 623,000	$ 749,000	$ 906,000	$ 1,127,000	$ 1,549,000	$ 1,697,000	$ 1,806,000	$ 1,851,000
Capital charge	238,000	368,000	485,000	571,000	1,291,000	1,975,000	2,008,000	2,323,000
Equalization charge	2,000	11,000	256,000	434,000	571,000	420,000	474,000	246,000
Bond proceeds	1,013,394	3,330,000	4,157,000	3,032,000	9,820,000	6,118,000	1,000,000	1,000,000
Other	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Interest earnings	-	4,000	5,000	9,000	17,000	33,000	52,000	73,000
Total	$ 1,901,394	$ 4,487,000	$ 5,834,000	$ 5,198,000	$ 13,273,000	$ 10,268,000	$ 5,365,000	$ 5,518,000

Expenses

Administration	$ 183,500	$ 184,913	$ 190,000	$ 196,000	$ 202,000	$ 208,000	$ 214,000	$ 220,000	#DIV/0!	#DIV/0!
Operation and maintenance	293,385	337,798	348,000	358,000	369,000	380,000	391,000	403,000		
Lab	-	-	-	-	-	-	-	-		
Construction	-	-	-	-	-	-	-	-		
Engineering	74,617	138,263	142,000	146,000	150,000	155,000	160,000	165,000		
Payback of existing internal loans	-	-	-	-	-	-	-	-		
CIP - funded by bonds	1,013,394	3,330,000	4,157,000	3,032,000	9,820,000	6,118,000	1,000,000	1,000,000		
CIP - pay-as-you-go	-	-	-	-	-	-	-	-		
Debt service	88,000	379,000	741,000	1,005,000	1,862,000	2,395,000	2,482,000	$2,569,000		
Sewer franchise	44,100	55,850	58,000	60,000	62,000	64,000	66,000	68,000		
Total	$ 1,696,996	$ 4,425,824	$ 5,636,000	$ 4,797,000	$ 12,465,000	$ 9,320,000	$ 4,313,000	$ 4,425,000		
Net revenue	$ 204,398	$ 61,176	$ 198,000	$ 401,000	$ 808,000	$ 948,000	$ 1,052,000	$ 1,093,000		
Ending balance	$ 204,398	$ 265,574	$ 463,574	$ 864,574	$ 1,672,574	$ 2,620,574	$ 3,672,574	$ 4,765,574		
Capital Component Excess	152,000	-	-	-	-	-	-	-		
Operating Revenue Excess	$ 52,398	$ 61,176	$ 198,000	$ 401,000	$ 808,000	$ 948,000	$ 1,052,000	$ 1,093,000		

Source: Prepared by Bartle Wells Associates.

Table 11
Marina Coast Water District - Ord Community
Summary of Water Capital Revenue Alternatives

Baseline		
Capital component charge	Varies annually between $0.70 and $3.82 per hcf* of monthly water consumption.	
	Cost - $92 to $504 per year for 11 hcf of monthly water consumption.	
Equalization charge	Increases annually from $210 to $2,496. One-time charge at time of connection.	
General Benefit Capacity Charge	$7,340	per acre-foot
	$2,202	for an average home using 0.3 acre-feet
Uniform Capacity Charge	$9,710	per acre-foot
	$2,913	for an average home using 0.3 acre-feet
Uniform Capacity Charge with Reimbursement	$7,340	per acre-foot
	$2,202	for an average home using 0.3 acre-feet
Additional Reimbursement	$2,370	per acre-foot
	$711	for an average home using 0.3 acre-feet

* - Hundred cubic feet
Source: Prepared by Bartle Wells Associates

Table 12
Marina Coast Water District - Ord Community
Summary of Wastewater Capital Revenue Alternatives

Baseline		
Capital component charge	Varies annually between $6.00 and $29.75 per month for an average homeowner	
	Cost - $72 to $357 per year	
Equalization charge	Increases annually from $109 to $1,045. One-time charge at time of connection.	
General Benefit Capacity Charge	$1,260	for an average home
Uniform Capacity Charge	$1,440	for an average home
Uniform Capacity Charge with Reimbursement	$1,260	for an average home
Additional Reimbursement	$170	for an average home

Source: Prepared by Bartle Wells Associates