



TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT



SDLF Platinum-Level of Governance

President – Bill Pease • Vice-President – Bryon Gutow • Director – Kevin Graves • Director – Robert Leete • Director – Bill Mayer

**NOTICE OF THE REGULAR MEETING
OF THE BOARD OF DIRECTORS
OF THE TOWN OF DISCOVERY BAY
Wednesday April 1, 2020
REGULAR MEETING 7:00 P.M.
Website address: www.todb.ca.gov**

NOTICE **Coronavirus COVID-19**

In accordance with the Governor's Executive Order N-33-20, and for the period in which the Order remains in effect, the Town of Discovery Bay Community Services District Board Chambers will be closed to the public.

To accommodate the public during this period of time that the Board's Chambers are closed to the public, the Town of Discovery Bay Community Services District Board of Directors has arranged for members of the public to observe and address the meeting telephonically.

TO ATTEND BY TELECONFERENCE:
Toll-Free Dial-In Number: (833)759-9778
CONFERENCE CODE **7846996#**
To view presentation content:
Go to <https://my.intercall.com/9tc7rcq>
Once connected to Unified Meeting:
Select – I Will Call
Click on Join Meeting

Download Agenda Packet and Materials at www.todb.ca.gov/

REGULAR MEETING 7:00 P.M.

A. ROLL CALL AND PLEDGE OF ALLEGIANCE

1. Call business meeting to order 7:00 p.m.
2. Pledge of Allegiance.
3. Roll Call.

B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)

During Public Comments, the public may address the Board on any issue within the District's jurisdiction which is not on the Agenda. The public may comment on any item on the Agenda at the time the item is before the Board for consideration. Any person wishing to speak will have 3 minutes to make their comment. There will be no dialog between the Board and the commenter as the law strictly limits the ability of Board members to discuss matters not on the agenda. We ask that you refrain from personal attacks during comment, and that you address all comments to the Board only. Any clarifying questions from the Board must go through the President. Comments from the public do not necessarily reflect the view point of the Directors.

C. CONSENT CALENDAR

All matters listed under the CONSENT CALENDAR are considered by the District to be routine and will be enacted by one motion.

1. Approve DRAFT Minutes of Regular Meeting for March 18, 2020
2. Approve Register of District Invoices.

D. AREA AGENCIES REPORTS / PRESENTATION

1. Supervisor Diane Burgis, District III Report.
2. Sheriff's Office Report.
3. CHP Report.
4. East Contra Costa Fire Protection District Report.

E. LIAISON REPORTS

F. PRESENTATIONS

G. BUSINESS AND ACTION ITEMS

1. Discussion and Possible Action Regarding Making a Final Decision on the Proposed Rate Increase Option for the Water and Wastewater Enterprises.
2. Discussion and Possible Action to Approve Resolution No. 2020-07, Approving Preparation of Application to LAFCo to Annex Lands Owned by the District Containing the Existing Newport Water Treatment Plant and Wastewater Plant No. 2, Adopting a CEQA Exemption and Directing Filing of the Notice of Exemption.

H. MANAGER'S REPORT

I. DIRECTORS' REPORTS

1. Standing Committee Reports.
 - a. Finance Committee Meeting (Committee Members Robert Leete and Bill Mayer)
April 1, 2020.
 - b. Internal Operations Committee Meeting (Committee Members Robert Leete and Kevin Graves)
April 1, 2020.
 - c. Water and Wastewater Committee Meeting (Committee Members Bill Pease and Bill Mayer)
April 1, 2020.
2. Other Reportable Items.

J. GENERAL MANAGER'S REPORT

K. CORRESPONDENCE RECEIVED (Information Only)

L. FUTURE AGENDA ITEMS

M. ADJOURNMENT

1. Adjourn to the next regular meeting of April 15, 2020 beginning at 7:00 p.m.

"This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Town of Discovery Bay, at (925) 634-1131, during regular business hours, at least forty-eight hours prior to the time of the meeting."

"Materials related to an item on the Agenda submitted to the Town of Discovery Bay after distribution of the agenda packet are available for public inspection in the District website located at <https://www.todb.ca.gov>."



TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT

SDLF Platinum-Level of Governance



President – Bill Pease • Vice-President – Bryon Gutow • Director – Kevin Graves • Director – Robert Leete • Director – Bill Mayer

MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE TOWN OF DISCOVERY BAY

Wednesday March 18, 2020

REGULAR MEETING 7:00 P.M.

Community Center

1601 Discovery Bay Boulevard, Discovery Bay, California

Website address: www.todb.ca.gov

NOTICE Coronavirus COVID-19

In accordance with the Governor's Executive Order N-25-20 the Town of Discovery Bay Directors may be attending this regular meeting via teleconference. As required by Executive Order N-25-20, the Town's Community Center located at 1601 Discovery Bay Boulevard will be publicly accessible from which members of the public shall have the right to observe and offer public comment at this regular meeting.

TO ATTEND BY TELECONFERENCE:

Toll-Free Dial-In Number: (833) 759-9778

CONFERENCE ID **5152116#**

To view presentation content:

Go to <https://my.intercall.com/9tc7rcq>

Once connected to Unified Meeting:

Select – I Will Call

Click on Join Meeting

Presentation content is also available at www.todb.ca.gov/

REGULAR MEETING 7:05 P.M.

A. ROLL CALL AND PLEDGE OF ALLEGIANCE

1. Call business meeting to order 7:00 p.m. – By President Pease
2. Pledge of Allegiance – Led by President Pease
3. Roll Call – All Present

B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)

During Public Comments, the public may address the Board on any issue within the District's jurisdiction which is not on the Agenda. The public may comment on any item on the Agenda at the time the item is before the Board for consideration by filling out a comment form. The public will be called to comment in the order the comment forms are received. Any person wishing to speak must come up and speak from the podium and will have 3 minutes to make their comment. There is a device on the podium with a green, yellow, and red light. The yellow light will come on 30 seconds before the end of the 3 minutes. There will be no dialog between the Board and the commenter as the law strictly limits the ability of Board members to discuss matters not on the agenda. We ask that you refrain from personal attacks during comment, and that you address all comments to the Board only. Any clarifying questions from the Board must go through the President. Comments from the public do not necessarily reflect the view point of the Directors.

C. CONSENT CALENDAR

All matters listed under the CONSENT CALENDAR are considered by the District to be routine and will be enacted by one motion.

1. Approve DRAFT minutes of regular meeting for Board Meeting, March 4, 2020.
2. Approve DRAFT minutes of annual Board Workshop Meeting, March 5, 2020.
3. Adopt Resolution No. 2020-04 ordering HERWIT Engineering to prepare the 2020-2021 Annual Assessment Report for the Ravenswood Improvement District, Discovery Bay Landscape & Lighting Zone #9.
4. Approve Register of District Invoices.

Motion by: Director Leete to approve the Consent Calendar.

Second by: Director Graves to approve the Consent Calendar.

Motion Carried- AYES: 5, NOES: 0

D. PRESENTATIONS

1. Presentation by Brandis Tallman on Financing of Current and Future Capital Projects. – Nicki Tallman from Brandis Tallman LLC presented current market trends and options for future financing on the District's bonds. Update was given on the status of the two current bonds the Town has and their underwriting progress. Opportunities for refinancing and possibility for future water and wastewater capital projects were offered. Directors Leete and Mayer and President Pease inquired on cost of issuance, rating and risks. Public comment was made regarding rushing into a refining of the Town's bonds before the bond's call date.
2. Presentation by Lechowicz & Tseng Municipal Consultants detailing the District's Proposed Water and Wastewater Rate Studies for Fiscal Years 2020 through 2025. Alison Lechowicz from Lechowicz and Tseng Municipal Consultants presented through teleconference. Alison discussed the proposed Water and Wastewater Rate Study for the next 5 years. Alison shared options for Water and Wastewater rate adjustments and projected the financial impact to be expected. Discussing also included water conservation and less water usage. Public comment was made concerning rushing into an increase of water and waste water rates. Decision regarding Lechowicz and Tseng's presentation will be revisited by the Board at the Regular Board Meeting on April 1, 2020 at 7:00 p.m.

E. MONTHLY WATER AND WASTEWATER REPORT – VEOLIA

1. Presentation Cancelled – Moved to April 15, 2020 Regular Board Meeting

F. BUSINESS AND ACTION ITEMS

1. Discussion and Possible Action to Accept Audited Financial Statements for Fiscal Year 2018-2019.- Rick Croce from Croce, Sanguinetti and Vander Veen participated in the Board Meeting via teleconference. The Annual Audit for fiscal year 2018-2019 was shared and explained.

Motion by: Director Kevin Graves to Approve Audited Financial Statements

Second by: Director Bryon Gutow to approve Audited Financial Statements

Motion Carried- AYES: 5, NOES: 0

2. Discussion and Possible Action to Authorize the General Manager to Purchase Playground Equipment for Ravenswood Park in an Amount Not to Exceed \$98,853.90. Parks and Landscape Manager, Bill Engelman presented information for purchase of new playground equipment at Ravenswood Park. President Pease inquired about the life expectancy of the new equipment. Bill Engelman estimated the life cycle of the playground equipment to be between 10-12 years.

Motion by: Director Graves to approve Business and Action Items.

Second by: Director Gutow to approve Business and Action Items.

Motion Carried- AYES: 5, NOES: 0

G. DIRECTORS' REPORTS

1. Standing Committee Reports.
2. Other Reportable Items.

H. MANAGER'S REPORT

I. GENERAL MANAGER'S REPORT

1. Update on Novel Coronavirus (COVID-19) – General Manager, Mike Davies provided update on actions the Town has taken during this pandemic. The town website is constantly being updated with the latest vital communications. The Town will continue providing services to the public to ensure there are no interruptions in essential services such as water and wastewater services. There will be limited access to the Town's main office building. Parks and Recreation programming has been canceled.

J. CORRESPONDENCE RECEIVED

1. CCSDA January 27 Meeting Minutes

K. FUTURE AGENDA ITEMS

L. ADJOURNMENT

1. Adjourn to the regular meeting on April 1, 2020 beginning at 7:00 p.m. at the Community Center located at 1601 Discovery Bay Boulevard.

"This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Town of Discovery Bay, at (925) 634-1131, during regular business hours, at least forty-eight hours prior to the time of the meeting."

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Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

April 1, 2020

Prepared By: Julie Carter, Finance Manager & Lesley Marable, Accountant
Submitted By: Michael R. Davies, General Manager *MRD*

Agenda Title

Approve Register of District Invoices.

Recommended Action

Staff recommends that the Board approve the listed invoices for payment.

Executive Summary

District invoices are paid on a regular basis, and must obtain Board authorization prior to payment. Staff recommends Board authorization in order that the District can continue to pay warrants in a timely manner.

Fiscal Impact:

Amount Requested \$ 188,219.34

Sufficient Budgeted Funds Available?: Yes (If no, see attached fiscal analysis)

Prog/Fund # See listing of invoices. **Category:** Operating Expenses and Capital Improvements

Previous Relevant Board Actions for This Item

Attachments

Request For Authorization to Pay Invoices for the Town of Discovery Bay CSD 2019/2020

AGENDA ITEM: C-2

For The Meeting On April 1, 2020
Town of Discovery Bay CSD
Fiscal Year 7/19 - 6/20

Pacific Gas & Electric	\$68,979.86
WorleyParsons Group, Inc.	\$40,628.32
Veolia Water North America	\$40,253.85
J.W. Backhoe & Construction, Inc.	\$9,545.19
Luhdorff & Scalmanini	\$5,370.00
CA Dept. of Fish & Wildlife	\$4,559.25
CA State Lands Commission	\$3,025.00
Town of Discovery Bay CSD	\$2,805.53
Tee Janitorial & Maintenance	\$2,054.00
SWRCB	\$1,949.00
Mt. Diablo Resource Recovery	\$1,434.00
United States Postal Services	\$1,291.00
Matrix Trust	\$1,073.83
TASC	\$995.83
Univar Solutions USA Inc.	\$845.40
Office Depot	\$544.69
Watersavers Irrigation Inc.	\$465.17
Koff & Associates	\$390.00
Aflac	\$365.58
ReliaStar Life Insurance Company	\$325.00
Smearred Paint	\$261.75
Discovery Bay Designs	\$243.91
Cintas	\$131.86
UniFirst Corporation	\$127.44
Alhambra	\$125.85
Concentra	\$101.50
Lesley Marable	\$97.98
Shred-It USA-Concord	\$85.53
Discovery Pest Control	\$68.00
County Clerk - CCC	\$50.00
Verizon Wireless	\$25.02
	<hr/>
	\$188,219.34



Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

April 1, 2020

Prepared By: Dina Breitstein, Assistant General Manager

Submitted By: Michael R. Davies, General Manager *MRD*

Agenda Title

Discussion and Possible Action Regarding Making a Final Decision on the Proposed Rate Increase Option for the Water and Wastewater Enterprises

Recommended Action

Select a proposed rate increase option for the water and wastewater enterprises.

Executive Summary

At the November 6, 2019 Board of Directors' meeting, the District approved the contract with Lechowicz & Tseng Municipal Consultants to conduct the Water and Wastewater Enterprise Rate Studies.

On February 24, 2020, the Finance Committee met with Alison Lechowicz of Lechowicz & Tseng Municipal Consultants, where she presented the various options for the water and wastewater enterprises. The Finance Committee made some option recommendations, which were presented at the March 18, 2020 Board of Directors' Meeting. Since this meeting, both the water and wastewater rate studies have been updated to reflect current market interest rate trends as well as include all final capital improvement projects and projected costs.

Alison Lechowicz will be presenting to the Board of Directors various rate options for the District's water and wastewater enterprises. These options are to be considered for a final decision. A decision is needed to select and approve a rate increase option for water and wastewater divisions over the next five years, beginning July 2020 through June 2025. Upon the decision, the Final Rate Study Reports and the Proposition 218 mailer will be updated and presented for adoption and approval at the April 15, 2020 Board meeting.

Fiscal Impact:

Amount Requested

Sufficient Budgeted Funds Available? (If no, see attached fiscal analysis)

Prog/Fund # Category:

Previous Relevant Board Actions for This Item

Attachments

1. Water proposed rates
2. Sewer proposed rates
3. Bill Survey comparison
4. Slide presentation

AGENDA ITEM: G-1



**Town of Discovery Bay
Community Services District
2020 Water Rate Study
Draft Tables – April 1, 2020**



Notes:

Options have been revised since the March 18 Board Meeting:

- Additional projects added (40% water/60% sewer) for the relocation of the District’s office building, District security, and vehicle and equipment purchases
- New debt assumed for FY2020/21. Debt service costs are estimated by Brandis Tallman at 4.5% over 30 years

12% rate increase approved for FY2020/21 in prior rate study.

Rate design has been adjusted based on the proposed cost allocation methodology and water conservation targets. SB 606 and AB1668 establish a current target of 55 gallons per capita indoor water use by January 1, 2025. On January 1, 2025, it will decrease to the greater of (a) a number selected by DWR or (b) 52.5 gallons per capita daily. On January 1, 2030, the limit will decrease to 50 gallons per capita daily. Enforcement mechanisms are unclear however it is anticipated that fines against water purveyors will begin in 2027. L&T reviewed various sources of water usage data from the Town. It is estimated that current indoor water use is 80 gallons per person per day. This rate study assumes that residential indoor water use will decrease to 70 gallons per person per day by 2025. It is also assumed that the Town will further evaluate its water conservation goals and implement measures to reduce indoor demand from 2025 to 2027.

System Average Annual Rate Revenue Increases

(total increase to rate revenues; the rates of individual customers will vary based on changes to rate design)

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+32%	+32%	+1%	+1%	+1%
#2: \$4M debt	+7%	+7%	+7%	+7%	+7%
#3: \$8M debt	+1.75%	+1.75%	+1.75%	+1.75%	+1.75%

Cumulative Rate Revenue Increases

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+32%	+74.2%	+76.0%	+77.7%	+79.5%
#2: \$4M debt	+7%	+14.5%	+22.5%	+31.1%	+40.3%
#3: \$8M debt	+1.75%	+3.53%	+5.34%	+7.19%	+9.06%

Debt Service Coverage Ratio (combined ratio for 2012, 2017, and new debt)

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	10.98	17.32	17.17	17.06	17.20
#2: \$4M debt	6.98	4.02	4.40	4.92	5.52
#3: \$8M debt	6.15	2.10	2.01	1.98	1.97

**Table 1: Summary of Capital Funding Sources
Town of Discovery Bay
Water Rate Study**

	OPTION 1 No Debt	OPTION 2 \$4M	OPTION 3 \$8M
Revenue Sources			
Existing Capital Reserves	164,100	164,100	114,100
Excess Operating Reserves	1,000,000	1,000,000	1,000,000
Capacity Fees	407,400	407,400	407,400
Rate Revenues	12,450,000	8,450,000	4,500,000
New Debt	<u>0</u>	<u>4,000,000</u>	<u>8,000,000</u>
Total Revenues	14,021,500	14,021,500	14,021,500
Total Capital Projects	14,021,500	14,021,500	14,021,500

**Table 2: Reserves
Town of Discovery Bay
Water Rate Study**

Reserves	FY2018/19		
	Estimate	Water	Wastewater
Water & Wastewater Operating Reserves	\$5,142,601	\$755,828	\$4,386,773
Emergency Reserves	\$3,001,000	\$1,200,400	\$1,800,600
Sewer Infrastructure Replacement Fund	\$1,550,000	\$0	\$1,550,000
Pumps/Motors Replacement Fund	\$390,000	\$156,000	\$234,000
Water Infrastructure Replacement Fund	\$859,143	\$418,728	\$0
Generators Replacement Fund	\$175,000	\$70,000	\$105,000
Facilities & Vehicles Replacement Fund	\$310,852	\$117,426	\$193,426
Operating Reserves Total	\$5,142,601	\$755,828	\$4,386,773
Emergency Reserves	\$3,001,000	\$1,200,400	\$1,800,600
Infrastructure Replacement Total	\$2,844,580	\$762,154	\$2,082,426
Total Reserves	\$10,988,181	\$2,718,382	\$8,269,799

**Table 3: Proposed Water Rates and Changes – OPTION 1: No Debt
Town of Discovery Bay
Water Rate Study**

Monthly Use (cc)	13.0	12.8	12.6	12.4	12.2	11.9
Residential Bill (1" meter)	\$49.40	\$65.44	\$86.34	\$86.90	\$87.61	\$88.32
% increase		32%	32%	1%	1%	1%
Bill at 13 ccf, 1" meter	13.0	13.0	13.0	13.0	13.0	13.0
	\$49.40	\$66.02	\$87.91	\$89.30	\$90.89	\$92.97
		34%	33%	2%	2%	2%

WATER	Current	PROPOSED				
		FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
	Monthly (\$/month)					
Vacant	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67
Non-irrigation Account Charge:						
5/8 Inch Meter	\$20.06	\$27.91	\$36.85	\$37.22	\$37.60	\$37.98
3/4 Inch Meter	\$20.06	\$27.91	\$36.85	\$37.22	\$37.60	\$37.98
1 Inch Meter	\$20.06	\$27.91	\$36.85	\$37.22	\$37.60	\$37.98
1 1/2 Inch Meter	\$39.16	\$52.93	\$69.87	\$70.57	\$71.28	\$72.00
2 Inch Meter	\$62.04	\$82.95	\$109.50	\$110.60	\$111.71	\$112.83
3 Inch Meter	\$123.06	\$163.02	\$215.19	\$217.35	\$219.53	\$221.73
4 Inch Meter	\$191.71	\$253.09	\$334.08	\$337.43	\$340.81	\$344.22
6 Inch Meter	\$382.43	\$503.29	\$664.35	\$671.00	\$677.71	\$684.49
Irrigation Account Charge:						
5/8 Inch Meter	\$18.92	\$25.00	\$33.00	\$33.33	\$33.67	\$34.01
3/4 Inch Meter	\$18.92	\$25.00	\$33.00	\$33.33	\$33.67	\$34.01
1 Inch Meter	\$18.92	\$25.00	\$33.00	\$33.33	\$33.67	\$34.01
1 1/2 Inch Meter	\$36.87	\$47.11	\$62.19	\$62.82	\$63.45	\$64.09
2 Inch Meter	\$58.38	\$73.64	\$97.21	\$98.19	\$99.18	\$100.18
3 Inch Meter	\$115.73	\$144.39	\$190.60	\$192.51	\$194.44	\$196.39
4 Inch Meter	\$180.27	\$223.99	\$295.67	\$298.63	\$301.62	\$304.64
6 Inch Meter	\$359.54	\$445.09	\$587.52	\$593.40	\$599.34	\$605.34
Metered Usage Charge:						
All Usage (\$/ccf)	\$2.257	\$2.932	\$3.928	\$4.006	\$4.099	\$4.230
Newly Metered Customers Meter Install Fee (10-year payback)	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

Table 4: Water Capital Cash Flows - OPTION 1: No Debt

	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
Emergency Reserves	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400
Infrastructure Replacement	<u>762,000</u>	<u>749,900</u>	<u>356,800</u>	<u>2,300</u>	<u>190,400</u>	<u>588,300</u>
Beginning Balance	1,962,400	1,950,300	1,557,200	1,202,700	1,390,800	1,788,700
Revenues						
Capacity Fees (\$4,850/EDU)	164,900	48,500	48,500	48,500	48,500	48,500
Transfer from Operating	1,000,000	2,750,000	4,300,000	2,000,000	1,700,000	1,700,000
New Debt Proceeds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenues	1,164,900	2,798,500	4,348,500	2,048,500	1,748,500	1,748,500
Capital Improvements						
Water Supply Capacity						
Well 8	150,000	772,500	2,811,400	958,900	0	0
Well 5A Decommissioning	<u>0</u>	<u>0</u>	<u>0</u>	<u>82,000</u>	<u>0</u>	<u>0</u>
Total Water Supply Capacity	150,000	772,500	2,811,400	1,040,900	0	0
Upgrades for Existing Water Supply						
Well 4A Rehab	140,000	0	0	0	0	0
Well Rehab (Wells 1B, 2, 4A, 6)	0	257,500	0	0	225,100	0
Filter Repair (Newport & Willow)	118,000	103,000	231,300	0	0	0
Stabilization Soils- Willow Lake WTP	150,000	0	0	0	0	0
Upgrade Well 4A Piping	<u>75,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Existing Water Supply	483,000	360,500	231,300	0	225,100	0
Distribution/Pipeline Replacements						
Mainline CIP Program Long-Term	0	0	530,500	819,500	1,125,500	1,738,900
Cathodic Protection	0	257,500	0	0	0	0
6 inch pipeline Lakeview Biz Park	0	298,700	0	0	0	0
Replace Underwater Crossing Laguna Ct	400,000	0	0	0	0	0
Edgeview St. Andrews /Clubhouse	0	309,000	0	0	0	0
Marina Underwater Crossing	<u>0</u>	<u>600,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	400,000	1,465,200	530,500	819,500	1,125,500	1,738,900
Additional Distribution Improvements						
WTP spill containment curbing/diversion	0	25,800	0	0	0	0
Upgrade Hypo Tanks at WTP	<u>0</u>	<u>0</u>	<u>26,500</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	0	25,800	26,500	0	0	0
Master Plans						
Water Master & Asset Management Plans	0	257,500	0	0	0	0
2020 Urban Water Management Plan	0	41,200	0	0	0	0
AWIA Emergency Plans	<u>0</u>	<u>25,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Master Plans	0	324,500	0	0	0	0
Building Rehab or Relocation						
Island Building by Well 1B	60,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>164,800</u>	<u>1,103,300</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Building Rehab/Relocation	60,000	164,800	1,103,300	0	0	0
Vehicle & Equipment Purchases						
New Truck	16,000	16,500	0	0	0	0
Woodchipper or Firebox	<u>20,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	36,000	16,500	0	0	0	0
District Security						
Cyber Security	0	61,800	0	0	45,000	0
Phase 1 - complete	0	0	0	0	0	0
Phase 2	48,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>61,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	48,000	61,800	0	0	0	0
Total Capital Improvements	1,177,000	3,191,600	4,703,000	1,860,400	1,350,600	1,738,900
Total Net Revenues	(12,100)	(393,100)	(354,500)	188,100	397,900	9,600
Ending Balance	1,950,300	1,557,200	1,202,700	1,390,800	1,788,700	1,798,300

Table 5: Water Operating Cash Flows – OPTION 1: No Debt
Town of Discovery Bay
Water Rate Study

Line	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25	
1	Beginning Operating Balance	\$756,000	\$1,533,000	\$1,366,600	\$1,310,500	\$3,482,200	\$5,941,000
2							
3	Proposed Increase		32.0%	32.0%	1.0%	1.0%	1.0%
4							
5	Revenues						
6	Rate Revenue	4,191,000	5,532,000	7,302,000	7,375,000	7,449,000	7,523,000
7	New Customers	<u>20,000</u>	<u>34,600</u>	<u>55,900</u>	<u>66,700</u>	<u>77,800</u>	<u>89,000</u>
8	Rate Rev Subtotal	4,211,000	5,566,600	7,357,900	7,441,700	7,526,800	7,612,000
9	Less Delinquency (2%)	(91,000)	(111,000)	(146,000)	(148,000)	(149,000)	(150,000)
10	Vacant Parcel	12,000	12,000	12,000	12,000	12,000	12,000
11	Meter Reimbursements	336,000	336,000	336,000	336,000	336,000	336,000
12	Other & Misc	<u>22,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>
13	Total Revenues	4,490,000	5,830,600	7,586,900	7,668,700	7,752,800	7,837,000
14							
15	% increase in operating expenses		budget	3.0%	3.0%	3.0%	3.0%
16	Expenses						
17	Operating Expenses						
18	Admin & Inter Govt. & Board	334,000	451,000	465,000	479,000	493,000	508,000
19	Staffing & Consulting Serv	572,000	862,000	888,000	915,000	942,000	970,000
20	Meters Reading	88,000	93,000	96,000	99,000	102,000	105,000
21	Operations & Maint	331,000	424,000	437,000	450,000	464,000	478,000
22	SGMA Compliance	0	15,000	20,000	21,000	21,000	22,000
23	Utilities [1]	479,000	467,000	481,000	495,000	510,000	525,000
24	Service Contract [2]	<u>651,000</u>	<u>676,000</u>	<u>696,000</u>	<u>780,000</u>	<u>803,000</u>	<u>827,000</u>
25	Total Operating Expenses	2,455,000	2,988,000	3,083,000	3,239,000	3,335,000	3,435,000
26							
27	Net Operating Revenues	2,035,000	2,842,600	4,503,900	4,429,700	4,417,800	4,402,000
28							
29	Debt Service						
30	2012 Bonds Debt Service [3]	88,000	88,000	89,000	88,000	89,000	88,000
31	2017 Bonds Debt Service [3]	170,000	171,000	171,000	170,000	170,000	168,000
32	New Debt Service [4]	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
33	Total Debt Service	258,000	259,000	260,000	258,000	259,000	256,000
34							
35	Debt Service Coverage	7.89	10.98	17.32	17.17	17.06	17.20
36							
37	Total O&M + Debt	2,713,000	3,247,000	3,343,000	3,497,000	3,594,000	3,691,000
38							
39	Total Net Revenues	1,777,000	2,583,600	4,243,900	4,171,700	4,158,800	4,146,000
40							
41	Transfer to Capital	1,000,000	2,750,000	4,300,000	2,000,000	1,700,000	1,700,000
42							
43	O&M Ending balance	1,533,000	1,366,600	1,310,500	3,482,200	5,941,000	8,387,000
44							
45	Minimum balance target [5]	818,000	996,000	1,028,000	1,080,000	1,112,000	1,145,000

1 - Chemicals and electric

2 - Assumed increase in FY2023 due to Well #8 coming online

3 - Based on year ended December 1

4 - Estimated by Brandis Tallman

5 - 4 months O&M expenses

Table 6: Proposed Water Rates and Changes – OPTION 2: \$4M
Town of Discovery Bay
Water Rate Study

Monthly Use (cc)	13.0	12.8	12.6	12.4	12.2	11.9
Residential Bill (1" meter)	\$49.40	\$53.06	\$56.75	\$60.52	\$64.64	\$69.04
% increase		7%	7%	7%	7%	7%
Bill at 13 ccf, 1" meter	13.0	13.0	13.0	13.0	13.0	13.0
	\$49.40	\$53.54	\$57.79	\$62.20	\$67.06	\$72.68
		8%	8%	8%	8%	8%

WATER	Current	PROPOSED				
		FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
	Monthly (\$/month)					
Vacant	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67
Non-irrigation Account Charge:						
5/8 Inch Meter	\$20.06	\$22.61	\$24.20	\$25.90	\$27.72	\$29.67
3/4 Inch Meter	\$20.06	\$22.61	\$24.20	\$25.90	\$27.72	\$29.67
1 Inch Meter	\$20.06	\$22.61	\$24.20	\$25.90	\$27.72	\$29.67
1 1/2 Inch Meter	\$39.16	\$42.59	\$45.58	\$48.78	\$52.20	\$55.86
2 Inch Meter	\$62.04	\$66.57	\$71.23	\$76.22	\$81.56	\$87.27
3 Inch Meter	\$123.06	\$130.50	\$139.64	\$149.42	\$159.88	\$171.08
4 Inch Meter	\$191.71	\$202.43	\$216.61	\$231.78	\$248.01	\$265.38
6 Inch Meter	\$382.43	\$402.23	\$430.39	\$460.52	\$492.76	\$527.26
Irrigation Account Charge:						
5/8 Inch Meter	\$18.92	\$20.25	\$21.67	\$23.19	\$24.82	\$26.56
3/4 Inch Meter	\$18.92	\$20.25	\$21.67	\$23.19	\$24.82	\$26.56
1 Inch Meter	\$18.92	\$20.25	\$21.67	\$23.19	\$24.82	\$26.56
1 1/2 Inch Meter	\$36.87	\$39.13	\$41.53	\$44.08	\$46.79	\$49.66
2 Inch Meter	\$58.38	\$61.77	\$65.35	\$69.14	\$73.15	\$77.39
3 Inch Meter	\$115.73	\$122.10	\$128.82	\$135.91	\$143.39	\$151.28
4 Inch Meter	\$180.27	\$189.99	\$200.24	\$211.05	\$222.43	\$234.43
6 Inch Meter	\$359.54	\$378.58	\$398.64	\$419.75	\$441.99	\$465.40
Metered Usage Charge:						
All Usage (\$/ccf)	\$2.257	\$2.379	\$2.584	\$2.792	\$3.026	\$3.308
Newly Metered Customers Meter Install Fee (10-year payback)	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

Table 7: Water Capital Cash Flows - OPTION 2: \$4M

	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
Emergency Reserves	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400
Infrastructure Replacement	<u>762,000</u>	<u>749,900</u>	<u>3,106,800</u>	<u>2,300</u>	<u>190,400</u>	<u>588,300</u>
Beginning Balance	1,962,400	1,950,300	4,307,200	1,202,700	1,390,800	1,788,700
Revenues						
Capacity Fees (\$4,850/EDU)	164,900	48,500	48,500	48,500	48,500	48,500
Transfer from Operating	1,000,000	1,500,000	1,550,000	2,000,000	1,700,000	1,700,000
New Debt Proceeds	<u>0</u>	<u>4,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenues	1,164,900	5,548,500	1,598,500	2,048,500	1,748,500	1,748,500
Capital Improvements						
Water Supply Capacity						
Well 8	150,000	772,500	2,811,400	958,900	0	0
Well 5A Decommissioning	<u>0</u>	<u>0</u>	<u>0</u>	<u>82,000</u>	<u>0</u>	<u>0</u>
Total Water Supply Capacity	150,000	772,500	2,811,400	1,040,900	0	0
Upgrades for Existing Water Supply						
Well 4A Rehab	140,000	0	0	0	0	0
Well Rehab (Wells 1B, 2, 4A, 6)	0	257,500	0	0	225,100	0
Filter Repair (Newport & Willow)	118,000	103,000	231,300	0	0	0
Stabilization Soils- Willow Lake WTP	150,000	0	0	0	0	0
Upgrade Well 4A Piping	<u>75,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Existing Water Supply	483,000	360,500	231,300	0	225,100	0
Distribution/Pipeline Replacements						
Mainline CIP Program Long-Term	0	0	530,500	819,500	1,125,500	1,738,900
Cathodic Protection	0	257,500	0	0	0	0
6 inch pipeline Lakeview Biz Park	0	298,700	0	0	0	0
Replace Underwater Crossing Laguna Ct	400,000	0	0	0	0	0
Edgeview St. Andrews /Clubhouse	0	309,000	0	0	0	0
Marina Underwater Crossing	<u>0</u>	<u>600,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	400,000	1,465,200	530,500	819,500	1,125,500	1,738,900
Additional Distribution Improvements						
WTP spill containment curbing/diversion	0	25,800	0	0	0	0
Upgrade Hypo Tanks at WTP	<u>0</u>	<u>0</u>	<u>26,500</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	0	25,800	26,500	0	0	0
Master Plans						
Water Master & Asset Management Plans	0	257,500	0	0	0	0
2020 Urban Water Management Plan	0	41,200	0	0	0	0
AWIA Emergency Plans	<u>0</u>	<u>25,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Master Plans	0	324,500	0	0	0	0
Building Rehab or Relocation						
Island Building by Well 1B	60,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>164,800</u>	<u>1,103,300</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Building Rehab/Relocation	60,000	164,800	1,103,300	0	0	0
Vehicle & Equipment Purchases						
New Truck	16,000	16,500	0	0	0	0
Woodchipper or Firebox	<u>20,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	36,000	16,500	0	0	0	0
District Security						
Cyber Security	0	61,800	0	0	45,000	0
Phase 1 - complete	0	0	0	0	0	0
Phase 2	48,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>61,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	48,000	61,800	0	0	0	0
Total Capital Improvements	1,177,000	3,191,600	4,703,000	1,860,400	1,350,600	1,738,900
Total Net Revenues	(12,100)	2,356,900	(3,104,500)	188,100	397,900	9,600
Ending Balance	1,950,300	4,307,200	1,202,700	1,390,800	1,788,700	1,798,300

Table 8: Water Operating Cash Flows – OPTION 2: \$4M
Town of Discovery Bay
Water Rate Study

Line		Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
1	Beginning Operating Balance	\$756,000	\$1,533,000	\$1,583,000	\$1,558,200	\$1,268,100	\$1,543,900
2							
3	Proposed Increase		7.00%	7.00%	7.00%	7.00%	7.00%
4							
5	Revenues						
6	Rate Revenue	4,191,000	4,484,000	4,798,000	5,134,000	5,493,000	5,878,000
7	New Customers	<u>20,000</u>	<u>28,000</u>	<u>36,800</u>	<u>46,500</u>	<u>57,400</u>	<u>69,600</u>
8	Rate Rev Subtotal	4,211,000	4,512,000	4,834,800	5,180,500	5,550,400	5,947,600
9	Less Delinquency (2%)	(91,000)	(90,000)	(96,000)	(103,000)	(110,000)	(118,000)
10	Vacant Parcel	12,000	12,000	12,000	12,000	12,000	12,000
11	Meter Reimbursements	336,000	336,000	336,000	336,000	336,000	336,000
12	Other & Misc	<u>22,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>
13	Total Revenues	4,490,000	4,797,000	5,113,800	5,452,500	5,815,400	6,204,600
14							
15	% increase in operating expenses		budget	3.0%	3.0%	3.0%	3.0%
16	Expenses						
17	Operating Expenses						
18	Admin & Inter Govt. & Board	334,000	451,000	465,000	479,000	493,000	508,000
19	Staffing & Consulting Serv	572,000	862,000	888,000	915,000	942,000	970,000
20	Meters Reading	88,000	93,000	96,000	99,000	102,000	105,000
21	Operations & Maint	331,000	424,000	437,000	450,000	464,000	478,000
22	SGMA Compliance	0	15,000	20,000	21,000	21,000	22,000
23	Utilities [1]	479,000	467,000	481,000	495,000	510,000	525,000
24	Service Contract [2]	<u>651,000</u>	<u>676,000</u>	<u>696,000</u>	<u>780,000</u>	<u>803,000</u>	<u>827,000</u>
25	Total Operating Expenses	2,455,000	2,988,000	3,083,000	3,239,000	3,335,000	3,435,000
26							
27	Net Operating Revenues	2,035,000	1,809,000	2,030,800	2,213,500	2,480,400	2,769,600
28							
29	Debt Service						
30	2012 Bonds Debt Service [3]	88,000	88,000	89,000	88,000	89,000	88,000
31	2017 Bonds Debt Service [3]	170,000	171,000	171,000	170,000	170,000	168,000
32	New Debt Service [4]	<u>0</u>	<u>0</u>	<u>245,600</u>	<u>245,600</u>	<u>245,600</u>	<u>245,600</u>
33	Total Debt Service	258,000	259,000	505,600	503,600	504,600	501,600
34							
35	Debt Service Coverage	7.89	6.98	4.02	4.40	4.92	5.52
36							
37	Total O&M + Debt	2,713,000	3,247,000	3,588,600	3,742,600	3,839,600	3,936,600
38							
39	Total Net Revenues	1,777,000	1,550,000	1,525,200	1,709,900	1,975,800	2,268,000
40							
41	Transfer to Capital	1,000,000	1,500,000	1,550,000	2,000,000	1,700,000	1,700,000
42							
43	O&M Ending balance	1,533,000	1,583,000	1,558,200	1,268,100	1,543,900	2,111,900
44							
45	Minimum balance target [5]	818,000	996,000	1,028,000	1,080,000	1,112,000	1,145,000

1 - Chemicals and electric

2 - Assumed increase in FY2023 due to Well #8 coming online

3 - Based on year ended December 1

4 - Estimated by Brandis Tallman based on 30 years at 4.5%

5 - 4 months O&M expenses

Table 9: Proposed Water Rates and Changes – OPTION 3: \$8M
Town of Discovery Bay
Water Rate Study

Monthly Use (cc)	13.0	12.8	12.6	12.4	12.2	11.9
Residential Bill (1" meter)	\$49.40	\$50.47	\$51.32	\$52.05	\$52.86	\$53.68
% increase		2%	2%	1%	2%	2%
Bill at 13 ccf, 1" meter	13.0 \$49.40	13.0 \$50.92	13.0 \$52.26	13.0 \$53.49	13.0 \$54.84	13.0 \$56.52
		3%	3%	2%	3%	3%

WATER	Current	PROPOSED				
		FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
	Monthly (\$/month)					
Vacant	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67	\$14.67
Non-irrigation Account Charge:						
5/8 Inch Meter	\$20.06	\$21.46	\$21.84	\$22.23	\$22.62	\$23.02
3/4 Inch Meter	\$20.06	\$21.46	\$21.84	\$22.23	\$22.62	\$23.02
1 Inch Meter	\$20.06	\$21.46	\$21.84	\$22.23	\$22.62	\$23.02
1 1/2 Inch Meter	\$39.16	\$40.08	\$40.79	\$41.51	\$42.24	\$42.98
2 Inch Meter	\$62.04	\$62.42	\$63.52	\$64.64	\$65.78	\$66.94
3 Inch Meter	\$123.06	\$122.01	\$124.15	\$126.33	\$128.54	\$130.80
4 Inch Meter	\$191.71	\$189.04	\$192.35	\$195.72	\$199.15	\$202.64
6 Inch Meter	\$382.43	\$375.24	\$381.81	\$388.50	\$395.30	\$402.22
Irrigation Account Charge:						
5/8 Inch Meter	\$18.92	\$19.25	\$19.58	\$19.92	\$20.27	\$20.62
3/4 Inch Meter	\$18.92	\$19.25	\$19.58	\$19.92	\$20.27	\$20.62
1 Inch Meter	\$18.92	\$19.25	\$19.58	\$19.92	\$20.27	\$20.62
1 1/2 Inch Meter	\$36.87	\$37.13	\$37.39	\$37.65	\$37.91	\$38.18
2 Inch Meter	\$58.38	\$58.55	\$58.73	\$58.90	\$59.07	\$59.25
3 Inch Meter	\$115.73	\$115.73	\$115.73	\$115.73	\$115.73	\$115.73
4 Inch Meter	\$180.27	\$180.27	\$180.27	\$180.27	\$180.27	\$180.27
6 Inch Meter	\$359.54	\$359.54	\$359.54	\$359.54	\$359.54	\$359.54
Metered Usage Charge:						
All Usage (\$/ccf)	\$2.257	\$2.266	\$2.340	\$2.405	\$2.479	\$2.577
Newly Metered Customers Meter Install Fee (10-year payback)	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01	\$8.01

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

Table 10: Water Capital Cash Flows - OPTION 3: 8M

	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
Emergency Reserves	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400	1,200,400
Infrastructure Replacement	<u>762,000</u>	<u>749,900</u>	<u>6,106,800</u>	<u>2,452,300</u>	<u>1,640,400</u>	<u>1,338,300</u>
Beginning Balance	1,962,400	1,950,300	7,307,200	3,652,700	2,840,800	2,538,700
Revenues						
Capacity Fees (\$4,850/EDU)	164,900	48,500	48,500	48,500	48,500	48,500
Transfer from Operating	1,000,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000
New Debt Proceeds	<u>0</u>	<u>8,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenues	1,164,900	8,548,500	1,048,500	1,048,500	1,048,500	1,048,500
Capital Improvements						
Water Supply Capacity						
Well 8	150,000	772,500	2,811,400	958,900	0	0
Well 5A Decommissioning	<u>0</u>	<u>0</u>	<u>0</u>	<u>82,000</u>	<u>0</u>	<u>0</u>
Total Water Supply Capacity	150,000	772,500	2,811,400	1,040,900	0	0
Upgrades for Existing Water Supply						
Well 4A Rehab	140,000	0	0	0	0	0
Well Rehab (Wells 1B, 2, 4A, 6)	0	257,500	0	0	225,100	0
Filter Repair (Newport & Willow)	118,000	103,000	231,300	0	0	0
Stabilization Soils- Willow Lake WTP	150,000	0	0	0	0	0
Upgrade Well 4A Piping	<u>75,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Existing Water Supply	483,000	360,500	231,300	0	225,100	0
Distribution/Pipeline Replacements						
Mainline CIP Program Long-Term	0	0	530,500	819,500	1,125,500	1,738,900
Cathodic Protection	0	257,500	0	0	0	0
6 inch pipeline Lakeview Biz Park	0	298,700	0	0	0	0
Replace Underwater Crossing Laguna Ct	400,000	0	0	0	0	0
Edgeview St. Andrews /Clubhouse	0	309,000	0	0	0	0
Marina Underwater Crossing	<u>0</u>	<u>600,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	400,000	1,465,200	530,500	819,500	1,125,500	1,738,900
Additional Distribution Improvements						
WTP spill containment curbing/diversion	0	25,800	0	0	0	0
Upgrade Hypo Tanks at WTP	<u>0</u>	<u>0</u>	<u>26,500</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution/Pipeline Replacements	0	25,800	26,500	0	0	0
Master Plans						
Water Master & Asset Management Plans	0	257,500	0	0	0	0
2020 Urban Water Management Plan	0	41,200	0	0	0	0
AWIA Emergency Plans	<u>0</u>	<u>25,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Master Plans	0	324,500	0	0	0	0
Building Rehab or Relocation						
Island Building by Well 1B	60,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>164,800</u>	<u>1,103,300</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Building Rehab/Relocation	60,000	164,800	1,103,300	0	0	0
Vehicle & Equipment Purchases						
New Truck	16,000	16,500	0	0	0	0
Woodchipper or Firebox	<u>20,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	36,000	16,500	0	0	0	0
District Security						
Cyber Security	0	61,800	0	0	45,000	0
Phase 1- complete	0	0	0	0	0	0
Phase 2	48,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>61,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	48,000	61,800	0	0	0	0
Total Capital Improvements	1,177,000	3,191,600	4,703,000	1,860,400	1,350,600	1,738,900
Total Net Revenues	(12,100)	5,356,900	(3,654,500)	(811,900)	(302,100)	(690,400)
Ending Balance	1,950,300	7,307,200	3,652,700	2,840,800	2,538,700	1,848,300

Table 11: Water Operating Cash Flows – OPTION 3: \$8M
Town of Discovery Bay
Water Rate Study

Line	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
1 Beginning Operating Balance	\$756,000	\$1,533,000	\$2,366,600	\$2,192,800	\$1,946,700	\$1,685,500
2						
3 Proposed Increase		1.75%	1.75%	1.75%	1.75%	1.75%
4						
5 Revenues						
6 Rate Revenue	4,191,000	4,264,000	4,339,000	4,415,000	4,492,000	4,571,000
7 New Customers	<u>20,000</u>	<u>26,600</u>	<u>33,300</u>	<u>40,000</u>	<u>46,900</u>	<u>54,100</u>
8 Rate Rev Subtotal	4,211,000	4,290,600	4,372,300	4,455,000	4,538,900	4,625,100
9 Less Delinquency (2%)	(91,000)	(85,000)	(87,000)	(88,000)	(90,000)	(91,000)
10 Vacant Parcel	12,000	12,000	12,000	12,000	12,000	12,000
11 Meter Reimbursements	336,000	336,000	336,000	336,000	336,000	336,000
12 Other & Misc	<u>22,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>	<u>27,000</u>
13 Total Revenues	4,490,000	4,580,600	4,660,300	4,742,000	4,823,900	4,909,100
14						
15 % increase in operating expenses		budget	3.0%	3.0%	3.0%	3.0%
16 Expenses						
17 Operating Expenses						
18 Admin & Inter Govt. & Board	334,000	451,000	465,000	479,000	493,000	508,000
19 Staffing & Consulting Serv	572,000	862,000	888,000	915,000	942,000	970,000
20 Meters Reading	88,000	93,000	96,000	99,000	102,000	105,000
21 Operations & Maint	331,000	424,000	437,000	450,000	464,000	478,000
22 SGMA Compliance	0	15,000	20,000	21,000	21,000	22,000
23 Utilities [1]	479,000	467,000	481,000	495,000	510,000	525,000
24 Service Contract [2]	<u>651,000</u>	<u>676,000</u>	<u>696,000</u>	<u>780,000</u>	<u>803,000</u>	<u>827,000</u>
25 Total Operating Expenses	2,455,000	2,988,000	3,083,000	3,239,000	3,335,000	3,435,000
26						
27 Net Operating Revenues	2,035,000	1,592,600	1,577,300	1,503,000	1,488,900	1,474,100
28						
29 Debt Service						
30 2012 Bonds Debt Service [3]	88,000	88,000	89,000	88,000	89,000	88,000
31 2017 Bonds Debt Service [3]	170,000	171,000	171,000	170,000	170,000	168,000
32 New Debt Service [4]	<u>0</u>	<u>0</u>	<u>491,100</u>	<u>491,100</u>	<u>491,100</u>	<u>491,100</u>
33 Total Debt Service	258,000	259,000	751,100	749,100	750,100	747,100
34						
35 Debt Service Coverage	7.89	6.15	2.10	2.01	1.98	1.97
36						
37 Total O&M + Debt	2,713,000	3,247,000	3,834,100	3,988,100	4,085,100	4,182,100
38						
39 Total Net Revenues	1,777,000	1,333,600	826,200	753,900	738,800	727,000
40						
41 Transfer to Capital	1,000,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000
42						
43 O&M Ending balance	1,533,000	2,366,600	2,192,800	1,946,700	1,685,500	1,412,500
44						
45 Minimum balance target [5]	818,000	996,000	1,028,000	1,080,000	1,112,000	1,145,000

1 - Chemicals and electric

2 - Assumed increase in FY2023 due to Well #8 coming online

3 - Based on year ended December 1

4 - Estimated by Brandis Tallman based on 30 years at 4.5%

5 - 4 months O&M expenses



Town of Discovery Bay Community Services District 2020 Sewer Rate Study Draft Tables – April 1, 2020



Notes:

Options have been revised since the March 18 Board Meeting:

- Additional projects added (40% water/60% sewer) for the relocation of the District’s office building, District security, and vehicle and equipment purchases
- New debt assumed for FY2020/21. Debt service costs are estimated by Brandis Tallman at 4.5% over 30 years
- Changes to debt and capital projects slightly updated/changed the cost allocation results

4% rate increase approved for FY2020/21 in prior rate study.

Rate design for residential and commercial customers has been adjusted. The prior studies assumed each single family home was discharging 14.4 ccf/month and each multifamily dwelling was discharging 11 ccf/month. Recent flow data at the wastewater treatment plant indicates that the average single family home (2.74 people) discharges 9 ccf/month. The average multifamily home is assumed to have 2 people and is assumed to discharge 6.5 ccf/month. The impact of this change is that single family customers have lower cost responsibility than previously assumed. All customers are proposed to receive rate increases under the options shown here but non-single family residential customers are proposed to receive larger % increases.

System Average Annual Rate Revenue Increases

(total increase to rate revenues; the rates of individual customers will vary based on changes to rate design)

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+18%	+18%	+7%	+2%	+2%
#2: \$5M debt	+5%	+5%	+5%	+1%	+1%
#3: \$7.5M debt	+1.8%	+1.8%	+1.8%	+1.8%	+1.8%
#4: \$10M debt	+1.5%	+1.5%	+1.5%	+1.5%	+1.5%

Cumulative Rate Revenue Increases

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+18%	+39.2%	+49.0%	+52.0%	+55.0%
#2: \$5M debt	+5.0%	+10.3%	+15.8%	+16.9%	+18.1%
#3: \$7.5M debt	+1.8%	+3.6%	+5.5%	+7.4%	+9.3%
#4: \$10M debt	+1.5%	+3.0%	+4.6%	+6.1%	+7.7%

Debt Service Coverage Ratio (combined ratio for 2012, 2017, and new debt)

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	3.22	4.33	4.81	4.92	5.05
#2: \$5M debt	2.51	2.15	2.34	2.35	2.35
#3: \$7.5M debt	2.34	1.69	1.72	1.75	1.78
#4: \$10M debt	2.33	1.52	1.54	1.55	1.56

**Table 1: Summary of Capital Funding Sources
Town of Discovery Bay
Wastewater Rate Study**

	OPTION 1 No Debt	OPTION 2 \$5M	OPTION 3 \$7.5M	OPTION 4 \$10M
Revenue Sources				
Existing Capital Reserves	\$271,800	\$271,800	\$271,800	\$121,800
Excess Operating Reserves	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000
Capacity Fees	\$769,900	\$769,900	\$769,900	\$769,900
Rate Revenues	\$15,050,000	\$10,050,000	\$7,550,000	\$5,200,000
New Debt	<u>\$0</u>	<u>\$5,000,000</u>	<u>\$7,500,000</u>	<u>\$10,000,000</u>
Total Revenues	\$19,591,700	\$19,591,700	\$19,591,700	\$19,591,700
Total Capital Projects	\$19,591,700	\$19,591,700	\$19,591,700	\$19,591,700

**Table 2: Reserves
Town of Discovery Bay
Wastewater Rate Study**

Reserves	FY2018/19 Estimate	Water	Wastewater
Water & Wastewater Operating Reserves	\$5,142,601	\$755,828	\$4,386,773
Emergency Reserves	\$3,001,000	\$1,200,400	\$1,800,600
Sewer Infrastructure Replacement Fund	\$1,550,000	\$0	\$1,550,000
Pumps/Motors Replacement Fund	\$390,000	\$156,000	\$234,000
Water Infrastructure Replacement Fund	\$859,143	\$418,728	\$0
Generators Replacement Fund	\$175,000	\$70,000	\$105,000
Facilities & Vehicles Replacement Fund	\$310,852	\$117,426	\$193,426
Operating Reserves Total	\$5,142,601	\$755,828	\$4,386,773
Emergency Reserves	\$3,001,000	\$1,200,400	\$1,800,600
Infrastructure Replacement Total	\$2,844,580	\$762,154	\$2,082,426
Total Reserves	\$10,988,181	\$2,718,382	\$8,269,799

Table 3: Proposed Wastewater Rates and Charges - OPTION 1: No Debt
Town of Discovery Bay
Wastewater Rate Study

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU	\$82.55	\$990.63	\$96.73	\$1,160.76	\$114.15	\$1,369.80	\$122.14	\$1,465.68	\$124.58	\$1,494.96	\$127.07	\$1,524.84
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$73.06	\$876.78	\$86.22	\$1,034.59	\$91.21	\$1,094.51	\$96.49	\$1,157.90	\$102.08	\$1,224.96
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
Nonresidential Metered	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.766		\$7.984		\$8.965		\$10.066		\$11.303	
Restaurants/Bars/Dining Facilities	\$16.793		\$19.816		\$23.383		\$25.495		\$27.799		\$30.310	
Schools	\$5.161		\$6.090		\$7.186		\$8.103		\$9.138		\$10.304	
Other Domestic Strength Users	\$5.734		\$6.766		\$7.984		\$8.965		\$10.066		\$11.303	

DU = Dwelling Unit
ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU			17%	17%	18%	18%	7%	7%	2%	2%	2%	2%
Multiple Family/Condos - Each DU			18%	18%	18%	18%	6%	6%	6%	6%	6%	6%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Nonresidential Metered			Use (\$/ccf)									
Business/Government/Clubs			18%		18%		12%		12%		12%	
Restaurants/Bars/Dining Facilities			18%		18%		9%		9%		9%	
Schools			18%		18%		13%		13%		13%	
Other Domestic Strength Users			18%		18%		12%		12%		12%	

DU = Dwelling Unit
ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

Table 4: Wastewater Capital Cash Flows - OPTION 1: No Debt

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>7,080,800</u>	<u>958,200</u>	<u>26,200</u>	<u>609,900</u>
Beginning Balance	3,883,000	6,114,900	8,881,400	2,758,800	1,826,800	2,410,500
Revenues						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	4,000,000	4,000,000	4,050,000	1,500,000	1,500,000
New Debt Proceeds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenues	3,668,400	4,120,300	4,120,300	4,170,300	1,620,300	1,620,300
Capital Improvements						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
Lift Stations						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Lift Stations	0	154,500	212,200	0	0	0
Clarifier Rehab						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Clarifier Rehab	5,000	5,200	159,100	0	336,500	0
Additional Projects and Maintenance						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Additional Projects and Maintenance	640,000	113,300	244,000	245,900	148,600	0
Other Master Plan Projects						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
Total Other Master Plan Projects	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
Building Rehab or Relocation						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Relocation	90,000	247,200	1,655,000	0	0	0
Vehicle & Equipment Purchases						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	54,000	24,700	0	0	0	0
District Security						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	72,000	185,400	0	0	67,500	0
Total Capital Improvements	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
Total Net Revenues	2,231,900	2,766,500	(6,122,600)	(932,000)	583,700	1,200,700
Ending Balance	6,114,900	8,881,400	2,758,800	1,826,800	2,410,500	3,611,200

**Table 5: Wastewater Operating Cash Flows – OPTION 1: No Debt
Town of Discovery Bay
Wastewater Rate Study**

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Beginning balance	\$4,387,000	\$3,326,400	\$1,763,600	\$1,424,400	\$1,555,000	\$4,368,200
Rate Increase		18.00%	18.00%	7.00%	2.00%	2.00%
Revenues						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	7,105,000	8,383,900	8,970,800	9,150,200	9,333,200
New Customers	0	(47,000)	(55,000)	(56,000)	(30,000)	(3,000)
Vacant	13,900	27,900	46,600	64,500	80,700	97,600
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
Total revenues	6,312,400	7,363,200	8,652,800	9,256,600	9,478,200	9,705,100
% increase in expenses			3.0%	3.0%	3.0%	3.0%
Expenses						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	3,537,200	4,758,800	5,277,600	5,412,200	5,550,100
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt [2]	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Debt Service	1,101,000	1,100,000	1,098,000	1,097,000	1,099,000	1,098,000
Debt Service Coverage	3.22	3.22	4.33	4.81	4.92	5.05
Total Expenses	3,873,000	4,926,000	4,992,000	5,076,000	5,165,000	5,253,000
Net Revenues	2,439,400	2,437,200	3,660,800	4,180,600	4,313,200	4,452,100
Transfer to Capital Fund	3,500,000	4,000,000	4,000,000	4,050,000	1,500,000	1,500,000
O&M Ending balance	3,326,400	1,763,600	1,424,400	1,555,000	4,368,200	7,320,300
O&M Minimum balance target [3]	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

Table 6: Proposed Wastewater Rates and Charges - OPTION 2: \$5M

**Town of Discovery Bay
Wastewater Rate Study**

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU	\$82.55	\$990.63	\$86.17	\$1,034.04	\$90.48	\$1,085.76	\$95.00	\$1,140.00	\$95.95	\$1,151.40	\$96.91	\$1,162.92
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$64.93	\$779.22	\$68.10	\$817.17	\$71.41	\$856.97	\$74.89	\$898.71	\$78.54	\$942.48
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
Nonresidential Metered	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.194		\$6.692		\$7.229		\$7.810		\$8.437	
Restaurants/Bars/Dining Facilities	\$16.793		\$17.790		\$18.846		\$19.965		\$21.150		\$22.405	
Schools	\$5.161		\$5.590		\$6.055		\$6.558		\$7.103		\$7.693	
Other Domestic Strength Users	\$5.734		\$6.194		\$6.692		\$7.229		\$7.810		\$8.437	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU			4%	4%	5%	5%	5%	5%	1%	1%	1%	1%
Multiple Family/Condos - Each DU			5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Nonresidential Metered			Use (\$/ccf)									
Business/Government/Clubs			8%		8%		8%		8%		8%	
Restaurants/Bars/Dining Facilities			6%		6%		6%		6%		6%	
Schools			8%		8%		8%		8%		8%	
Other Domestic Strength Users			8%		8%		8%		8%		8%	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

Table 7: Wastewater Capital Cash Flows - OPTION 2: \$5M

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>10,080,800</u>	<u>2,458,200</u>	<u>26,200</u>	<u>609,900</u>
Beginning Balance	3,883,000	6,114,900	11,881,400	4,258,800	1,826,800	2,410,500
Revenues						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	2,000,000	2,500,000	2,550,000	1,500,000	1,500,000
New Debt Proceeds	<u>0</u>	<u>5,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenues	3,668,400	7,120,300	2,620,300	2,670,300	1,620,300	1,620,300
Capital Improvements						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
Lift Stations						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Lift Stations	0	154,500	212,200	0	0	0
Clarifier Rehab						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Clarifier Rehab	5,000	5,200	159,100	0	336,500	0
Additional Projects and Maintenance						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Additional Projects and Maintenance	640,000	113,300	244,000	245,900	148,600	0
Other Master Plan Projects						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
Total Other Master Plan Projects	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
Building Rehab or Relocation						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Relocation	90,000	247,200	1,655,000	0	0	0
Vehicle & Equipment Purchases						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	54,000	24,700	0	0	0	0
District Security						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	72,000	185,400	0	0	67,500	0
Total Capital Improvements	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
Total Net Revenues	2,231,900	5,766,500	(7,622,600)	(2,432,000)	583,700	1,200,700
Ending Balance	6,114,900	11,881,400	4,258,800	1,826,800	2,410,500	3,611,200

Table 8: Wastewater Operating Cash Flows – OPTION 2: \$5M
Town of Discovery Bay
Wastewater Rate Study

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Beginning balance	\$4,387,000	\$3,326,400	\$2,991,800	\$2,112,400	\$1,445,200	\$1,836,700
Rate Increase		5.00%	5.00%	5.00%	1.00%	1.00%
Revenues						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	6,322,300	6,638,400	6,970,300	7,040,000	7,110,400
New Customers	0	(33,000)	(33,000)	(32,000)	(16,000)	0
Vacant	13,900	24,800	36,900	50,200	62,200	74,400
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
Total revenues	6,312,400	6,591,400	6,919,600	7,265,800	7,363,500	7,462,100
% increase in expenses			3.0%	3.0%	3.0%	3.0%
Expenses						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	2,765,400	3,025,600	3,286,800	3,297,500	3,307,100
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt [2]	<u>0</u>	<u>0</u>	<u>307,000</u>	<u>307,000</u>	<u>307,000</u>	<u>307,000</u>
Total Debt Service	1,101,000	1,100,000	1,405,000	1,404,000	1,406,000	1,405,000
Debt Service Coverage	3.22	2.51	2.15	2.34	2.35	2.35
Total Expenses	3,873,000	4,926,000	5,299,000	5,383,000	5,472,000	5,560,000
Net Revenues	2,439,400	1,665,400	1,620,600	1,882,800	1,891,500	1,902,100
Transfer to Capital Fund	3,500,000	2,000,000	2,500,000	2,550,000	1,500,000	1,500,000
O&M Ending balance	3,326,400	2,991,800	2,112,400	1,445,200	1,836,700	2,238,800
O&M Minimum balance target [3]	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

Table 9: Proposed Wastewater Rates and Charges - OPTION 3: \$7.5M
Town of Discovery Bay
Wastewater Rate Study

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU	\$82.55	\$990.63	\$83.52	\$1,002.24	\$85.02	\$1,020.24	\$86.55	\$1,038.60	\$88.11	\$1,057.32	\$89.70	\$1,076.40
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$64.00	\$768.01	\$66.15	\$793.82	\$68.38	\$820.51	\$70.67	\$848.09	\$73.05	\$876.60
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
Nonresidential Metered	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.083		\$6.453		\$6.846		\$7.263		\$7.705	
Restaurants/Bars/Dining Facilities	\$16.793		\$17.454		\$18.141		\$18.855		\$19.598		\$20.369	
Schools	\$5.161		\$5.491		\$5.843		\$6.217		\$6.615		\$7.039	
Other Domestic Strength Users	\$5.734		\$6.083		\$6.453		\$6.846		\$7.263		\$7.705	

DU = Dwelling Unit
ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU			1.2%	1.2%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Multiple Family/Condos - Each DU			3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Nonresidential Metered			Use (\$/ccf)									
Business/Government/Clubs			6%		6%		6%		6%		6%	
Restaurants/Bars/Dining Facilities			4%		4%		4%		4%		4%	
Schools			6%		6%		6%		6%		6%	
Other Domestic Strength Users			6%		6%		6%		6%		6%	

DU = Dwelling Unit
ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

Table 10: Wastewater Capital Cash Flows - OPTION 3: \$7.5M

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>12,130,800</u>	<u>3,508,200</u>	<u>26,200</u>	<u>609,900</u>
Beginning Balance	3,883,000	6,114,900	13,931,400	5,308,800	1,826,800	2,410,500
Revenues						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	1,550,000	1,500,000	1,500,000	1,500,000	1,500,000
New Debt Proceeds	<u>0</u>	<u>7,500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenues	3,668,400	9,170,300	1,620,300	1,620,300	1,620,300	1,620,300
Capital Improvements						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
Lift Stations						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Lift Stations	0	154,500	212,200	0	0	0
Clarifier Rehab						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Clarifier Rehab	5,000	5,200	159,100	0	336,500	0
Additional Projects and Maintenance						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Additional Projects and Maintenance	640,000	113,300	244,000	245,900	148,600	0
Other Master Plan Projects						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
Total Other Master Plan Projects	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
Building Rehab or Relocation						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Relocation	90,000	247,200	1,655,000	0	0	0
Vehicle & Equipment Purchases						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	54,000	24,700	0	0	0	0
District Security						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	72,000	185,400	0	0	67,500	0
Total Capital Improvements	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
Total Net Revenues	2,231,900	7,816,500	(8,622,600)	(3,482,000)	583,700	1,200,700
Ending Balance	6,114,900	13,931,400	5,308,800	1,826,800	2,410,500	3,611,200

Table 11: Wastewater Operating Cash Flows – OPTION 3: \$7.5M
Town of Discovery Bay
Wastewater Rate Study

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Beginning balance	\$4,387,000	\$3,326,400	\$3,252,400	\$2,828,900	\$2,450,700	\$2,117,200
Rate Increase		1.80%	1.80%	1.80%	1.80%	1.80%
Revenues						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	6,129,600	6,239,900	6,352,200	6,466,500	6,582,900
New Customers	0	(29,000)	(23,000)	(17,000)	(9,000)	(2,000)
Vacant	13,900	24,100	34,700	45,700	57,100	68,900
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
Total revenues	6,312,400	6,402,000	6,528,900	6,658,200	6,791,900	6,927,100
% increase in expenses			3.0%	3.0%	3.0%	3.0%
Expenses						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	2,576,000	2,634,900	2,679,200	2,725,900	2,772,100
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt [2]	<u>0</u>	<u>0</u>	<u>460,400</u>	<u>460,400</u>	<u>460,400</u>	<u>460,400</u>
Total Debt Service	1,101,000	1,100,000	1,558,400	1,557,400	1,559,400	1,558,400
Debt Service Coverage	3.22	2.34	1.69	1.72	1.75	1.78
Total Expenses	3,873,000	4,926,000	5,452,400	5,536,400	5,625,400	5,713,400
Net Revenues	2,439,400	1,476,000	1,076,500	1,121,800	1,166,500	1,213,700
Transfer to Capital Fund	3,500,000	1,550,000	1,500,000	1,500,000	1,500,000	1,500,000
O&M Ending balance	3,326,400	3,252,400	2,828,900	2,450,700	2,117,200	1,830,900
O&M Minimum balance target [3]	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

Table 12: Proposed Wastewater Rates and Charges - OPTION 4: \$10M

**Town of Discovery Bay
Wastewater Rate Study**

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU	\$82.55	\$990.63	\$83.34	\$1,000.08	\$84.59	\$1,015.08	\$85.86	\$1,030.32	\$87.15	\$1,045.80	\$88.46	\$1,061.52
Multiple Family/Condos - Each DU	\$61.92	\$743.03	\$63.89	\$766.64	\$65.92	\$790.99	\$68.01	\$816.12	\$70.17	\$842.05	\$72.40	\$868.80
Vacant	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00	\$18.67	\$224.00
Nonresidential Metered	Use (\$/ccf)											
Business/Government/Clubs	\$5.734		\$6.050		\$6.384		\$6.737		\$7.109		\$7.501	
Restaurants/Bars/Dining Facilities	\$16.793		\$17.337		\$17.899		\$18.479		\$19.078		\$19.696	
Schools	\$5.161		\$5.462		\$5.781		\$6.118		\$6.475		\$6.853	
Other Domestic Strength Users	\$5.734		\$6.050		\$6.384		\$6.737		\$7.109		\$7.501	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

WASTEWATER	Proposed FY 2019/20		Proposed FY 2020/21		Proposed FY 2021/22		Proposed FY 2022/23		Proposed FY 2023/24		Proposed FY 2024/25	
	Monthly (\$/month)	Yearly (\$/year)										
Residential Unmetered												
Single Family - Each DU			1.0%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Multiple Family/Condos - Each DU			3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Vacant			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Nonresidential Metered			Use (\$/ccf)									
Business/Government/Clubs			6%		6%		6%		6%		6%	
Restaurants/Bars/Dining Facilities			3%		3%		3%		3%		3%	
Schools			6%		6%		6%		6%		6%	
Other Domestic Strength Users			6%		6%		6%		6%		6%	

DU = Dwelling Unit

ccf = 100 cubic feet = 748 gallons

Note: This rate plan does not designate which projects are repair and rehabilitation projects and which are expansion projects to meet the needs of new development. Capacity fee revenues can only be used to fund expansion projects and are estimated based on 34 EDUs in FY2019/20 and 10 new EDUs per year thereafter. Project costs escalated by 3% annually.

Table 13: Wastewater Capital Cash Flows - OPTION 4: \$10M

	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Emergency Reserves	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600	1,800,600
Infrastructure Replacement	<u>2,082,400</u>	<u>4,314,300</u>	<u>14,080,800</u>	<u>4,958,200</u>	<u>976,200</u>	<u>1,159,900</u>
Beginning Balance	3,883,000	6,114,900	15,881,400	6,758,800	2,776,800	2,960,500
Revenues						
Capacity Fees (\$12,030/EDU)	168,400	120,300	120,300	120,300	120,300	120,300
Transfer from Operating	3,500,000	1,000,000	1,000,000	1,000,000	1,100,000	1,100,000
New Debt Proceeds	<u>0</u>	<u>10,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenues	3,668,400	11,120,300	1,120,300	1,120,300	1,220,300	1,220,300
Capital Improvements						
WWTP Plant 1 Refurbishment	192,100	183,500	3,707,500	390,200	0	0
Denitrification	383,400	440,000	4,265,100	4,466,200	0	0
Lift Stations						
Lift Stations J, S, H	0	154,500	0	0	0	0
Lift Stations A, C, D, E	<u>0</u>	<u>0</u>	<u>212,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Lift Stations	0	154,500	212,200	0	0	0
Clarifier Rehab						
Plant 2 Clarifier #3 Rehabilitation	5,000	5,200	148,500	0	0	0
Clarifier 1 & 2 RAS Pump and Check Valves	0	0	0	0	336,500	0
Clarifier #4 Repair (cement)	<u>0</u>	<u>0</u>	<u>10,600</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Clarifier Rehab	5,000	5,200	159,100	0	336,500	0
Additional Projects and Maintenance						
Plant 2 RAS & WAS Pumping System	25,000	0	0	0	148,600	0
Replace Lagoon Dredge & Conduits	0	113,300	0	0	0	0
CCTV Van (portable and push camera)	70,000	0	0	0	0	0
Install Screen Headworks at Plant #2	25,000	0	0	245,900	0	0
Minor Rehab to Piping at Plant #1	20,000	0	244,000	0	0	0
Outfall Diffuser Repairs	<u>500,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Additional Projects and Maintenance	640,000	113,300	244,000	245,900	148,600	0
Other Master Plan Projects						
Emergency Storage Drain to Pump Sta. W	0	0	0	0	0	86,900
Solids Handling Improvements	0	0	0	0	0	208,700
WAS Pumps and Check Valves Replacement	0	0	0	0	0	124,000
Collection System Pump Stations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>202,600</u>	<u>0</u>
Total Other Master Plan Projects	0	0	0	0	202,600	419,600
Mainline Piping Replacement	0	0	0	0	281,400	0
Building Rehab or Relocation						
Island Building by Well 1B	90,000	0	0	0	0	0
Move District Main Office Building	<u>0</u>	<u>247,200</u>	<u>1,655,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Relocation	90,000	247,200	1,655,000	0	0	0
Vehicle & Equipment Purchases						
New Truck	24,000	24,700	0	0	0	0
Woodchipper or Firebox	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Vehicle & Equipment	54,000	24,700	0	0	0	0
District Security						
Cyber Security	0	92,700	0	0	67,500	0
Phase 1	0	0	0	0	0	0
Phase 2	72,000	0	0	0	0	0
Phase 3	<u>0</u>	<u>92,700</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total District Security	72,000	185,400	0	0	67,500	0
Total Capital Improvements	1,436,500	1,353,800	10,242,900	5,102,300	1,036,600	419,600
Total Net Revenues	2,231,900	9,766,500	(9,122,600)	(3,982,000)	183,700	800,700
Ending Balance	6,114,900	15,881,400	6,758,800	2,776,800	2,960,500	3,761,200

Table 14: Wastewater Operating Cash Flows – OPTION 4: \$10M
Town of Discovery Bay
Wastewater Rate Study

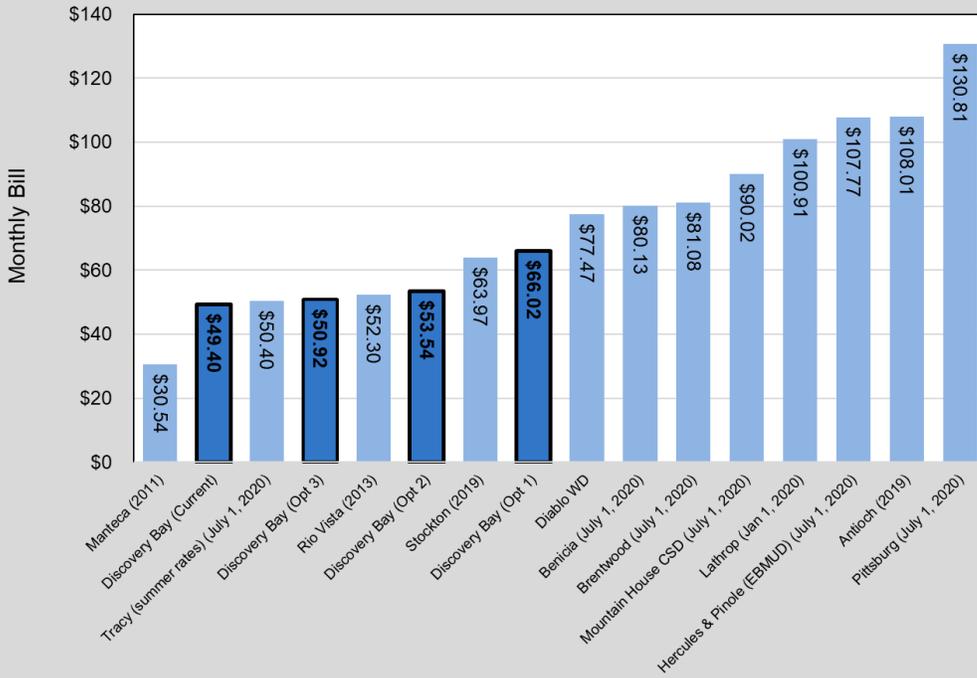
	Current FY2019/20	Projected FY2020/21	Projected FY2021/22	Projected FY2022/23	Projected FY2023/24	Projected FY2024/25
Beginning balance	\$4,387,000	\$3,326,400	\$3,788,200	\$3,678,300	\$3,595,200	\$3,435,700
Rate Increase		1.50%	1.50%	1.50%	1.50%	1.50%
Revenues						
Wastewater service						
Zone 9 Reimbursement	243,000	243,000	243,000	243,000	243,000	243,000
Other & Misc	17,300	17,300	17,300	17,300	17,300	17,300
Property Taxes (unmetered)	6,021,200	6,111,500	6,203,200	6,296,200	6,390,600	6,486,500
New Customers	0	(25,000)	(19,000)	(12,000)	(5,000)	0
Vacant	13,900	24,000	34,500	45,300	56,500	67,900
Metered sewer flow	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>	<u>17,000</u>
Total revenues	6,312,400	6,387,800	6,496,000	6,606,800	6,719,400	6,831,700
% increase in expenses			3.0%	3.0%	3.0%	3.0%
Expenses						
Operating Expenses						
Admin & Inter Govt. & Board	332,000	450,000	450,000	464,000	478,000	492,000
Staffing & Consulting Serv	593,000	1,090,000	1,090,000	1,090,000	1,090,000	1,090,000
Operations & Maint	334,000	538,000	554,000	571,000	588,000	606,000
Utilities	536,000	673,000	693,000	714,000	735,000	757,000
Service Contract	<u>977,000</u>	<u>1,075,000</u>	<u>1,107,000</u>	<u>1,140,000</u>	<u>1,175,000</u>	<u>1,210,000</u>
Total Operating Expenses	2,772,000	3,826,000	3,894,000	3,979,000	4,066,000	4,155,000
Net Operating Revenues	3,540,400	2,561,800	2,602,000	2,627,800	2,653,400	2,676,700
Debt Service [1]						
2012 Bonds Debt Service	741,000	743,000	744,000	740,000	745,000	743,000
2017 Bonds Debt Service	360,000	357,000	354,000	357,000	354,000	355,000
New Debt	<u>0</u>	<u>0</u>	<u>613,900</u>	<u>613,900</u>	<u>613,900</u>	<u>613,900</u>
Total Debt Service	1,101,000	1,100,000	1,711,900	1,710,900	1,712,900	1,711,900
Debt Service Coverage	3.22	2.33	1.52	1.54	1.55	1.56
Total Expenses	3,873,000	4,926,000	5,605,900	5,689,900	5,778,900	5,866,900
Net Revenues	2,439,400	1,461,800	890,100	916,900	940,500	964,800
Transfer to Capital Fund	3,500,000	1,000,000	1,000,000	1,000,000	1,100,000	1,100,000
O&M Ending balance	3,326,400	3,788,200	3,678,300	3,595,200	3,435,700	3,300,500
O&M Minimum balance target [3]	924,000	1,275,000	1,298,000	1,326,000	1,355,000	1,385,000

1 - Based on year ended December 1

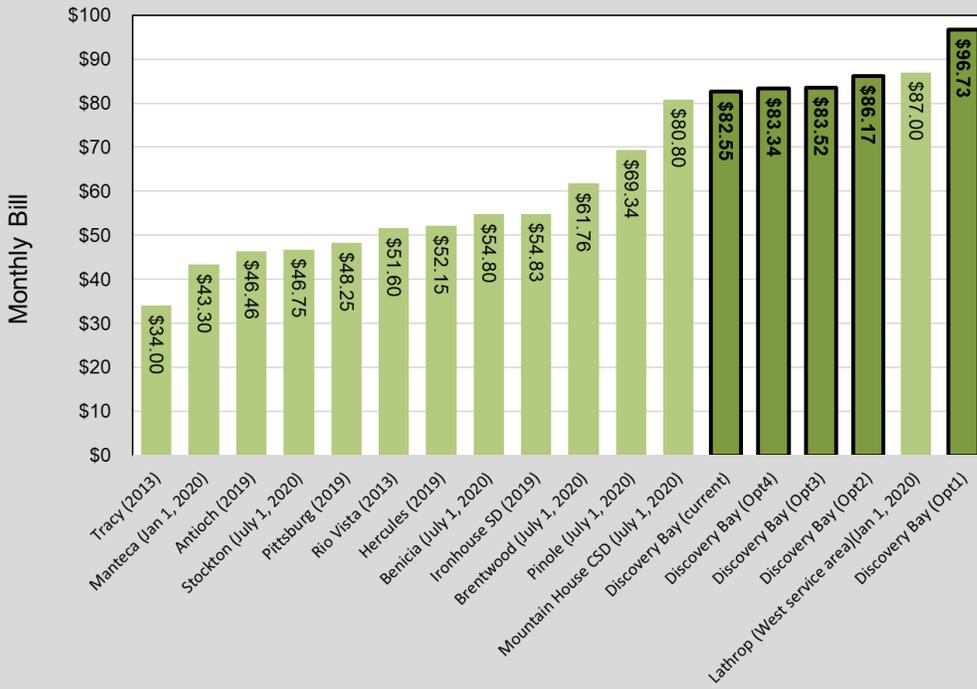
2 - Estimated by Brandis Tallman at 4.5% over 30 years

3 - 4 months O&M expenses

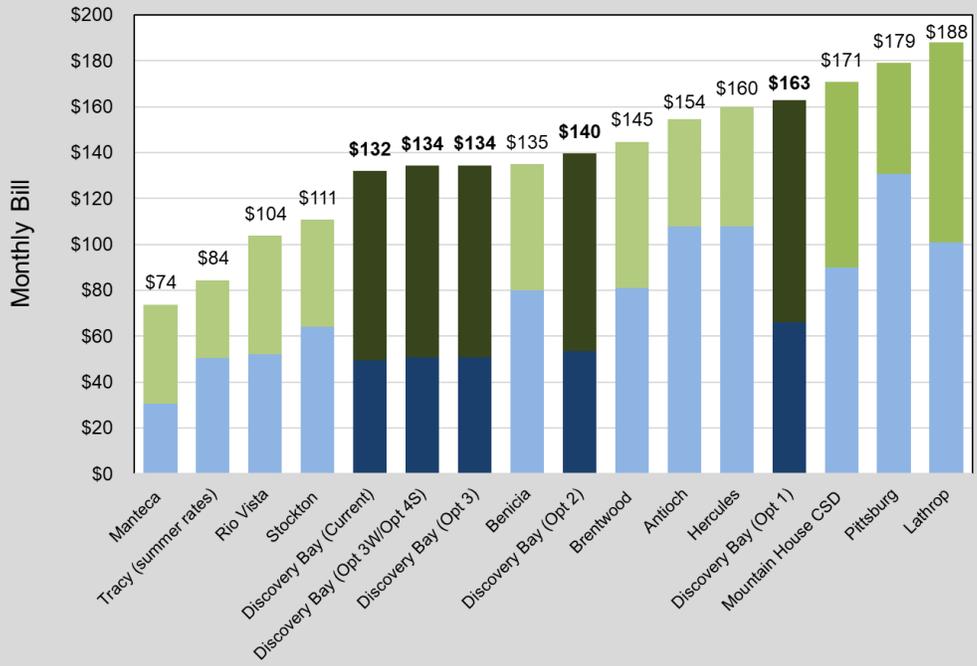
Single Family Residential Water Bill Survey (1" meter, 13 ccf monthly use)



Single Family Residential Wastewater Bill Survey



Single Family Residential Water and Wastewater Bill Survey



Town of Discovery Bay CSD

Water and Wastewater Rate Study



April 1, 2020



LECHOWICZ + TSENG
MUNICIPAL CONSULTANTS

Alison Lechowicz
Project Manager



Background

- Water and sewer rates are subject to Proposition 218
 - Rates must be based on the reasonable cost of service
 - Rates must proportionally recover costs based on how customers take service
 - Covers rates over a maximum 5-year period
 - Procedural requirements: conduct a rate study, mail a notice to property owners, hold a hearing a minimum of 45 days later, protest vote

- Water and sewer utilities are enterprise funds



Rate Study Goals

- Update the cost of service
- Collect sufficient funds to cover:
 - Operations
 - Debt obligations
 - Repair and replacement of infrastructure
 - Funding of reserves for emergencies
- Meet legal requirements
 - Prop 218
 - Water conservation requirements
- New rates effective July 1



Current Financial Position

- Water Fund
 - Transition to metered service in 2017
 - Reserves of about \$2.7 million
- Sewer Fund
 - Reserves of about \$8.3 million
- 2012 and 2017 Outstanding Bonds
- Both utilities have capacity to take on new debt and/or cash fund new projects



Water Capital Projects

- Funding Capital Improvement Plan will drive rate increases
- Town expects to fund \$14 million total through FY2024/25 including relocation of the Office Building

Project Categories	6-Year Total	% of Total
Distribution/Pipeline Replacements	6,079,600	43%
Water Supply Capacity	4,774,800	34%
Building Rehab and Relocation	1,328,100	9%
Upgrades for Existing Water Supply	1,299,900	9%
Master Plans	324,500	2%
Security/Cyber Security	109,800	1%
Vehicle & Equipment Purchases	52,500	0%
Additional Distribution Improvements	<u>52,300</u>	<u>0%</u>
Total Projects	14,021,500	100%



Water Project Funding

- Range of options from no debt to \$8M in debt financing
- All options use \$1M in current, available operating reserves
- All options maintain an emergency reserve of \$1.2M and 4 months of operating costs
- All options maintain a debt coverage ratio greater than 1.25 times the annual payment (typical threshold)
- Debt service costs estimated by Brandis Tallman at 4.5% over 30 years



Water Revenue Impacts

System Average Annual Rate Revenue Increases

(total increase to rate revenues; the rates of individual customers will vary based on changes to rate design)

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+32%	+32%	+1%	+1%	+1%
#2: \$4M debt	+7%	+7%	+7%	+7%	+7%
#3: \$8M debt	+1.75%	+1.75%	+1.75%	+1.75%	+1.75%

Cumulative Rate Revenue Increases

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+32%	+74.2%	+76.0%	+77.7%	+79.5%
#2: \$4M debt	+7%	+14.5%	+22.5%	+31.1%	+40.3%
#3: \$8M debt	+1.75%	+3.53%	+5.34%	+7.19%	+9.06%

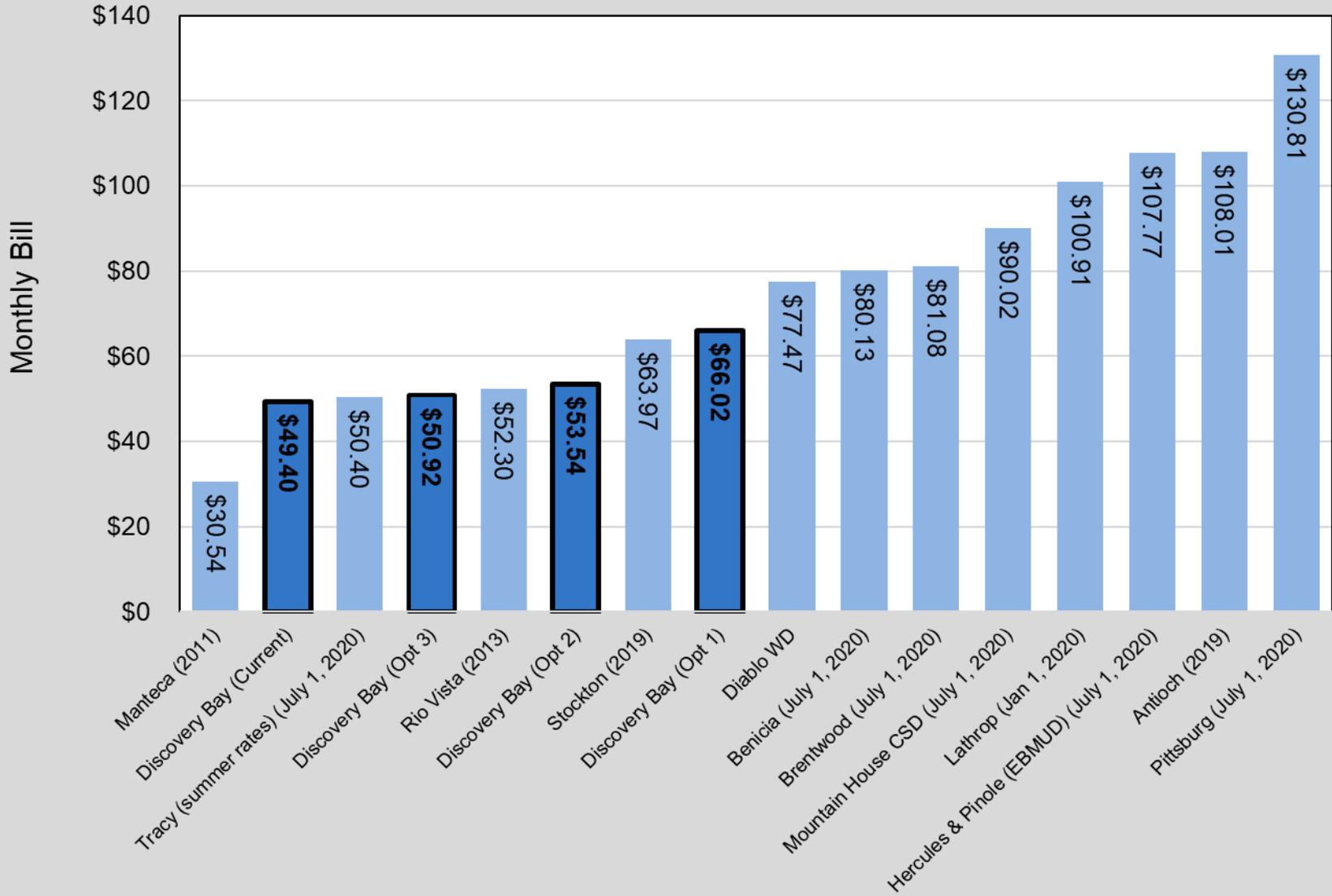


Water Rate Impacts

- Proposed rates reflect the financing options
- Rates also reflect slight water conservation of 1 ccf/month for the typical single family customers over the next 5 years
- Not every customer will receive exactly the same % rate change due to cost allocation results (i.e. recovery of costs through fixed and volume rates)
- Typical bill of a residential customer – 1” meter and 13 ccf/month

Option	Current	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	\$49.40	\$66.02	\$87.91	\$89.30	\$90.89	\$92.97
#2: \$4M debt	\$49.40	\$53.54	\$57.79	\$62.20	\$67.06	\$72.68
#3: \$8M debt	\$49.40	\$50.92	\$52.26	\$53.49	\$54.84	\$56.52

Single Family Residential Water Bill Survey (1" meter, 13 ccf monthly use)





Wastewater Fund Capital Projects

- Town expects to fund \$19.6 million total through FY2024/25 including relocation of the Office Building

Project Categories	6-Year Total	% of Total
Denitrification	9,554,700	49%
WWTP Plant 1 Refurbishment	4,473,300	23%
Building Rehab and Relocation	1,992,200	10%
Additional Projects and Maintenance	1,391,800	7%
Other Master Plan Projects	622,200	3%
Clarifier Rehab	505,800	3%
Lift Stations	366,700	2%
Security/Cyber Security	324,900	2%
Mainline Piping Replacement	281,400	1%
Vehicle & Equipment Purchases	<u>78,700</u>	<u>0%</u>
Total Projects	19,591,700	100%



Wastewater Project Funding

- Range of options from no debt to \$10M in debt financing
- All options use \$3.5M in current, available operating reserves
- All options maintain an emergency reserve of \$1.8M and 4 months of operating costs
- All options maintain a debt coverage ratio greater than 1.25 times the annual payment (typical threshold)
- Debt service costs estimated by Brandis Tallman at 4.5% over 30 years



Wastewater Revenue Impacts

System Average Annual Rate Revenue Increases

(total increase to rate revenues; the rates of individual customers will vary based on changes to rate design)

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+18%	+18%	+7%	+2%	+2%
#2: \$5M debt	+5%	+5%	+5%	+1%	+1%
#3: \$7.5M debt	+1.8%	+1.8%	+1.8%	+1.8%	+1.8%
#4: \$10M debt	+1.5%	+1.5%	+1.5%	+1.5%	+1.5%

Cumulative Rate Revenue Increases

Option	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	+18%	+39.2%	+49.0%	+52.0%	+55.0%
#2: \$5M debt	+5.0%	+10.3%	+15.8%	+16.9%	+18.1%
#3: \$7.5M debt	+1.8%	+3.6%	+5.5%	+7.4%	+9.3%
#4: \$10M debt	+1.5%	+3.0%	+4.6%	+6.1%	+7.7%

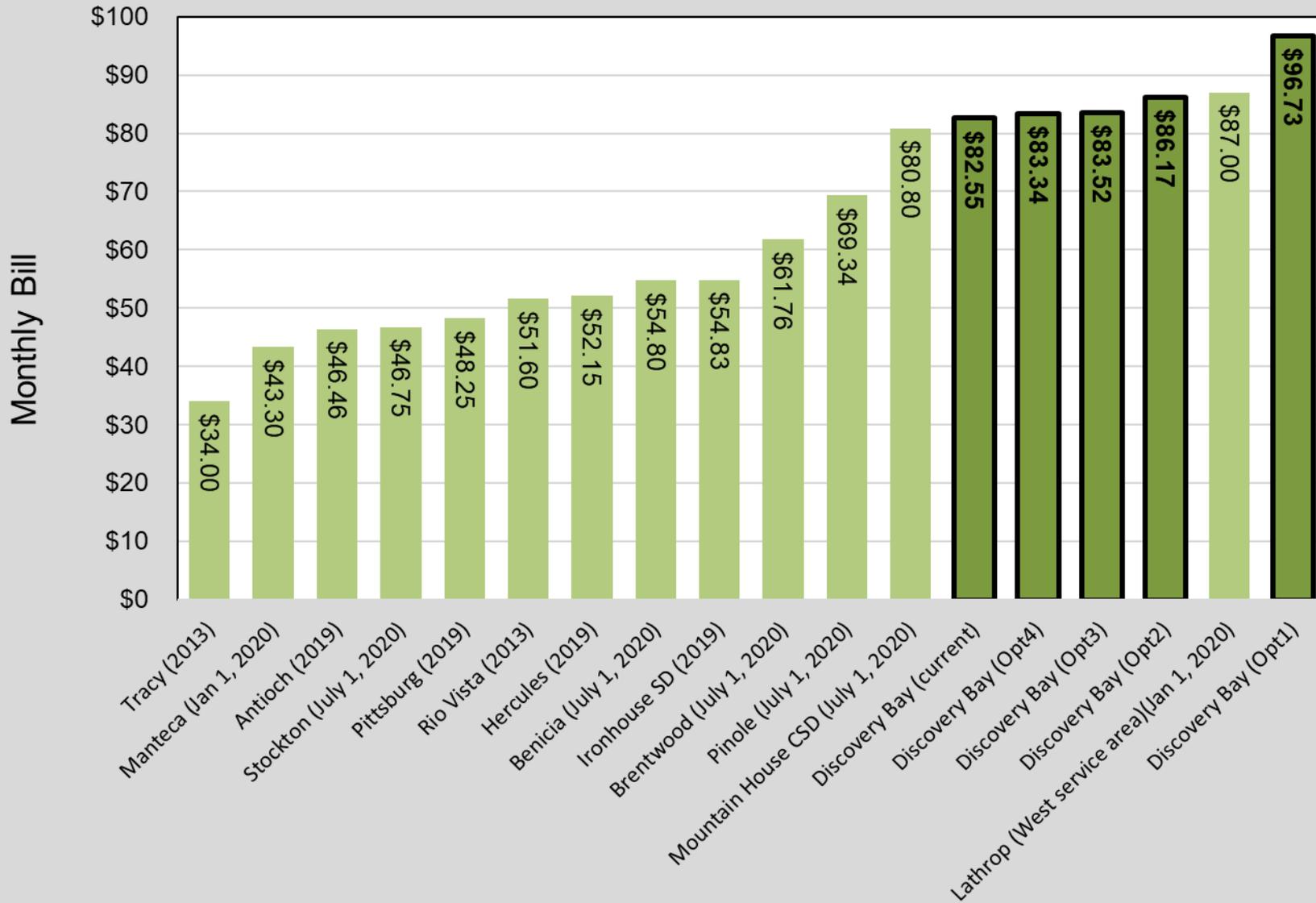


Wastewater Rate Impacts

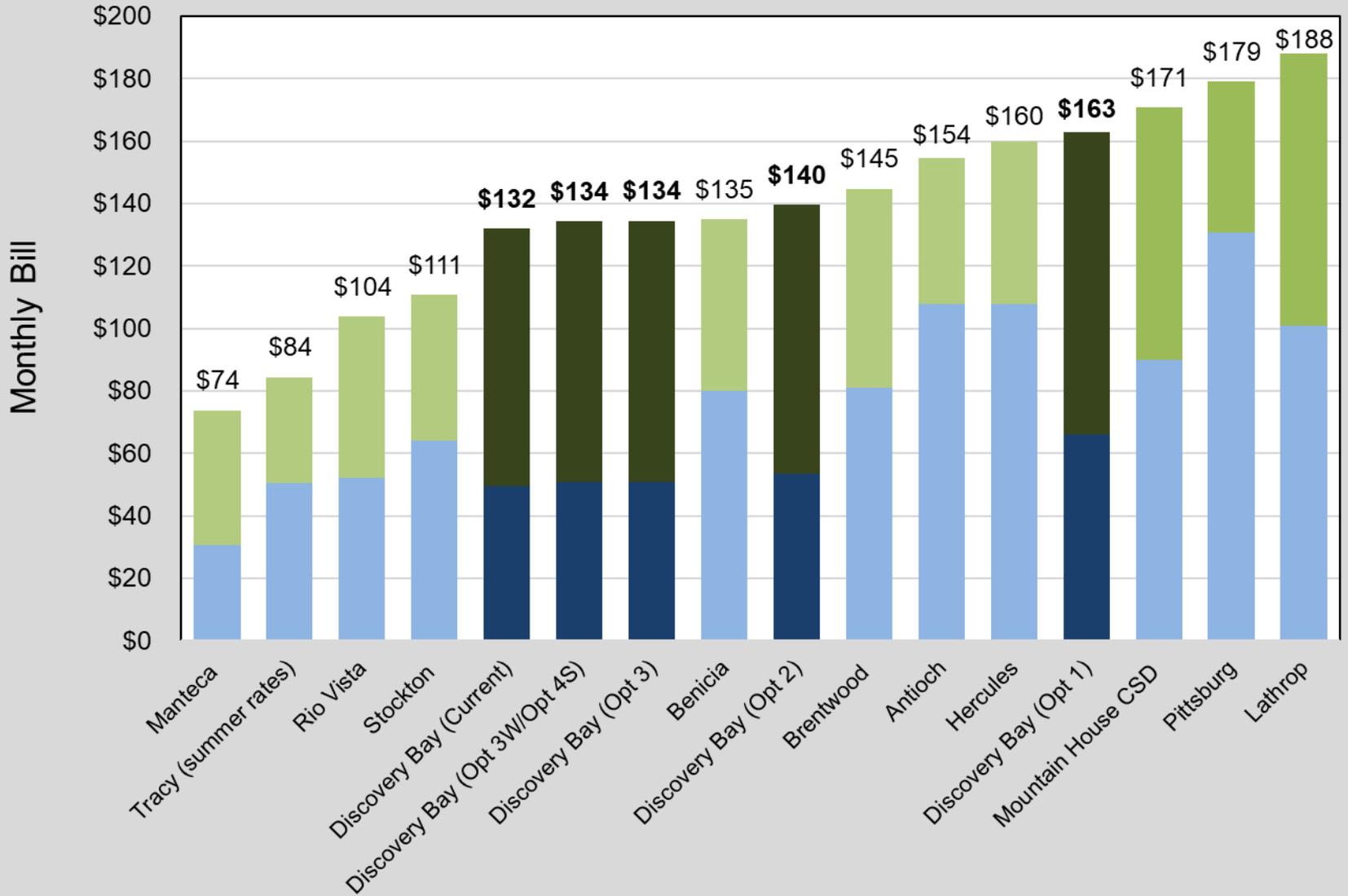
- Proposed rates reflect the financing options selected
- Rates also reflect new sewer flow estimates. Single family residential flow is down from 14 ccf/month to 9 ccf/month. Thus, lower cost responsibility for single family customers and higher costs for non-single family customers.
- Not every customer will receive exactly the same % rate change due to cost allocation results (i.e. recovery of costs through fixed and volume rates)
- Typical bill of a residential customer:

Option	Current	FY2020/21	FY2021/22	FY2022/23	FY2023/24	FY2024/25
#1: No debt	\$82.55	\$96.73	\$114.15	\$122.14	\$124.58	\$127.07
#2: \$5M debt	\$82.55	\$86.17	\$90.48	\$95.00	\$95.95	\$96.91
#3: \$7.5M debt	\$82.55	\$83.52	\$85.02	\$86.55	\$88.11	\$89.70
#4: \$10M debt	\$82.55	\$83.34	\$84.59	\$85.86	\$87.15	\$88.46

Single Family Residential Wastewater Bill Survey



Single Family Residential Water and Wastewater Bill Survey





Rate Study Timeline

- Finance Committee meetings on February 5 and 24
- Presentations to the Board
 - March 18 (Informational)
 - April 1 (select preferred rate option)
- Approve Final Report on April 15
- Proposition 218 notices mailed to customers April 17
 - Customers have the right to protest the water rates, sewer rates, or both
 - Protests must be in writing and be received by the end of the public hearing
 - If more than 50% of property owners protest, rates cannot be implemented
- Public hearing will be held June 3
- If approved, rates will go into effect July 1
- Each year, Board will review the budget and rates (if approved). Board has the option to adopt lower rates without additional hearings.



Questions?





Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

April 1, 2020

Prepared By: Mike Yeraka, Projects Manager
Submitted By: Michael R. Davies, General Manager

MRD

Agenda Title

Discussion and Possible Action to Approve Resolution No. 2020-07, Approving Preparation of Application to LAFCo to Annex Lands Owned by the District Containing the Existing Newport Water Treatment Plant and Wastewater Plant No. 2, Adopting a CEQA Exemption and Directing Filing of the Notice of Exemption.

Recommended Action

Adopt Resolution 2020-07 Authorizing Preparation of an Application to LAFCo to Annex District Property and Adopting a CEQA Notice of Exemption.

Executive Summary

At the February 5, 2020, Meeting the Board authorized Staff to proceed with preparing the necessary documents to apply to LAFCo to annex District Property containing the Newport Water Treatment Plant (1 Acre) and Wastewater Plant No. 2 (70.70 Acres). The District must first comply with CEQA before submitting an application to LAFCo to annex the property. Attached is Resolution 2020-07 which authorizes preparation of the application and adopting the attached Notice of Exemption which was prepared with the assistance of Legal Counsel.

Every year the Town of Discovery Bay (TODB) pays approximately \$11,000 in property taxes on four (4) Parcels we own that are not within our District boundaries. By annexing the parcels to our District we will eliminate the annual \$11,000 in property taxes.

"Continued to the next page"

Specific Board Action:

It is recommended that the Board take the following Action:

- a. Adopt Resolution 2020-07.
- b. Authorize Staff to file the attached Notice of Exemption with the Contra Costa County Clerk's Office.

Fiscal Impact:

Amount Requested: \$15,000

Sufficient Budgeted Funds Available?: Yes in Consulting Services.

Prog/Fund # Category: TBD

Previous Relevant Board Actions for This Item

At the February 5, 2020 Meeting the Board authorized staff to prepare a CEQA document for the project.

Attachments

1. Map of the Areas to be Annexed.
2. Resolution 2020-07
3. Notice of Exemption

AGENDA ITEM: G-2

Discovery Bay CSD Boundary and SOI

Att 2v/Exhibit A



	Discovery Bay CSD
	Discovery Bay CSD SOI
	City Boundaries
	County Urban Limit Line

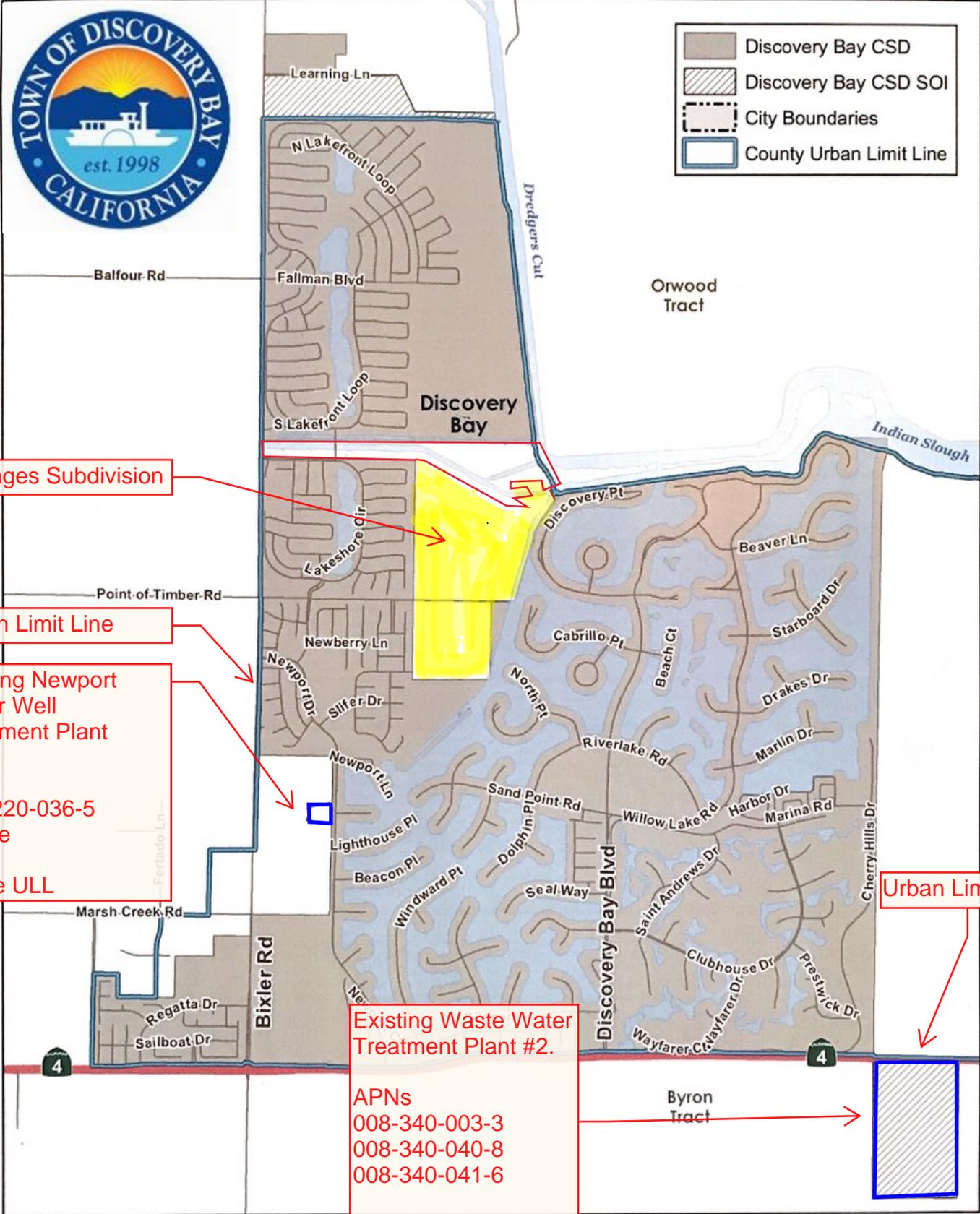
Pantages Subdivision

Urban Limit Line

Existing Newport Water Well Treatment Plant
 APN: 011-220-036-5
 1 Acre
 Inside ULL

Existing Waste Water Treatment Plant #2.
 APNs
 008-340-003-3
 008-340-040-8
 008-340-041-6
 70.70 Acres
 Outside ULL

Urban Limit Line



Map created 06/23/2014
 by Contra Costa County Department of Conservation and Development, GIS Group
 30 Muir Road, Martinez, CA 94553
 37.59 41.791N 122.07 03.756W

This map or dataset was created by the and Development with data from its base data, primarily City Limits, is de tax rate areas. While obligated to use its accuracy. This map contains copyright reproduced in its current state if the so except the County of Contra Costa



**TOWN OF DISCOVERY BAY
COMMUNITY SERVICES DISTRICT**

RESOLUTION 2020-07

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TOWN OF DISCOVERY BAY, APPROVING THE PREPARATION OF AN APPLICATION TO THE CONTRA COSTA COUNTY LOCAL AGENCY FORMATION COMMISSION TO ANNEX LANDS OWNED BY THE DISTRICT, ADOPTING THE COMMON SENCE AND CATEGORICAL EXEMPTIONS FOR THE PURPOSES OF SATISFYING THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AND DIRECTING THE GENERAL MANAGER TO FILE A NOTICE OF EXEMPTION WITH THE CONTRA COSTA COUNTY CLERK.

WHEREAS, the Town of Discovery Bay Community Services District ("District") is a government agency organized and existing under the laws of the State of California; and

WHEREAS, the District currently owns real property containing the existing Newport Water Treatment Plant that is not within the District's current sphere of influence and Wastewater Plant No. 2 that is currently within the District's current sphere of influence, and neither are within the District's current jurisdictional service boundary (the "Property"); and

WHEREAS, it is in the best interest of the District and its constituents to annex the Property into the Town's jurisdictional service boundary (the "Annexation"); and

WHEREAS, Annexation of the Property requires that the District make an application to the Contra Costa County Local Agency Formation Commission ("LAFCO");

WHEREAS, annexations are only considered a "project" for California Environmental Quality Act ("CEQA") purposes where such annexation will have a reasonably foreseeable effect on the environment; and

WHEREAS, the District would be considered the lead agency for CEQA purposes because the District took the first discretionary act in applying for the LAFCO application; and

WHEREAS, the Property is developed to the density allowed by current zoning and any utility services are designed to serve only the existing development; and

WHEREAS, there is no possibility that the Annexation would have a significant effect on the environment as the Annexation does not change any existing use of the Property, does not cause any additional impact to the environment, nor is the Annexation intended to facilitate future development. Rather the Annexation is intended solely to benefit the public interest to include the Property within the District's jurisdictional service boundary; and

WHEREAS, all other legal prerequisites to the adoption of this resolution have been met.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE TOWN OF DISCOVERY BAY COMMUNITY SERVICES DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:

- Section 1: The above recitals are true and correct and are incorporated by reference.
- Section 2: The Board approves the preparation of the application to the Contra Costa County Local Agency Formation Commission for the Annexation of the Property.
- Section 3: The Annexation is exempt from CEQA, in accordance with California Code of Regulations, Title 14, Division 6, Chapter 3, Article 5, Section 15061(b)(3), since it can be seen with certainty there is no possibility that the Annexation would have a significant effect on the environment.
- Section 4: The Annexation is categorically exempt under CEQA pursuant to Section 15319(a) of the Guidelines for CEQA, California Administrative Code of Regulations, Title 14, Title 14, Division 6, Chapter 3, Article 5 because the Property containing the publicly owned structures is developed to the density allowed by current zoning and any utility services are designed to serve only the existing development.
- Section 5: The Board hereby directs the General Manager to prepare and file with the County Clerk of Contra Costa County for posting, a "Notice of Exemption" pursuant to California Administrative Code, Title 14, Chapter 3, Section 15062.

PASSED, APPROVED AND ADOPTED THIS 1ST DAY OF APRIL 2020.

Bill Pease
Board President

I hereby certify that the foregoing Resolution was duly adopted by the Board of Directors of the Town of Discovery Bay Community Services District at a regularly scheduled meeting, held on April 1, 2020, by the following vote of the Board:

- AYES:
- NOES:
- ABSENT:
- ABSTAIN:

Michael R. Davies
Board Secretary

Notice of Exemption

TO: Contra Costa County
Clerk's Office
555 Escobar Street
Martinez, CA 94553

From: Town of Discovery Bay
1800 Willow Lake Rd.
Discovery Bay, CA 94505

Project Title: Annexation of Areas Containing the Existing Newport Water Treatment Plant and Wastewater Plant No. 2

Project Applicant: Town of Discovery Bay, 1800 Willow Lake Road, Discovery Bay, CA 94505

Project Location: 1800 Newport Drv. and 17501 Highway 4, Discovery Bay, CA 94505

Project Location – City: Discovery Bay

Project Location – County: Contra Costa

Description of Nature, Purpose and Beneficiaries of Project:

Annex into the Town of Discovery Bay Community Services District (TODB CSD) district boundary that property described above as 1800 Newport Drv. and 17501 Highway 4, Discovery Bay, CA 94505, located in the unincorporated County of Contra Costa which is where the TODB CSD existing drinking water and wastewater treatment facilities currently exist.

There will be no extension of any services to the existing facilities as part of this project since those services already exist. There will be no construction activities associated with the project.

Name of Public Agency Approving the Project: Town of Discovery Bay Community Services District

Name of Lead Agency Carrying Out the Project: Town of Discovery Bay Community Services District 925-634-1131

Exempt Status: (check one)

Ministerial (Sec. 21080(b)(1); 15268);

Declared Emergency (Sec. 21080(b)(3); 15269(a));

Emergency Project (Sec. 21080(b)(4); 15269(b)(c));

Categorical Exemption. State type and section number: Annexation of Existing Facilities pursuant to Guidelines for CEQA, Regulation Sec. 15319 (a)

Statutory Exemptions. State code number:

Other: Section 15601(b)(3)

Reasons why project is exempt:

Firstly, in accordance with California Code of Regulations, Title 14, Division 6, Chapter 3, Article 5, Section 15061(b)(3) The project is exempt from CEQA since it can be seen with certainty that there is no possibility that the activity of annexing lands owned by the TODB CSD containing existing public facilities into the boundary of the TODB CSD may have a significant effect on the environment. This activity is therefore not subject to CEQA.

Secondly, in accordance with California Code of Regulations, Title 14, Division 6, Chapter 3, Article 5, Section 15319(a), the project is further exempt from CEQA because the project is an annexation to a special district of areas containing existing public structures and the project does not include the extension of any utility services to the existing facilities since those services already exist.

Lead Agency

Contact Person: Mike Davies, General Manager Telephone: 925-634-1131

Attached is the certified document of exemption finding.

Signature: _____ Date: _____ Title: _____

Signed by Lead Agency

Signed by Applicant

Attached:

Resolution 2020-07