



TOWN OF PALM BEACH

Town Manager's Office
PUBLIC WORKS COMMITTEE

**TOWN HALL
COUNCIL CHAMBERS-SECOND FLOOR
360 SOUTH COUNTY ROAD**

AGENDA

MAY 24, 2022

9:30 AM

Welcome!

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

I. CALL TO ORDER AND ROLL CALL

Bobbie Lindsay, Chair
Margaret A. Zeidman, Member

II. PLEDGE OF ALLEGIANCE

III. APPROVAL OF AGENDA

IV. COMMUNICATIONS FROM CITIZENS - 3 MINUTE LIMIT PLEASE

V. REGULAR AGENDA

A. Old Business

1. Update on Green Initiative Progress - Ficus Replacement on Town Property
H. Paul Brazil, P.E., Director of Public Works

B. New Business

1. Water Supply Feasibility Study:
H. Paul Brazil, P.E., Director of Public Works
 - a. Age-Based Condition of Existing Water Supply Infrastructure
 - b. Summary of Water Supply Infrastructure Improvements Per 1999 Franchise Agreement with the City of West Palm Beach
 - c. Discussion of Treatment Methods Used by City of West Palm Beach, Palm Beach County and City of Lake Worth
 - d. Discussion of Commonly Available Private Home Filtration Systems
 - e. Discussion of Items for Future Public Works Meetings

VI. SCHEDULE FOR FUTURE PUBLIC WORKS COMMITTEE MEETINGS

VII. ANY OTHER MATTERS

VIII. ADJOURNMENT

PLEASE TAKE NOTE:

- Note 1:** No written materials received after 3:30 p.m. on the Thursday immediately prior to a monthly Public Works Committee will be included in the back-up binders distributed to the Mayor and Town Council in preparation for that meeting. Written materials received after 3:30 p.m. on Thursday will be separately distributed to the Mayor and Town Council; however, depending upon the length of the materials, the time of submittal, and other circumstances, the Mayor and Town Council may not be able to read and consider such late submittals prior to acting upon the policy matter(s) which they address.
- Note 2:** 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.
- Note 3:** If a person decides to appeal any decision made by this Council with respect to any matter considered at this meeting or hearing, he/she will need a record of the proceedings. For such purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.
- Note 4:** Disabled persons who need an accommodation in order to participate in the Public Works Committee 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.
- Note 5:** Items listed on the Consent Agenda will be approved by one motion of the Town Council, unless the Mayor or an individual Council Member requests that any item(s) be moved to the Regular Agenda and individually considered.
- Note 6:** 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 Public Works Committee. To access the back-up materials

and/or subscribe to the Stay Informed list, please visit the Town's website (townofpalmbeach.com).

PROCEDURES FOR PUBLIC PARTICIPATION

Citizens desiring to address the Town Council should proceed toward the public microphones when the applicable agenda item is being considered to enable the Town Council President to acknowledge you.

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

COMMUNICATIONS FROM CITIZENS: 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.

OTHER AGENDA ITEMS: Any citizen is entitled to be heard on any official agenda item when the Town Council calls for public comments, subject to the three minute limitation.

Public Works Committee are public business meetings and, as such, the Town Council retains the right to limit discussion on any issue.

TOWN OF PALM BEACH

Public Works Committee on: May 24, 2022

Section of Agenda

Regular Agenda - Old Business

Agenda Title

Update on Green Initiative Progress - Ficus Replacement on Town Property

Presenter

H. Paul Brazil, P.E., Director of Public Works

ATTACHMENTS:

- ▣ **Memorandum Dated May 17, 2022, from H. Paul Brazil, P.E., Director of Public Works**
- ▣ **Ficus Replacement List**

TOWN OF PALM BEACH

Information for Public Works Committee Meeting: May 24, 2022

TO: Public Works Committee

FROM: H. Paul Brazil, P.E., Director of Public Works

RE: Update on Green Initiative Program - Ficus Replacement on Town Property

DATE: May 17, 2022

STAFF RECOMMENDATION

Town staff is providing an update on the progress pertaining to the Town's Green Initiative Program and requests the Public Works Committee members to provide any direction deemed necessary.

GENERAL INFORMATION

Green Initiative Update:

The items outlined below are topics which the Public Works Committee discussed previously and which Staff will continue to watch closely, track, and provide updates at future Committee meetings.

1. Pesticides, Lethal Yellowing, Royal Palm Bug, White Fly, and Fertilizers

The Town continues to treat for lethal yellowing, and white fly utilizing synthetics. All other pests are treated with environmentally friendly applications on an as-needed-basis. Fertilizations continue to follow Town black-out periods with nitrogen and phosphorus free products (0-0-20). Due to the limited green space adjacent to the palms, some of the trees are treated via deep root injections which provides proper nutrients.

All applications are applied at or below label rates, are applied using Best Management Practices (BMP), according to Town Ordinances and by a licensed professional.

Staff continues to work with the Town's arborist reviewing the Royal Palm trees at the Town's nursery as it relates to Royal Palm Bug. The Town continues to see no visible signs of Royal Palm Bug at the Palmo site, our last treatment for these trees was in 2018. This early observation suggests pest management treatment cycles can be greatly extended or eliminated.

With this information, the Town is happy to announce we have discontinued all Royal Palm Bug treatments throughout Town.

2. Ficus Replacement Program

All remaining ficus hedges and a large ficus tree have been removed at North Fire in preparation of the station's renovation, as well as the ficus hedges that surrounded D-10 (Via Marila) pump station.

Staff will be replacing hedges at D-4 (North Lake Way) and D-8 (Country Club) pump station as part of upcoming station renovations.

The only remaining ficus hedges on the list to complete are D-4 and D-9 pump stations, South Fire, and Phipps Ocean Park. These hedges will be removed during upcoming pump station and park renovation projects with the exception of D-9, which will be removed by our in-house team.

Since the last Public Works Committee meeting, the residential ficus removal program has been reestablished by Town Council. Town staff is in the process of scheduling the collection and disposal of resident removed ficus. Currently, two (2) residents have signed up for the program.

3. Other Items

- a. The treatment of the North County Road ficus canopy continues at the reduced rate of two (2) treatments per year, Altus (a non-neonicotinoid systemic) is used for the alternate treatments. This has reduced our neonicotinoid exposure in the area by 50%.
- b. The Town continues to tag, log, and inventory all Town Coconut Palms, Royal Palms, Date Palms, Foxtail Palms, and Adonedia Palms. Over the summer, staff will re-inventory Lakeside Park and add all the additional trees.
- c. Town staff is reviewing the possibility of utilizing growth regulators as part of the Town's Green Initiative. The most obvious benefit is labor savings as there is slower vegetative growth and, thus, a reduced need for trimming and a lessened carbon footprint. Growth regulators are widely utilized for turf to promote a stronger leaf blade and healthier plant. This science would be the same for trees. The tree still grows, but the vertical growth is stunted and the branches become denser. This will increase the longevity of tree growth in stressful conditions as well as improve root density, along with increase disease resistance. This would only be used in select conditions.

Attachment

cc: Kirk W. Blouin, Town Manager
Carolyn Stone, Assistant Town Manager
Eric B. Brown, P.E., Assistant Director of Public Works
Paul Colby, Facility Maintenance Division Manager
John Lawrence, Grounds Supervisor

TOWN PROPERTY FICUS REPLACEMENT PROGRAM

LOCATION	SPECIES	LINEAR FT	REMOVAL & INSTALLATION LABOR COST	UNIT RATE POTENTIAL REPLACEMENT MATERIAL	ESTIMATED COST	ACTUAL COST TO DATE	VENDOR (V) or IN-HOUSE (IH)	ANTICIPATED REPLACEMENT YEAR	COMMENTS
North Fire	Ficus	268	\$100	\$96	\$52,528	\$7,985.10	V	2021	Completed
Central Fire	Ficus	15	\$100	\$96	\$2,940	\$985.00	V	2021	Completed
Australian Employee Parking Lot	Ficus	280	\$100	\$96	\$54,880	\$16,650.00	V	2021	Completed
Police	Ficus	268	\$100	\$96	\$52,528	\$5,600.00	V	2021	Completed
FY21 Est. Total					\$162,876	\$31,220.10			
D4 North Lake Way	Ficus	125	\$100	\$225	\$40,625			2022	Durring Pump Station Project
D8 Country Club	Ficus	175	\$100	\$225	\$56,875			2022	Durring Pump Station Project
D9 Mediterranean	Ficus	100	\$100	\$150	\$25,000			2022	Contingent on Funding
D10 Via Marila	Ficus	215	\$100	\$150	\$53,750	\$40,780.00	V	2022	Durring Pump Station Project (Podocarpus)
FY22 Est. Total					\$176,250	\$40,780.00			
Phipps Ocean/Little Red School House	Ficus	154	\$100	\$150	\$38,500			2023	Included as Part of Preservation Renovation Project
South Fire	Ficus	250	\$100	\$150	\$62,500			2023	Included as Part of Preservation Renovation Project
Phipps Ocean North Lot	Ficus	180	\$100	\$150	\$45,000			2023	Included as Part of Preservation Renovation Project
Phipps Ocean South Lot	Ficus	274	\$100	\$150	\$68,500			2023	Included as Part of Preservation Renovation Project
Phipps Ocean South Restroom	Ficus	186	\$100	\$150	\$46,500			2023	Included as Part of Preservation Renovation Project
FY23 Est. Total					\$261,000	\$0.00			
					\$600,126	\$72,000.10			

TOWN OF PALM BEACH

Public Works Committee on: May 24, 2022

Section of Agenda

Regular Agenda - New Business

Agenda Title

Water Supply Feasibility Study:

H. Paul Brazil, P.E., Director of Public Works

- a. Age-Based Condition of Existing Water Supply Infrastructure
- b. Summary of Water Supply Infrastructure Improvements Per 1999 Franchise Agreement with the City of West Palm Beach
- c. Discussion of Treatment Methods Used by City of West Palm Beach, Palm Beach County and City of Lake Worth
- d. Discussion of Commonly Available Private Home Filtration Systems
- e. Discussion of Items for Future Public Works Meetings

Presenter

ATTACHMENTS:

- ▣ **Memorandum dated May 20, 2022, from H. Paul Brazil, P.E., Director of Public Works**
- ▣ **Water Supply Feasibility Study**

TOWN OF PALM BEACH

Information for Public Works Committee Meeting: May 24, 2022

TO: Public Works Committee

FROM: H. Paul Brazil, P.E., Director of Public Works

RE: Water Supply Update

DATE: May 20, 2022

STAFF RECOMMENDATION

Town staff will make a presentation of Water Supply information as requested during the May Town Council Meeting.

GENERAL INFORMATION

During the May Town Council meeting, Council directed staff to provide additional information regarding the following subjects:

- Age Based Watermain Assessment
- Franchise Agreement and Critical Pipelines
- Water Treatment Methods
- In-Home Water Treatment
- Topics for Future Meetings

Town staff and Kimley-Horn will provide a presentation of these topics to the Public Works Committee.

Attachment

cc: Kirk W. Blouin, Town Manager
Carolyn Stone, Assistant Town Manager
Eric B. Brown, P.E., Assistant Director of Public Works
Patricia Strayer, P.E., Town Engineer
Jason Debrincat, P.E., Senior Project Engineer
Jane Le Clainche, Director of Finance

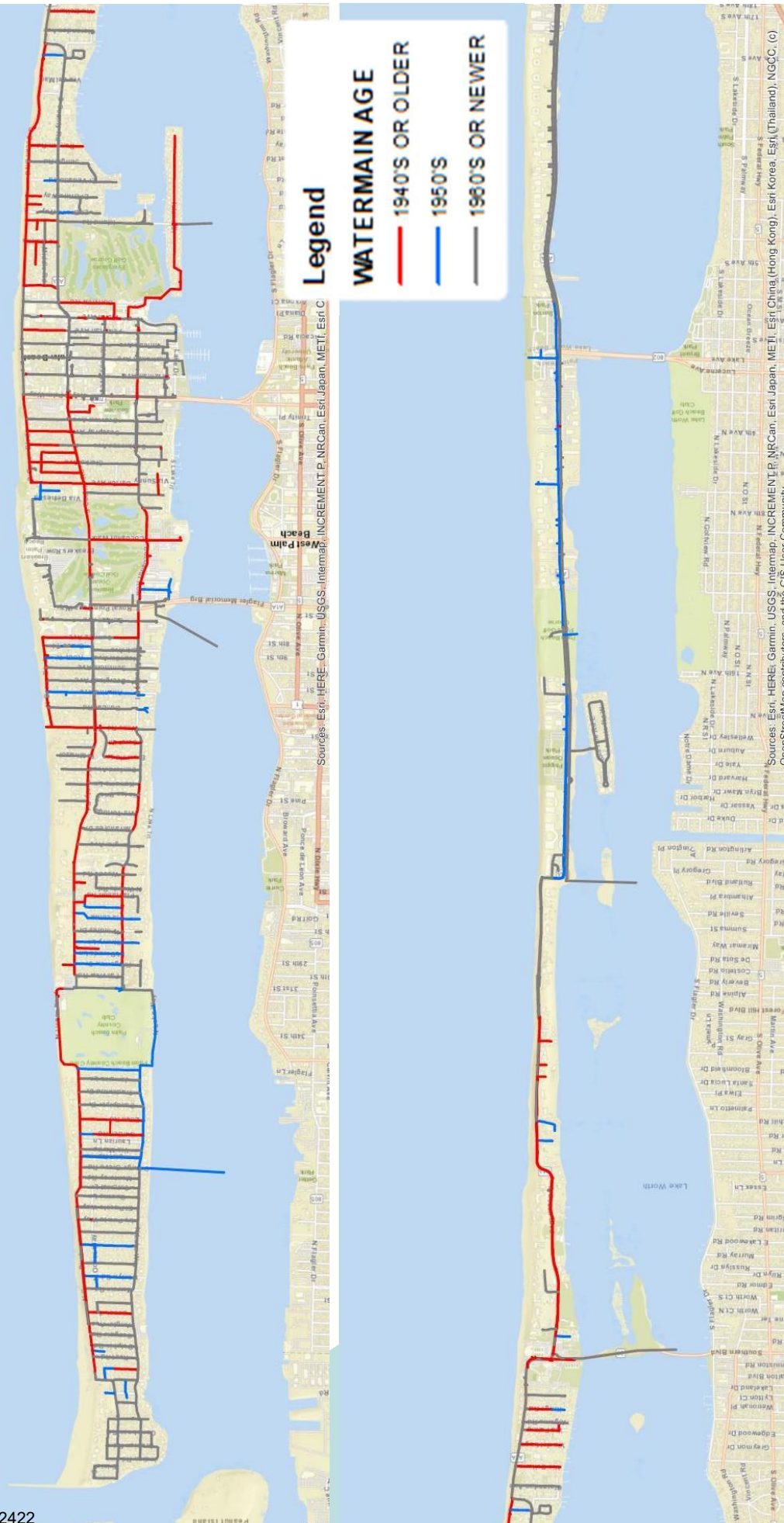
Town of Palm Beach Water Supply Feasibility Study

Meeting
May 24, 2022

Overview

- Age Based Watermain Assessment
- Franchise Agreement and Critical Pipelines
- Water Treatment Methods
- In-Home Water Treatment
- Topics for Future Meetings

Age Based Watermain Assessment



1999 Franchise Agreement

Legend

— 1999 FRANCHISE AGREEMENT

Map of Lake Worth, Florida, showing the location of the 1999 Franchise Agreement. The map includes a legend indicating the agreement area in blue. The map shows the lake, surrounding roads, and various landmarks.

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) Swisstopo, Mapbox, OpenStreetMap contributors, and the GIS User Community

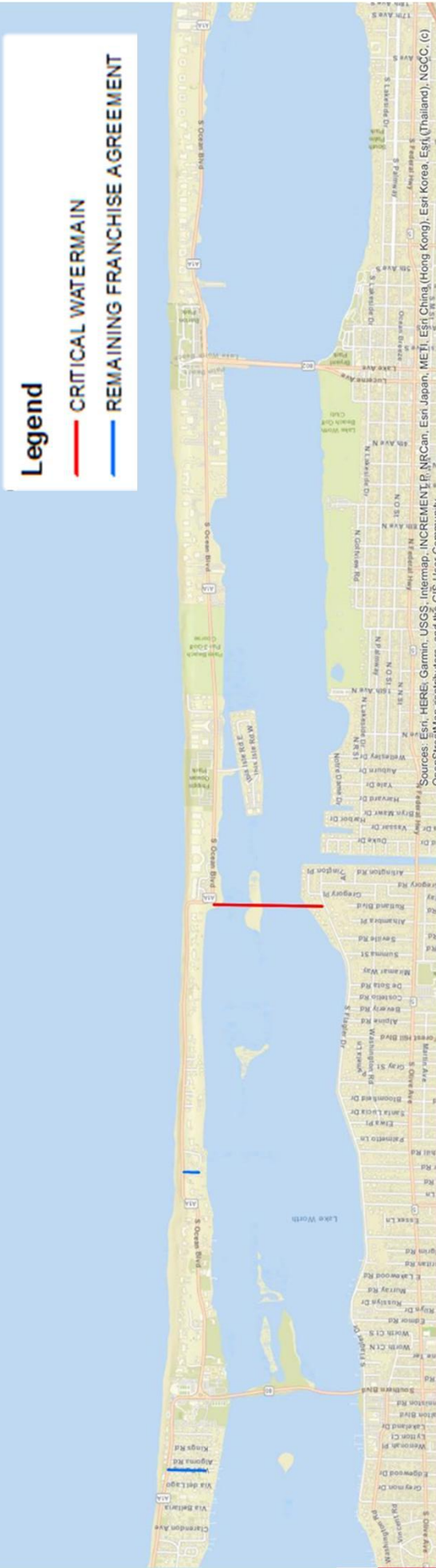
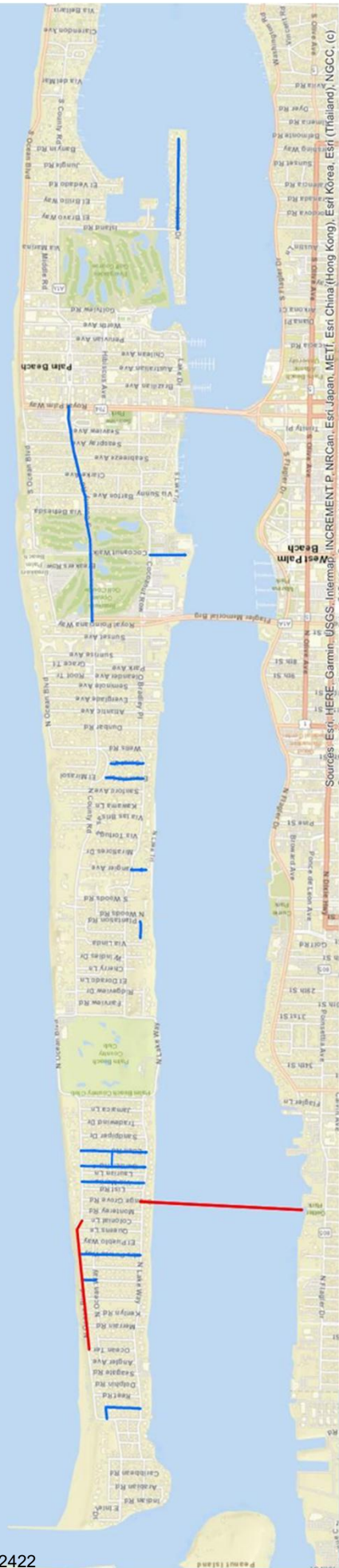
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Remaining Watermains to be Replaced



Water Treatment Plant Methods

City of West Palm Beach

- Capacity: 47 MGD
- Source: Surface water
- Treatment: Conventional



PBCWUD WTP 8

- Capacity: 30 MGD
- Source: Surficial Aquifer (Shallow Groundwater)
- Treatment: Conventional and Anion Exchange



PBCWUD WTP 2

- Capacity: 16.4 MGD
- Source: Surficial Aquifer (Shallow Groundwater)
- Treatment: Conventional and MIEX Anion Exchange



PBCWUD WTP 3

- Capacity: 30 MGD
- Source: Surficial Aquifer (Shallow Groundwater)
- Treatment: Nanofiltration Membrane



PBCWUD WTP 9

- Capacity: 26.88 MGD
- Source: Surficial Aquifer (Shallow Groundwater)
- Treatment: Nanofiltration Membrane



Lake Worth Beach WTP

- Capacity: 17.4 MGD
- Source: Surficial Aquifer and Floridan Aquifer
- Treatment: Conventional and Brackish Water Reverse Osmosis



In-Home Water Treatment

- Point of Use Treatment
 - Cloth Filters
 - Ion Exchange Softeners
 - Ultraviolet (UV)
 - Carbon Filters
 - Membranes



In-Home Water Treatment- Single Fixture

- Limited to a single point of use or one faucet
- Cost
 - \$250-\$500
 - Installation = \$1,000
 - Maintenance = \$1,000 annually or greater



In-Home Water Treatment- Whole House

- Limited to drinking/bathing water only
- Cost
 - \$5,000
 - Installation Costs vary: \$10,000-\$25,000
 - Maintenance = \$5,000 annually or greater



Topics for Future Meetings

- Drought impacts for various water sources
- SFWMD Regulations - water use impacts to alternative sources.
- Utility formation