TENTATIVE:
SUBJECT TO
REVISION

TOWN OF PALM BEACH

Town Manager's Office

FINANCE AND TAXATION COMMITTEE

TOWN HALL
COUNCIL CHAMBERS-SECOND FLOOR
360 SOUTH COUNTY ROAD

AGENDA

MARCH 16, 2023

9:30 AM

Welcome!

For information regarding this agenda and the procedures for public participation at Finance and Taxation Committee, please refer to the end of this agenda.

I. CALL TO ORDER AND ROLL CALL

Margaret A. Zeidman, Chair
Lew Crampton, Member

II. PLEDGE OF ALLEGIANCE

III. APPROVAL OF AGENDA

IV. COMMUNICATIONS FROM CITIZENS - 3 MINUTE LIMIT PLEASE

V. REGULAR AGENDA

A. New Business

1. Water Study Update
   Robert Miracle, Deputy Town Manager Finance & Administration

VI. ANY OTHER MATTERS

VII. ADJOURNMENT

Please Take Note:

The progress of this meeting may be monitored by visiting the Town's website (townofpalmbeach.com) and clicking on "Meeting Audio" in the left column. If you have questions regarding that feature, please contact the Office of Information Systems (561) 227-6315. The audio recording of the meeting will appear within 24 hours after the conclusion of the meeting.

Disabled persons who need an accommodation in order to participate in the Finance and Taxation Committee meeting are requested to contact the Town Manager's Office at 838-5410 or through the Florida Relay Service by dialing 1-800-955-8770 for voice callers or 1-800-955-8771 for TDD callers, at least two (2) working days before this meeting.

All back-up material for the items listed on the agenda are posted to the Town's website and emailed to all Stay Informed subscribers on the Friday before the Finance and Taxation Committee meeting. To access the back-up materials and/or subscribe to the Stay Informed list, please visit the Town's website (townofpalmbeach.com).

Any citizen is entitled to be heard concerning any matter under the section entitled "Communications from Citizens," subject to the three minute limitation. The public also has the opportunity to speak to any item listed on the agenda, including the consent agenda, at the time the agenda item comes up for discussion.

Any citizen is entitled to be heard on an official agenda item under the section entitled "Public Hearings," subject to the three minute limitation.

Finance and Taxation Committee meetings are public business meetings and, as such, the Committee retains the right to limit discussion on any issue.

TOWN OF PALM BEACH

Finance and Taxation Committee on: March 16, 2023

Section of Agenda

Regular Agenda - New Business

Agenda Title

Water Study Update

Presenter

Robert Miracle, Deputy Town Manager Finance & Administration

ATTACHMENTS:

- **Water Supply Feasibility Study**

Town of Palm Beach Water Supply Feasibility Study

Meeting

March 2023

Overview

- City of West Palm Beach – As Is, Current Water Treatment Process Remains
- City of West Palm Beach – Membrane Upgrade, Plant to have 32 MGD Nanofiltration and 16 MGD of Brackish Water Reverse Osmosis
- City of Lake Worth Beach – Plant to have 4.5 MGD Nanofiltration and 15 MGD Brackish Water Reverse Osmosis

City of West Palm Beach – As Is Treatment Process Does Not Change

Source Water	Raw Water Supply	Treatment Process	Treatment Capacity
Surface Water	41.2 MGD	Conventional (PAC, Lime Softening, carbon and sand filtration, UV disinfection, chloramine disinfection)	47 MGD

Cost Analysis – City of West Palm Beach – As-Is Treatment Process Does Not Change

Item	Item of Work	Subtotal
1	Current Franchise Agreement Pipeline Improvements	$13M
2	Current Critical Pipeline Improvements per Masterplan	$15M
	Subtotal Pipeline Capital Improvements:	**$29M**
	Engineering/Administration (20%)	$6M
	Subtotal Capital, Engineering and Administration:	**$35M**
	Contingency (35%)	$12M
	Subtotal Capital, Engineering and Administration, and Contingency:	**$47M**
	Level 5 Engineers Opinion of Probable Cost (0% -+ 50%):	**$47M - $70M**

City of West Palm Beach – Membrane Upgrade

Source Water	Raw Water Supply	Treatment Process	Treatment Capacity	Disposal Capacity Required
Surface Water	40 MGD	Nanofiltration (80% Recovery)	32 MGD	8 MGD
Floridan Aquifer	20 MGD	Brackish Water RO (80% Recovery)	16 MGD	4 MGD

Cost Analysis – City of West Palm Beach – 48 MGD Membrane Upgrade

Item	Item of Work	Subtotal
1	16 MGD BWRO and 32 MGD NF Treatment	$354M
2	Wells Including Allowance for Raw Watermains	$110M
3	Current Franchise Agreement Pipeline Improvements	$13M
4	Current Critical Pipeline Improvements per Masterplan	$15M
	Subtotal Capital Improvements:	**$492M**
	Engineering/Administration (20%)	$98M
	Subtotal Capital, Engineering and Administration:	**$590M**
	Contingency (35%)	$207M
	Subtotal Capital, Engineering and Administration, and Contingency:	**$797M**
	Level 5 Engineers Opinion of Probable Cost (0% -+ 50%):	**$797M - $1.19B**

City of Lake Worth Beach

Source Water	Raw Water Supply	Treatment Process	Treatment Capacity
Existing Capacity			
Surficial Aquifer	5.1 MGD	Conventional (Lime Softening and filtration)	5.1 MGD
Floridan Aquifer	6 MGD	Brackish Water RO (70% Recovery)	4.5 MGD
Future Capacity			
Surficial Aquifer	5.1 MGD	Nanofiltration (80% Recovery)	4.1 MGD
Floridan Aquifer	20 MGD	Brackish Water RO (75% Recovery)	15 MGD

Cost Analysis – City of Lake Worth Beach

Item	Item of Work	Subtotal
1	10.5 MGD RO Treatment Addition 4.5 MGD NF Treatment Treatment Building Addition	$110M
2	Lake Worth Beach Pipeline Interconnection 1 – C-51 Connection	$17M
3	Lake Worth Beach Pipeline Interconnection 2 – Lake Worth Road	$11M
4	Town Pipeline Distribution Improvements	$40M
5	Current Franchise Agreement Pipeline Replacements	$10M
6	Critical Pipeline Improvements Per Masterplan	$3M
	Subtotal Capital Improvements:	**$191M**
	Engineering/Administration (20%)	$38M
	Subtotal Capital, Engineering and Administration:	**$229M**
	Contingency (35%)	$80M
	Subtotal Capital, Engineering and Administration, and Contingency:	**$310M**
	Level 5 Engineers Opinion of Probable Cost (0% -+ 50%):	**$310M - $465M**

Cost Analysis Summary

Alternative Description	Cost	Included in Cost
City of West Palm Beach – As Is	$47M - $70M	Pipeline Infrastructure
City of West Palm Beach – 48 MGD Membrane Upgrade	$797M - $1.19B (21% of capacity represents $167M - $251M)	Pipeline and Treatment Infrastructure
City of Lake Worth Beach	$310M -$465M	Pipeline and Treatment Infrastructure

Town required capacity is 10 MGD which is 21% of 48 MGD planned capacity

Town of Palm Beach

Finance and Taxation Committee Meeting – Water and Sewer Revenue Bond Overview

March 16, 2023

PFM Financial Advisors LLC
200 S. Orange Avenue
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Orlando, FL 32801

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Financing Capital Needs - Overview

- As capital needs arise, the optimal funding plan is developed, which could include debt funding, cash funded or a combination of both
- Local governments often issue debt to fund these long-term capital needs for the following reasons:
  - Large capital projects often can’t be broken into smaller phases and funded out of annual budget
  - Mitigate rising construction costs
  - Taxpayer / Ratepayer equity – if multiple generations of tax or rate payers benefit from a capital project, then they should all pay for it
  - Historically speaking, interest rates for municipalities are low (tax-exempt)
- Local governments have a variety of financing options at their disposal including revenue bonds and general obligation bonds
  - Revenue Bonds are backed by revenues from a specific source. This can be revenues from an enterprise fund, such as water and sewer revenues or from the general fund which includes non ad valorem revenues.
  - General Obligation Bonds are backed by the full faith and credit of the issuer, which has the power to tax residents to pay bondholders (ad valorem taxes). They require voter referendum approval in Florida and allow the Town to levy a separate debt service millage that covers the annual debt service payment.

Financing Capital Needs – Water and Sewer Revenue Bonds

- We understand the Town is exploring different alternatives to enhance the water and sewer system that supplies the Town and its residents.
- Under all options, the issuance of long-term water and sewer revenue bonds would be required as part of the funding plan.
- Since the Town does not own or operate the utility system, it would not be responsible for issuing any debt. Instead, the owner of the system (City of West Palm Beach or City of Lake Worth Beach) would be the issuer of the debt. As an alternative, a separate authority could be established that has representation from the Town.
- As customers of the system, the funds needed for repayment of the debt would be factored into the rates and charges paid by the Town and its citizens via their water and sewer bill.
- Such rates and charges make up the Gross Revenues of the System and are first used to pay the operations and maintenance (O&M) expenses of the System. Funds remaining after the payment of O&M expenses are referred to as Net Revenues of the System.
- Net Revenues are what is pledged to the repayment of revenue bonds and used to repay any debt that is issued.
- The Issuer can (and must) adjust rates and charges to generate sufficient revenue to meet the obligations (O&M, debt service and other legal obligations) of the System.

Financing Capital Needs – Water and Sewer Revenue Bonds – Legal Requirements

- Prior to the issuance of water and sewer revenue bonds, the Issuer must demonstrate their ability to meet their Additional Bonds Test (ABT).
  - While the ABT differs by Issuer, they generally require Net Revenues following the issuance of additional debt to cover maximum annual debt of all obligations by 1.10 to 1.20 times. The issuer is generally able to apply future approved rate increases when calculating Net Revenues if certified by a Consulting Engineer or Rate Consultant.
- While water and sewer revenue bonds remain outstanding, the Issuer must also adhere to an annual Rate Covenant.
  - The Rate Covenant requires the Issuer to fix, charge and collect rates and charges to a level that generates Net Revenue that cover the current year’s annual debt service of all obligations by 1.10 to 1.20 times.
- While the ABT and Rate Covenant are legal requirements that must be met per the Authorizing Bond Resolution, a financially sound system will generate coverage ratios well in excess of the legal minimum.

Financing Capital Needs – Water and Sewer Revenue Bonds – Sample Projected Debt Service Coverage Test

	2022	2023	2024	2025	2026	2027
Gross Revenues[2]	$206,057	$218,791	$237,142	$257,149	$279,060	$297,329
Less:						
Cost of Operation and Maintenance[3]	(109,924)	(114,116)	(117,594)	(122,008)	(124,168)	(128,549)
Adjusted Net Revenue	$96,133	$104,675	$119,548	$135,141	$154,892	$168,779
Bond Service Requirement:						
Annual Bond Service Requirement [4]	$43,090	$44,648	$44,659	$51,150	$53,093	$61,108
Maximum Bond Service Requirement[4]	43,090	45,354	45,052	53,593	53,593	63,945
Bond Service Coverage:						
Annual Basis	2.23x	2.34x	2.68x	2.64x	2.92x	2.76x
Maximum Basis	2.23x	2.31x	2.65x	2.52x	2.89x	2.64x
Bond Service Requirement, Including Subordinate Debt:						
Annual Required Debt Service[4]	$45,820	$47,378	$49,606	$53,881	$58,691	$63,838
Maximum Debt Service Requirement[4]	45,820	48,085	49,999	56,324	59,191	66,675
Debt Service Coverage:[5]						
Annual Basis	2.10x	2.21x	2.41x	2.51x	2.64x	2.64x
Maximum Basis	2.10x	2.18x	2.39x	2.40x	2.62x	2.53x

MARCH 16, 2023

TOWN OF PALM BEACH, FL

WATER SYSTEM ALTERNATIVES ANALYSIS

WILLDAN

AGENDA

01 Scope of Engagement

02 Data and Assumptions

03 Results

Town of Palm Beach, FL

Water System Alternatives Analysis

Scope of Engagement

SCOPE OF ENGAGEMENT

- Willdan was retained to develop a high-level financial analysis that compares:
  - The estimated probable costs of each water system alternative
  - The estimated financial impact to the Town and its water customers
- Limitations
  - Analyzes total revenues only; not a rate study

Data and Assumptions

DATA AND ASSUMPTIONS

- Data Used
  - City of West Palm Beach 2021 Audited Comprehensive Financial Report
  - Detailed customer billing data for FY 2021 and FY 2022
  - Town of Palm Beach Water Feasibility Study dated April 2022 and prepared by Kimley-Horn
  - Other documents and analyses prepared by Kimley-Horn
- Assumptions
  - All costs associated with system improvements are debt funded
    - Term of loan = 30 years
    - Interest Rate = 4.5%
    - Issuance Costs = 2.0%
    - Debt Service Coverage Requirement = 1.50 times

Results

RESULTS

- Customer statistics
  - Town represents approximately 14% of total customers, 32% of total volume sales (ccf), and 30% of revenues of West Palm Beach water system.

Description	FY22
Average Annual Units	9,691
Water Sales (ccf)	3,947,890
Water System Sales	$21,401,336
Average $/Unit	$2,208
Average $/ccf	$5.42

RESULTS

Range of Required Revenue Increase is between 20.6% - 30.7%		
Estimated Probable Cost	$47.00M	$70.00M
Incremental Revenue Required	$4.41M	$6.57M
Percent Increase Compared to Current Revenues	20.6%	30.7%

*Assumed percent attributable to the Town = 100%

RESULTS

Range of Required Revenue Increase is between 73.5% - 110.2%		
Estimated Probable Cost	$167.4M	$251.2M
Incremental Revenue Required	$15.72M	$22.86M
Percent Increase Compared to Current Revenues	73.5%	110.2%

*Assumed percent attributable to the Town = 21%

RESULTS

Range of Required Revenue Increase is between 136.1% - 204.1%		
Estimated Probable Cost	$310.0M	$465.0M
Incremental Revenue Required	$29.12M	$43.68M
Percent Increase Compared to Current Revenues	136.1%	204.1%

*Assumed percent attributable to the Town = 100%

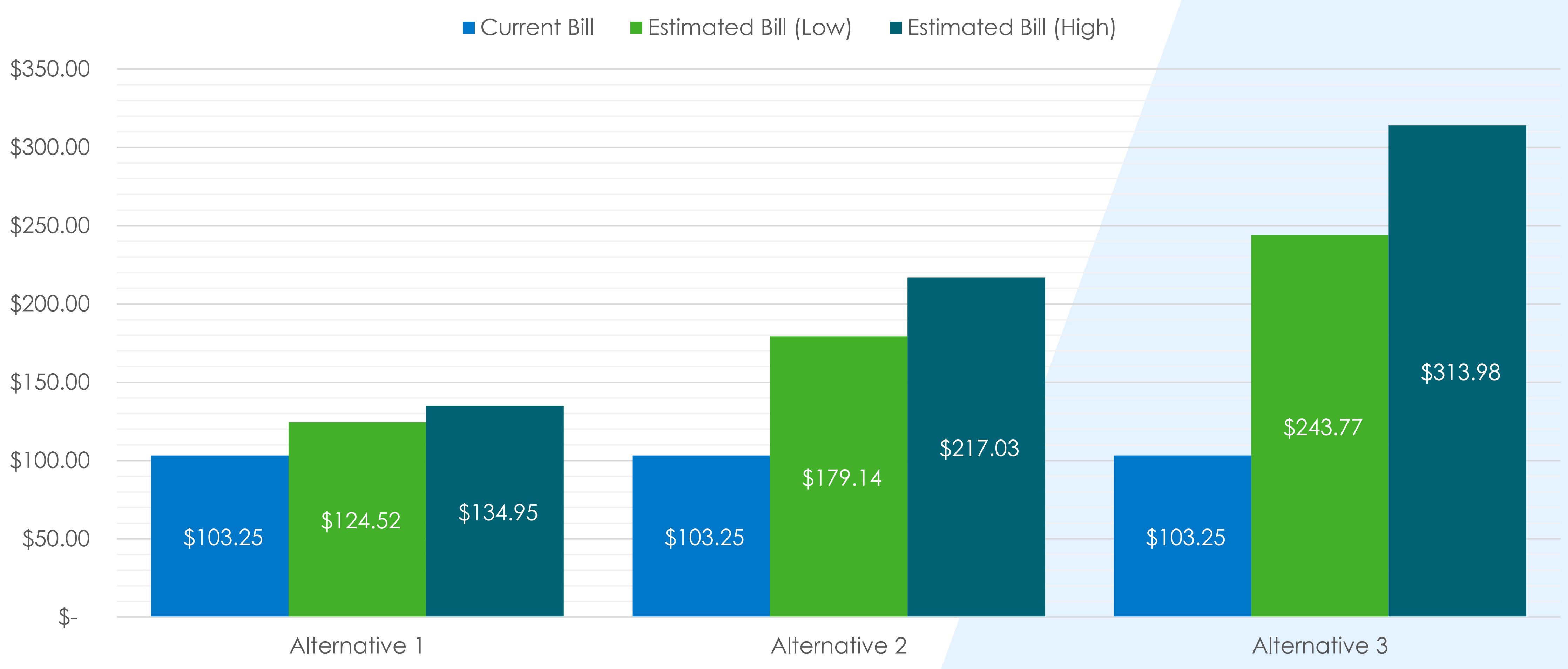
RESULTS

Alternative Description	Estimated Range of Probable Cost	Estimated Range of Increase to Revenues
Alternative 1 - Status Quo	$47,000,000 to $70,000,000	20.6% to 30.7%
Alternative 2 - City of West Palm Beach	$167,370,000 to $251,160,000	73.5% to 110.2%
Alternative 3 - City of Lake Worth Beach	$310,000,000 to $465,000,000	136.1% to 204.1%

ESTIMATED IMPACT TO MONTHLY BILL

Alternative Description	Estimated Range of Increase to Revenues	Incremental Impact to Monthly Bill
Alternative 1 - Status Quo	20.6% to 30.7%	$21.27 to $31.70
Alternative 2 - City of West Palm Beach	73.5% to 110.2%	$75.89 to $113.78
Alternative 3 - City of Lake Worth Beach	136.1% to 204.1%	$140.52 to $210.73

ESTIMATED IMPACT TO MONTHLY BILL



- * Assumed Monthly Usage = 24.7 ccf

Town of Palm Beach, FL

Water System Alternatives Analysis

Questions