

# Northeast Brunswick Regional WWTP Off-Site Transmission System



January 17, 2019



# Discussion

- ❖ **Wastewater Flow & Projections/Coordination**
- ❖ **Expansion NE Brunswick Regional WWTP**
- ❖ **Improvements to Force Main Transmission System**
- ❖ **Project Costs/Allocations**
- ❖ **Design & Permit Status**
- ❖ **Schedule**



# Wastewater Projections & Coordination

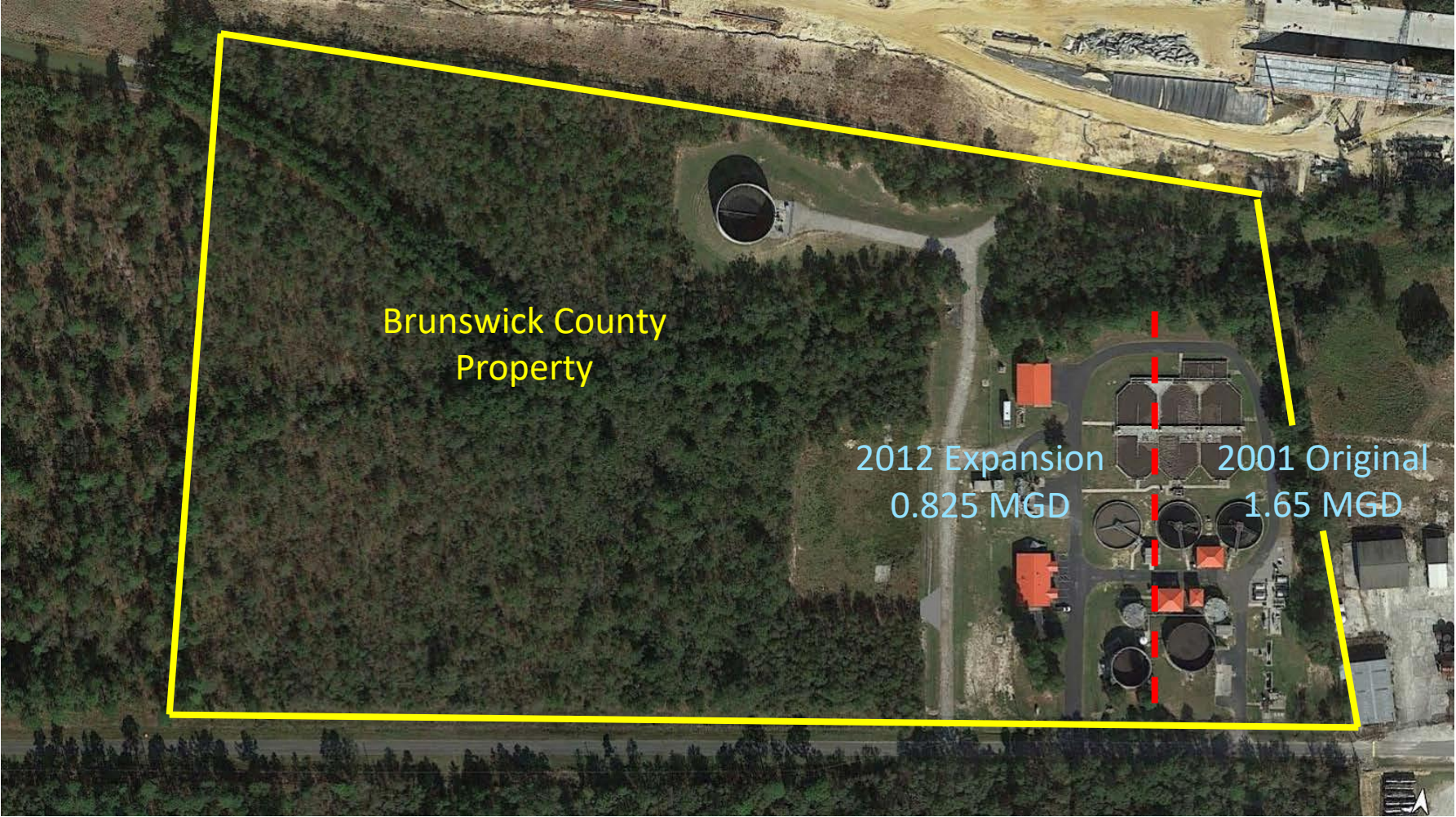
- ❖ **Capacity Study – Completed October 2017**
- ❖ **Input & Meetings from Participants**
- ❖ **Available Data** (*Census, Metered Flows, Reports, NC Data Center*)
- ❖ **Evaluated Multiple Growth & Projection Scenarios**
- ❖ **Final Recommendation 2.5 MGD Expansion**
- ❖ **18-20 Year Projection (2035-2037)**

# Flow Projections & Allocations

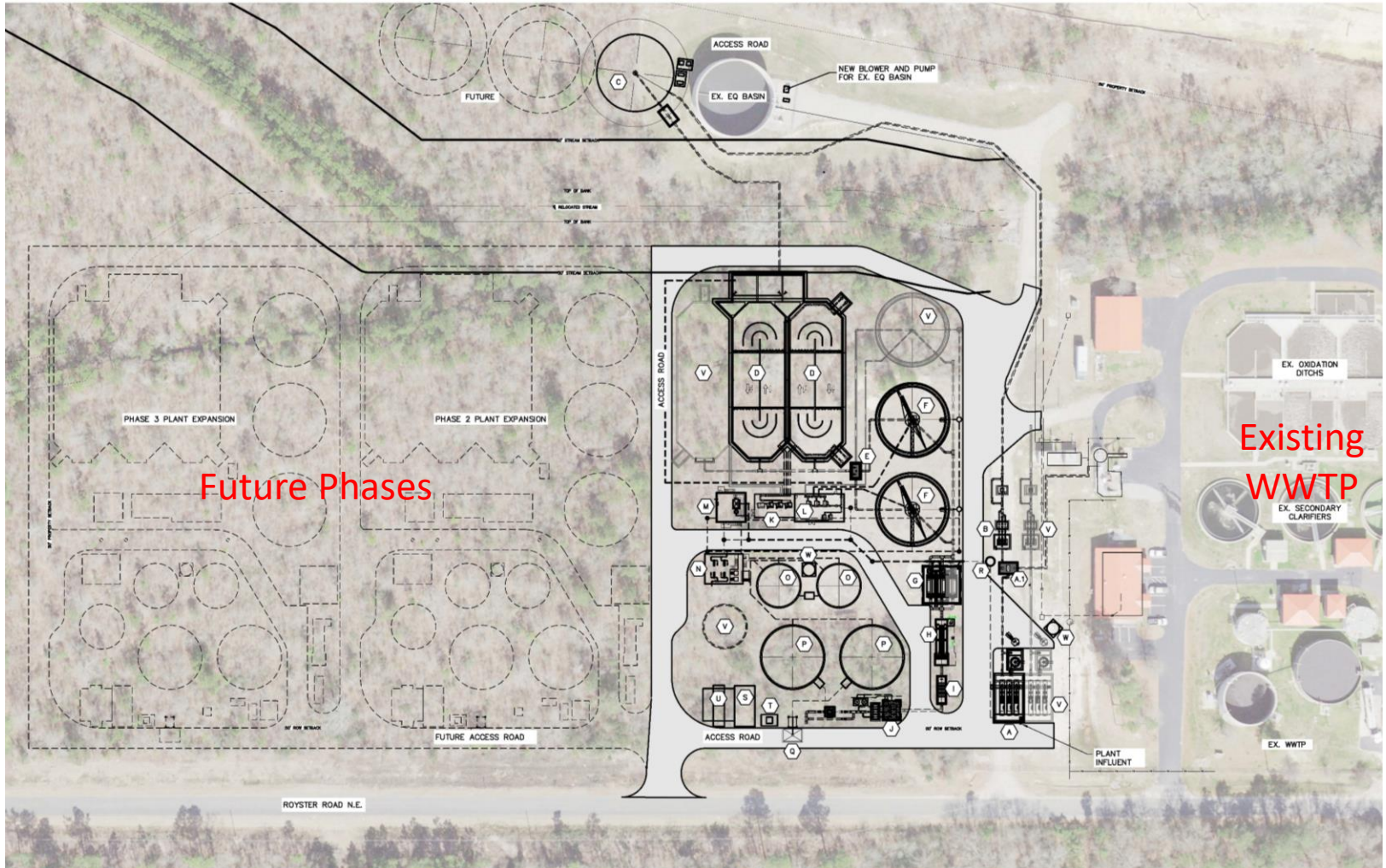
## 4.975 MGD (2.5 MGD Expansion)

Partner	Current Allocation (MGD)	4.975 MGD Allocation (MGD)	2.5 MGD Expansion Allocation (MGD)	% of Upgrade
<b>Brunswick County</b>	0.334975	0.334975	0	0
<b>Town of Leland</b>	1.160115	1.970416	0.810301	32.41%
<b>Town of Navassa</b>	0.169940	0.684609	0.514669	20.59%
<b>City of Northwest</b>	0.125000	0.125000	0	0
<b>H2GO</b>	0.684970	1.860000	1.175030	47.00%
<b>Totals</b>	<b>2.475</b>	<b>4.975</b>	<b>2.50</b>	<b>100%</b>

# Existing NE Brunswick Regional WWTP 2.475 MGD Capacity



# 2.5 MGD (4.975 MGD) Expansion Plan

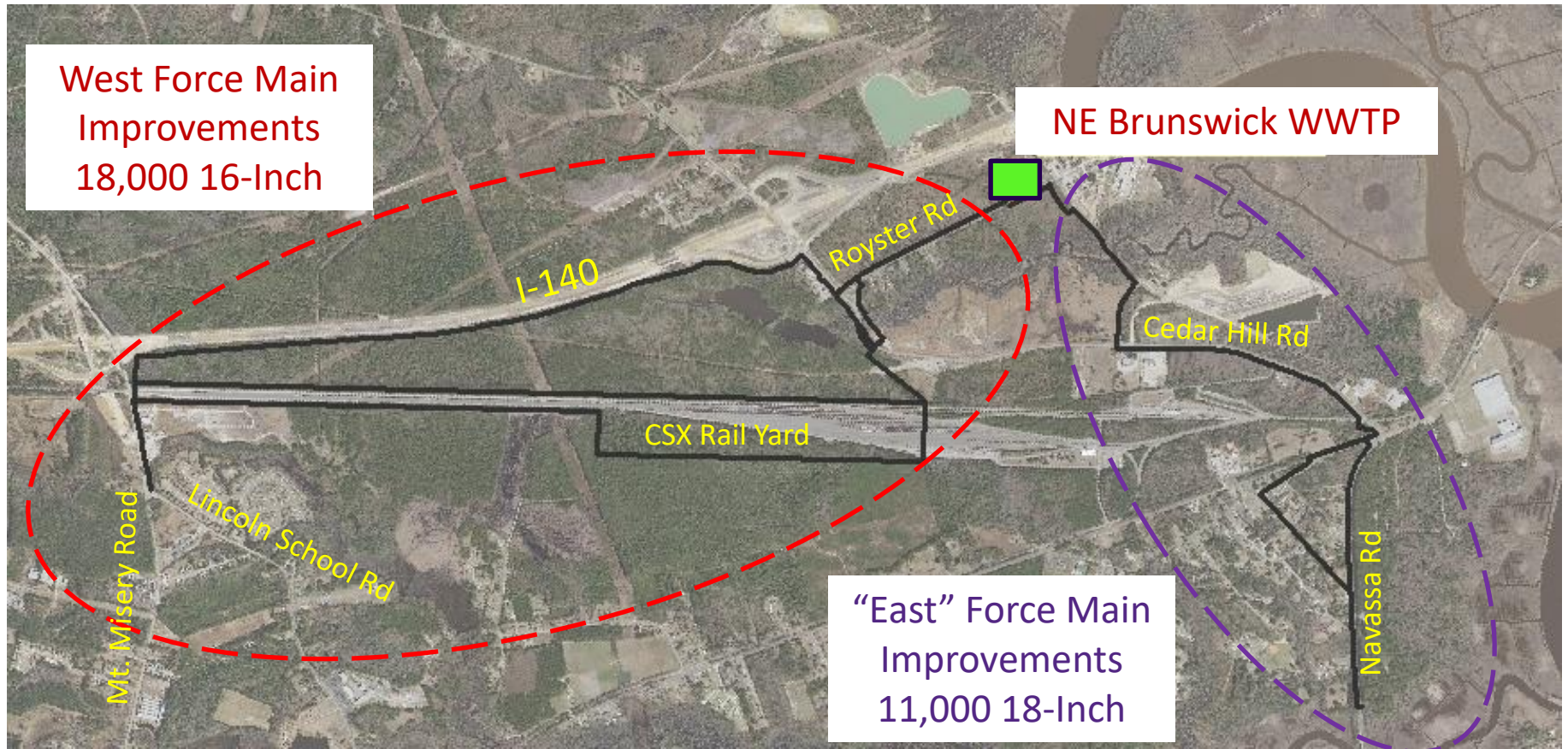


# Proposed Transmission Main Sizing

- ❖ 2011 NE Brunswick Regional Wastewater Transmission Study
- ❖ Phase 1 recommended transmission improvements completed
- ❖ Phase 1A (West) & Phase 2 (East) provide 4.975 MGD capacity
- ❖ Confirmed recommended pipe size for Phase 1A & Phase 2 are sufficient for the 4.975 MGD capacity



# Proposed Force Main Transmission System Improvements





# Opinion of Probable Project Costs 2.5 MGD Expansion (4.975 MGD)

Item	Cost Per Gallon	Remarks
<b>Construction</b>	\$12.51	Plant Expansion & Transmission System Improvements
<b>Contingency (15%)</b>	\$1.88	Budget Planning Contingency
<b>Technical Fees (10%)</b>	\$1.25	Technical & Design Fees
<b>Total</b>	<b>\$15.64</b>	<b>Total Cost Per Gallon</b>
Capacity Expansion	2.5 MGD	Total Capacity - 4.975 MGD
<b>Total Opinion of Probable Cost</b>	<b>\$39.1M</b>	

# Flow Projections & Allocations

## 4.975 MGD (2.5 MGD Expansion)

Partner	Current Allocation (MGD)	4.975 MGD Allocation (MGD)	2.5 MGD Expansion Allocation (MGD)	% of Upgrade	Participant Cost Share (MM)
Brunswick County	0.334975	0.334975	0	0	\$0.0M
Town of Leland	1.160115	1.970416	0.810301	32.41%	\$12.67M
Town of Navassa	0.169940	0.684609	0.514669	20.59%	\$8.05M
City of Northwest	0.125000	0.125000	0	0	\$0.0M
H2GO	0.684970	1.860000	1.175030	47.00%	\$18.38M
<b>Totals</b>	<b>2.475</b>	<b>4.975</b>	<b>2.50</b>	<b>100%</b>	<b>\$39.1M</b>

# Design & Permit Schedule

Task	Anticipated Completion Date
Design	June 2019
Permitting	September/October 2019
Receive Bids	December 2019
Construction Phase	January 2020 - August 2021

- ❖ **Basis of design complete**
- ❖ **Preliminary design complete - 60% design in process**
- ❖ **NPDES Permit Application - in process**

# Questions?

