

Climate Adaptation Planning Update

Ogunquit Sewer District

Presented to the Ogunquit Board of Selectmen
February 6, 2018



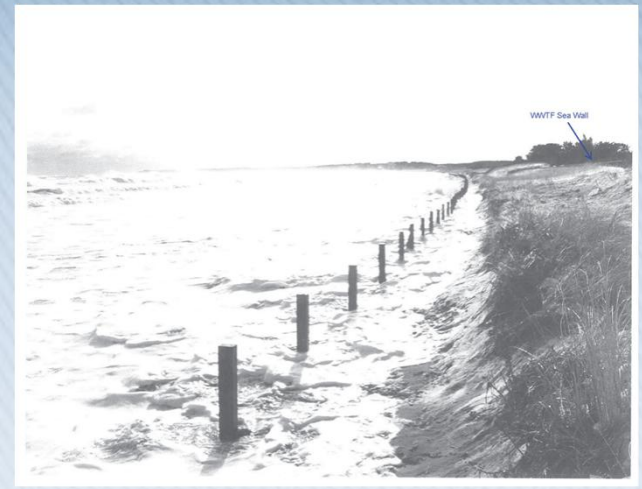
Presentation Outline

- Introductions and Opening Remarks
- Adaptation Planning Overview
- Activities Leading to June 7, 2017 Meeting
- Activities Since June 7, 2017 Meeting
- Next Steps
- Questions and Discussion

Adaptation Planning

- 2011 - Planning grant awarded to the District
- 2012 – Completed initial study
- 2014 – Completed follow-on study
- Conclusions:
 - § WSD facilities appear vulnerable in the long-term
 - § Certain OSD District facilities identified as vulnerable
 - § WWTF upgrades needed in short-term for reliability
 - § WWTF should be relocated in the next 20 to 30 yrs
 - § Strategic planning and budgeting should begin now for relocation and land purchase.

Adaptation projects addressing current Climate Change are underway and developing responsible plan for Sea Level Rise



Climate Change and Adaptation for OSD



Implementation Timeline from 2014 Report

	2013-2014	2015-2016	2017-2018	2019-2020	2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	2031-2032	2033-2034	2035-2036	2037-2038	2039-2040	2041-2042
Identify planning and implementation grants	X														
Evaluate regionalization alternative with Wells	X														
Establish a WWTF "investment cap"	X														
Proceed with Pump Station 1 upgrade		X	X												
Proceed with targeted WWTF upgrades		X	X												
Continue planning for WWTF and Pump Station 1 relocation		X													
Evaluate impacts to user rates and reserve accounts	X	X													
Perform Infiltration/Inflow Studies	X	X	X												
Implement Infiltration/Inflow reduction projects		X	X	X											
Perform Detailed Wastewater Facilities Study						X	X	X	X						
Collaborate with Town on beach nourishment program	X		X		X		X		X						
Decide whether to regionalize with Wells Sanitary District		X	X												
Purchase land for WWTF and Pump Station 1 relocation			X	X											
Relocate WWTF and Pump Station 1											X	X	X	X	X
X Suggested time frame ✓ Completed															

Links to Trustees
Agenda/Minutes

General Information

Notices & News Letter

Links to SLR Studies

Ogunquit
SEWER DISTRICT

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The Ogunquit Sewer District

Wastewater Treatment Facility

The Ogunquit Sewer District is a quasi-municipal corporation formed in 1963 for the purpose of wastewater treatment and disposal for public purposes and for the health, welfare, comfort and convenience of the inhabitants of the District.

The District's wastewater treatment facility is a secondary treatment plant, with a permitted capacity of 1.28 million gallons per day. The wastewater collection system presently includes 12 remote pump stations and approximately 20 miles of sewer line. The District's treatment system operates in an activated sludge mode. The dewatered sludge is converted into a soil additive at a licensed facility located in Plymouth, Maine.

The District's normal business hours are: 8:00 a.m. - 2:00 p.m. Monday through Friday.

The office will be closing for the Memorial Day Holiday at 11:00 a.m. Friday, May 26, 2017 thru Monday, May 29, 2017.

Notice: Notice of Public Informational Meeting - June 7, 2017 at 6 pm, Town Hall
Newsletter: OSD Newsletter 2017
Presentation: Sea Level Rise Preliminary Study, Woodard and Curran
Presentation: Preliminary Engineering Report, Sea Level Rise Study, Woodard and Curran
Presentation: Adaptation Upgrade Facilities Plan, Wright-Pierce Engineers, October 2014
Bulletin: **DEADLINE FOR LAWN METER READINGS IS NOVEMBER 30th EACH YEAR. ANY USAGE REPORTED AFTER THIS DATE WILL NOT BE ACCEPTED PER VOTE OF THE BOARD OF TRUSTEES.**

Question on your sewer bill? Email debbie@ogunquitsewerdistrict.org

View/ Pay Bill

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Ogunquit Sewer District

- The District's mission is to:
 - § Protect the environment by proper WW treatment
 - § Protect the Town's economic interests
 - § Provide sustainable WW infrastructure
 - § Serve the interests of the Town's current and future needs for WW treatment
 - § Being responsible requires long term planning

Activities Leading Up to the June 7, 2017 Trustees Meeting

- 1-3/2017 Reviewed two potential sites and regionalization.
- 3/29/17 Met with representatives of Littlefield Trust (site A).
- 4/11/17 Trustee Meeting – Discussed feasibility of land purchase .
- 5/03/17 Special Trustee Meeting - Set date for a public informational meeting on May 24, 2017. Motion to put down \$1,000 to hold property until after the May 24 meeting.
- 5/12/17 Notified by Littlefield Trust that site A is no longer for sale to the OSD.
- 5/16/17 Regular Trustee Meeting – Attendance of a few abutters of site A stating the District was not transparent with land purchase – Also at Select Board Meeting.
- 6/7/17 Scheduled Informational meeting at the Dunaway to discuss the future relocation of WWTF and how to better communicate our plans and procedures for land acquisition.

Next Steps from the Previous June 2017 Trustees Meeting

- Review remaining potential properties based on the Select Board and Public input
- Review site size and layouts for a new WWTF
- Review costs associated with Berwick Road site
- Review if crossing I-95 is feasible or necessary

Updated Review of Potential Sites

Key Factors:

- Out of flood zones
- Local overlays
- Current ownership
- Existing land use
- Surrounding land use
- Site area - total
- Site area - usable
- Available buffers
- Site access
- Distance to existing District facilities
- Distance to utilities
- Site elevation
- Wetlands/Vernal Pools
- Geology/Geotechnical
- Historical resources
- Public acceptance
- Permitting acceptance
- DEP acceptance

TABLE 3-1B: SUMMARY OF CONSIDERATIONS FOR CANDIDATE WWTF SITES

Factors	Site C	Site K	Site L/M	Site X	Site Y	Site Z
Figure No.	1	2	3	1	4	1
Parcel(s)	19-5-A	18-7	18-15-B/ 18-17-1	19-5	19-9	19-4
Zoning District	RR1	RR1	RR1	RR1	RR1	RR1
Stream Protection District Overlay	Very small area	Very small area	Very small area	Yes	No	No
Current Ownership	Town	Private	Town	Maine Turnpike Auth	Private	Private
Site Area - Total, Acres	34.9	35.1	30.6	26.7	92.0	13.0
Site Area - Usable, % of Total (Note 1)	30%	5%	25%	10%	10%	30%
Site Area - Usable, Acres	10.5	1.8	7.7	2.7	9.2	3.9
Existing Site Land Use	Town Garage	Power Lines/	Town Transfer	Turnpike Maint.	Wooded/	Wooded/
Surrounding Land Use	Undeveloped & Residential	Undeveloped & Residential	Undeveloped & Residential	Undeveloped & Residential	Undeveloped	Undeveloped
Available Natural Buffers?	Yes	Partial	Partial	Partial	Yes	Yes
Site in Preliminary 2017 100-Year Flood Plain?	Very small area	No	No	Yes	No	No
Streams & Wetlands On-Site?	Very small area	Yes	Very small area	Yes	Yes	Very small area
Within 500 of Town Line?	Yes	Yes	Yes	Yes	No	No
Number of Parcels w/in 500 ft of Site (in Ogunquit)	24	44	23	34	21	11
Number of Parcels w/in 500 ft of Site (other town)	3 (Wells)	3 (York)	3 (York)	2 (Wells)	0	0
Site Access	Capt. Thomas Rd	Berwick Rd	Berwick Rd	Capt. Thomas Rd	Capt. Thomas Rd or Berwick Rd (Note 2)	Capt. Thomas Rd (thru Site C)
Nearest State Route, ft	Route 1/ 4,000 ft	Route 1/ 4,200 ft	Route 1/ 5,100 ft (Note 3)	Route 1/ 5,000 ft	Route 1/ 7,000 ft	Route 1/ 6,000 ft
Distance to 3-Phase Power, ft	4,000	4,200	5,100	5,000	7,000	6,000
Distance to Public Water, ft	2,000	1,100	2,200	3,000	5,000	4,000
Distance to the District's Outfall Pipe, ft	8,500	13,000	14,500	9,000	10,000	9,000
Distance to the District's Pump Station 1 FM, ft	7,500	12,000	13,500	8,000	9,000	8,000
Distance to the District's Pump Station 2 FM, ft	7,700	6,200	8,000	8,300	9,700	8,700
Total Water, Sewer, Outfall Pipe, ft	25,700	32,300	38,200	28,300	33,700	29,700
Site Elevation	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Traffic in Downtown Area	More favorable	Less favorable	Less favorable	More favorable	Neutral	More favorable
Historical Resources On-Site?	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Public Acceptance/ Local Permitting Acceptance	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
DEP Acceptance	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Notes:

1) Usable site area is estimated visually based on Figures 1 through 4.

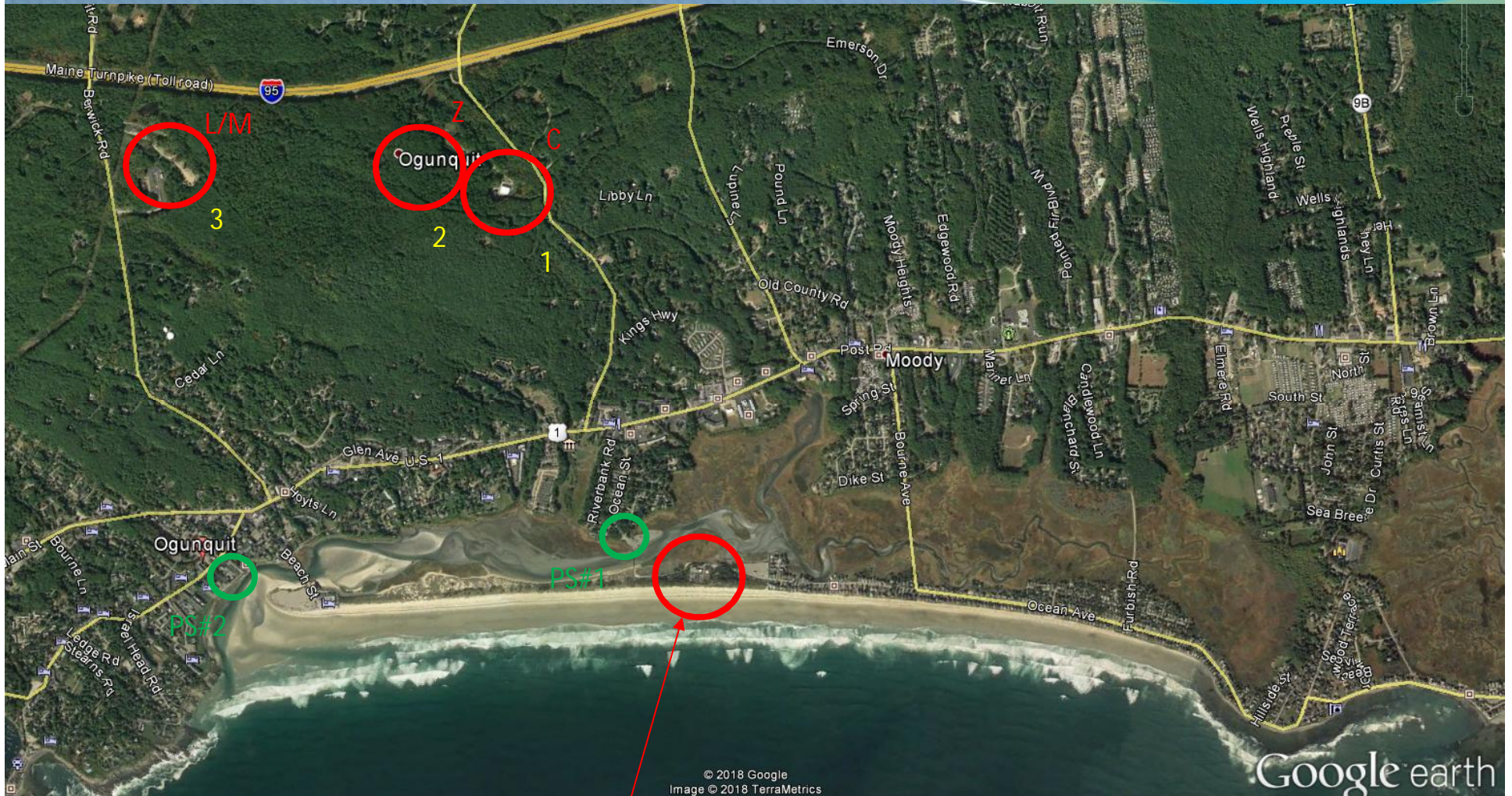
2) Access to Site Y would need to be through Site C (Captain Thomas Road) or through Site L/M (Berwick Road).

3) High voltage transmission wires run through this site. It is conceivable that CMP could approve an electrical service drop from the high voltage wires.

Review Site Sizing

- Sizing based on:
 - § Current capacity with space for future treatment elements
 - § Anticipated DEP permit requirements
 - § “Single campus” approach
- Considered:
 - § Readily available info from District, Town, State mapping
 - § Wastewater treatment and operations criteria
 - § Local regulations
 - § State and Federal environmental regulations

Updated Short-List of Sites



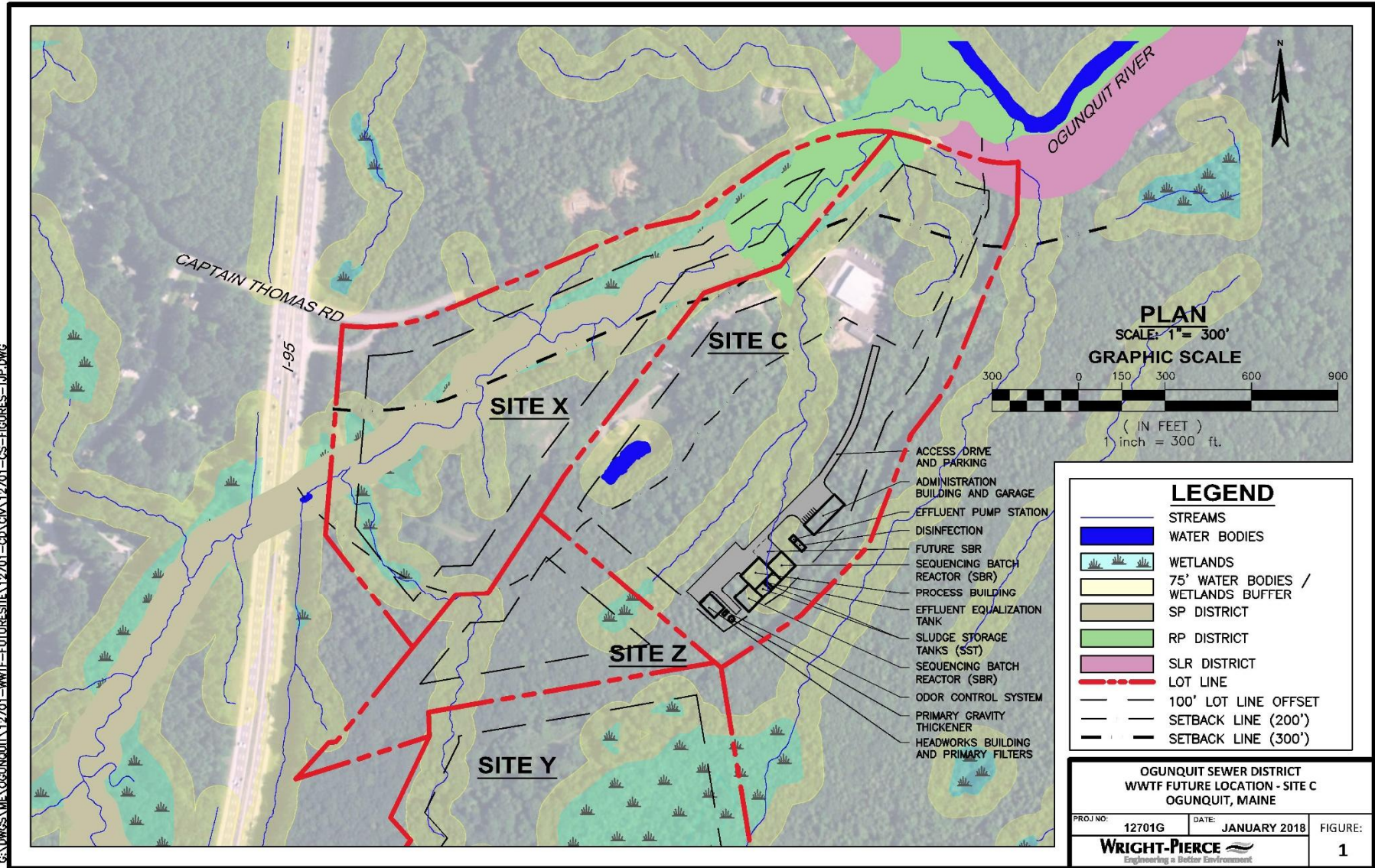
Ogunquit Sewer District WWTF

Site Identifier

Prioritization of Sites

Potential Site Arrangement - Site C

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PLAN
SCALE: 1" = 300'
GRAPHIC SCALE

0 150 300 600 900
(IN FEET)
1 inch = 300 ft.

LEGEND

- STREAMS
- WATER BODIES
- WETLANDS
- 75' WATER BODIES / WETLANDS BUFFER
- SP DISTRICT
- RP DISTRICT
- SLR DISTRICT
- LOT LINE
- 100' LOT LINE OFFSET
- SETBACK LINE (200')
- SETBACK LINE (300')

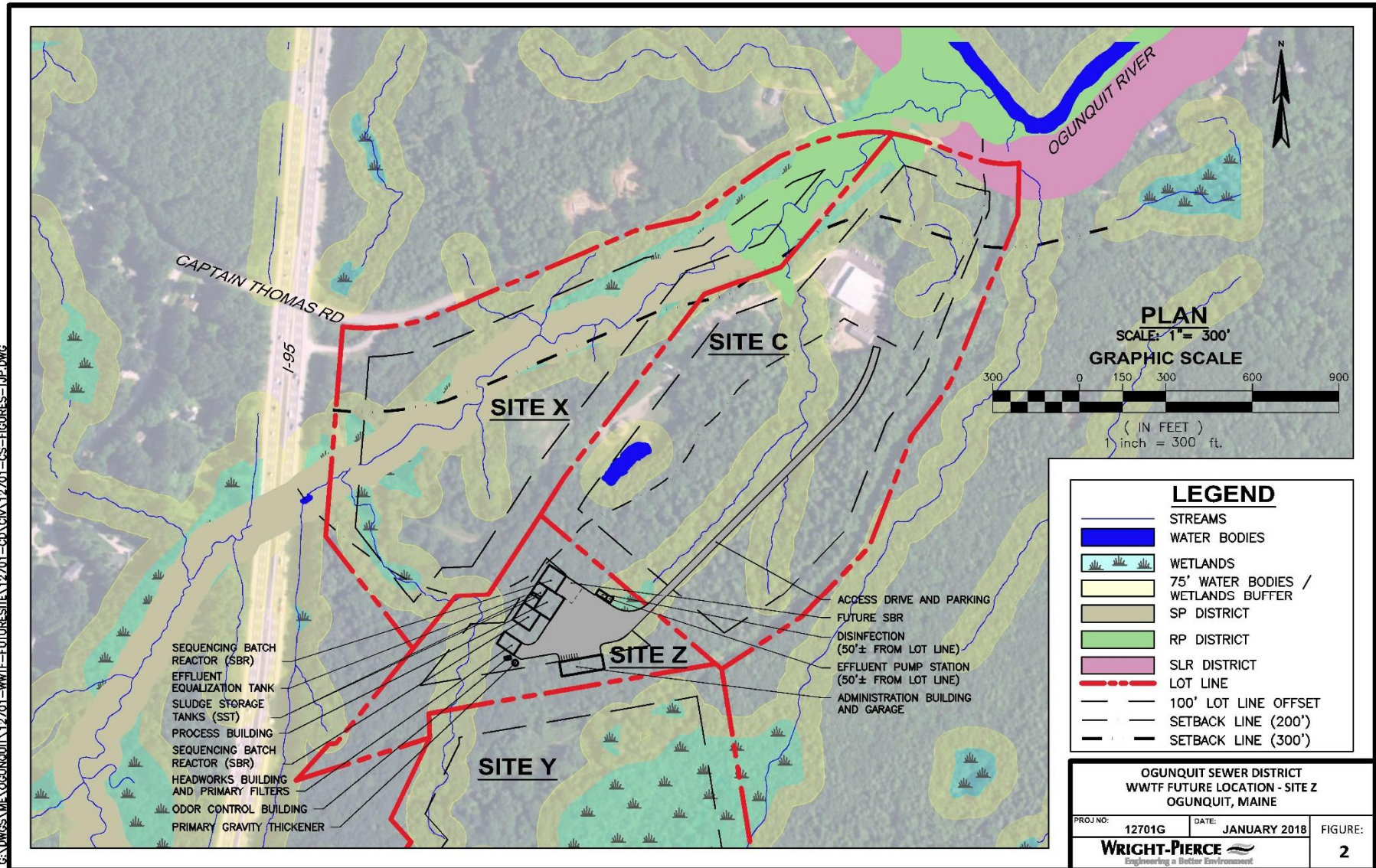
OGUNQUIT SEWER DISTRICT
WWTF FUTURE LOCATION - SITE C
OGUNQUIT, MAINE

PROJ NO: 12701G DATE: JANUARY 2018 FIGURE: 1

WRIGHT-PIERCE
Engineering a Better Environment

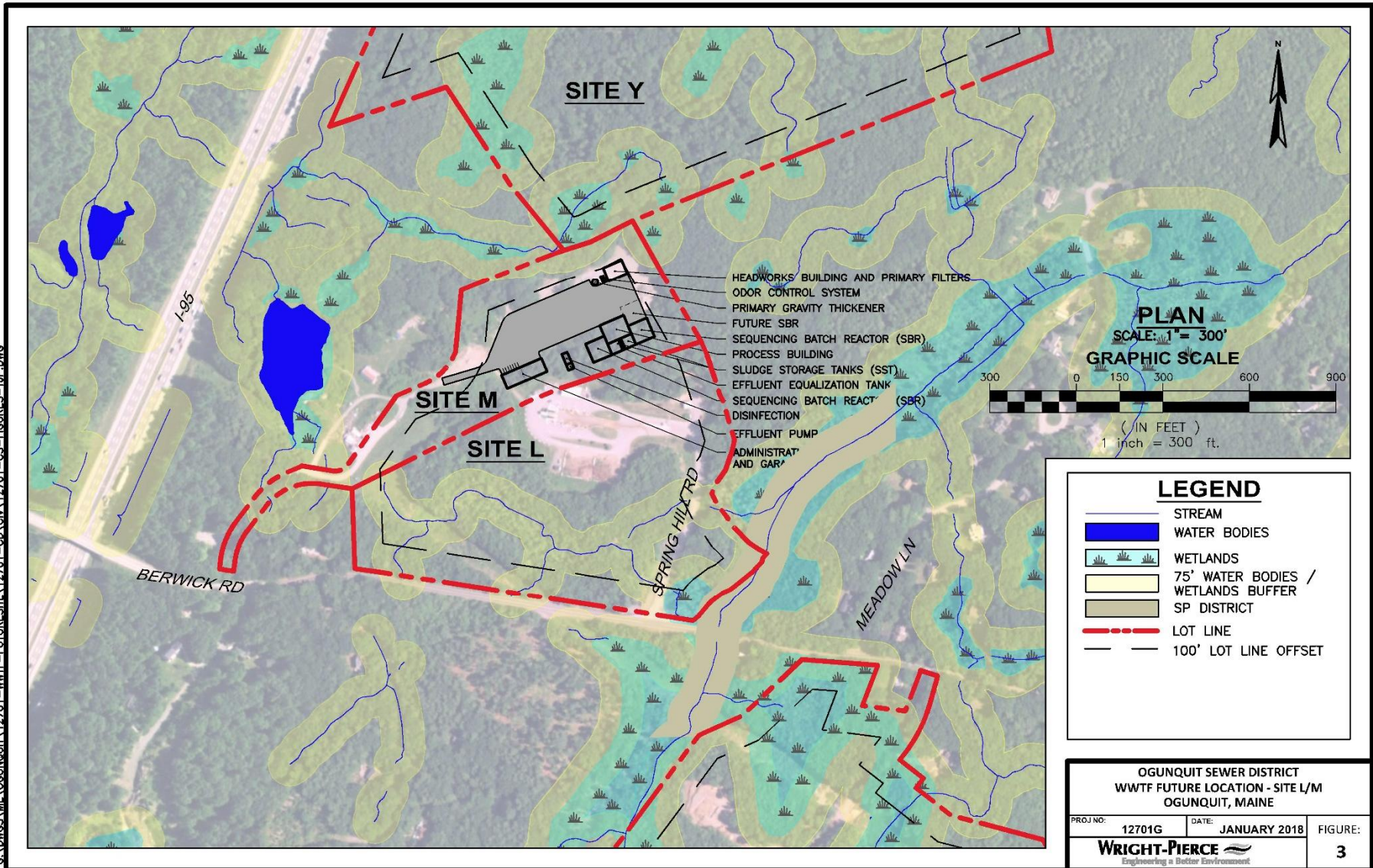
Potential Site Arrangement - Site Z

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Potential Site Arrangement - Site L/M

G:\DWG\ME\OGUNQUIT\12701-HWTF-FUTURE\SITE\12701-GDA\GDA\12701-GS-FIGURES-TJF.DWG



Other Items

- Costs Associated with Berwick Road Site
 - § Approx. \$2M to \$3M more than Capt. Thomas Road site
- Crossing I-95
 - § This does not appear necessary based on Sites C, Z and L/M and would add significant cost
- Land-Based Effluent Disposal
 - § Will not be considered further at this time
- Decentralized Treatment
 - § Not cost-effective for OSD service area, as presented at June 2017 Trustees Meeting

Next Steps

- Continue meeting with Town Code Enforcement
- Conduct legal review of applicable deeds, deed restrictions and restrictive covenants
- Refine cost differential between Site C & Site L/M
- Potentially conduct wetlands and vernal pool assessment to top site(s)
- Identify one or more sites to begin the multi-step process for land acquisition

Questions & Discussion

