



# Regionalization & Consolidation

## Eastern Shore Case Study

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# Background

- Exmore
  - Failing wastewater plant & rapid infiltration basin- Consent Order in 2005
  - Moratorium on new connections
  - Failing septic systems
  - Inadequate operational staff
- Nassawadox
  - >100k/day STP for former Shore Memorial Hospital and the town
- Onancock
  - Upgraded SOA Membrane Plant 0.75 MGD in 2011
- HRSD
  - Commissioned study



# Hampton Roads Sanitation District

- Political subdivision created in 1940 by Virginia General Assembly
- Serves 20 cities, counties and towns (approx. 1.9M people)
- Operates more than 500 miles of pipe from 6 to 60 inches, more than 100 pump stations, 8 major treatment plants and 6 smaller plants for a combined capacity of more than 225 MGD



# Challenges

## Exmore

- Largest number of individual connections to the system
- Currently operating septic systems- no sewer bill
- Economically disadvantaged
- Private Operator, Public Operator or Local Operator
- Economic autonomy

## Onancock

- Facility ownership & operations
- Existing WWTP debt

# Developments

Exmore inks \$18.5M deal for sewer initiative

APRIL 12, 2023



# Eastern Shore Transmission Forcemain

- Major players: Nassawaddox, Exmore, Wachapreague, Accomac, Onancock & HRSD
- Approximately 20-mile forcemain
  - Utilizing abandoned railway ROW
  - Multi-use ROW
- 4 pump stations
- Extension spurs
  - Wachapreague
  - Town of Accomac
- Exmore Sewer Collection System
  - Town responsible for collection
  - HRSD responsible for conveyance and treatment



# Full Alignment





# Project Benefits

- Water quality- aquaculture, seaside and the Chesapeake Bay
- Lift moratorium on new connections allowing for economic development.
- Long term solution to failing septic systems
- Opportunities for future connections outside of Exmore
- O&M cost savings
- Providing centralized sewer services to underserved communities

# Capital Stack

- **HRSD Transmission Force Main- Total Project Cost**
  - SRF Loan- \$26M
  - WQIF Grant- \$5M
  - ARPA Grants- \$4M
  - Other Funds- \$3M
- **Town of Exmore Sewer System- Total Project Cost**
  - SRF Loan/PF- \$6M
  - USDA Loan/Grant- \$9.5M
  - ARPA Grants- \$6.9M
  - DHCD- \$1M
  - HUD- \$0.75M
  - Town ARPA- \$0.68M



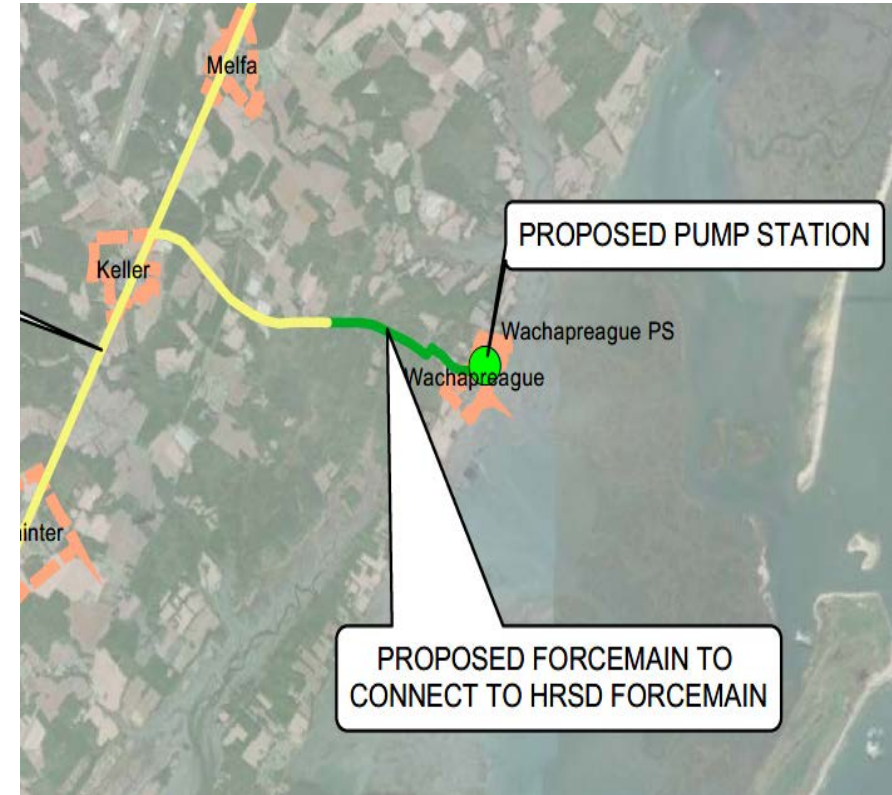
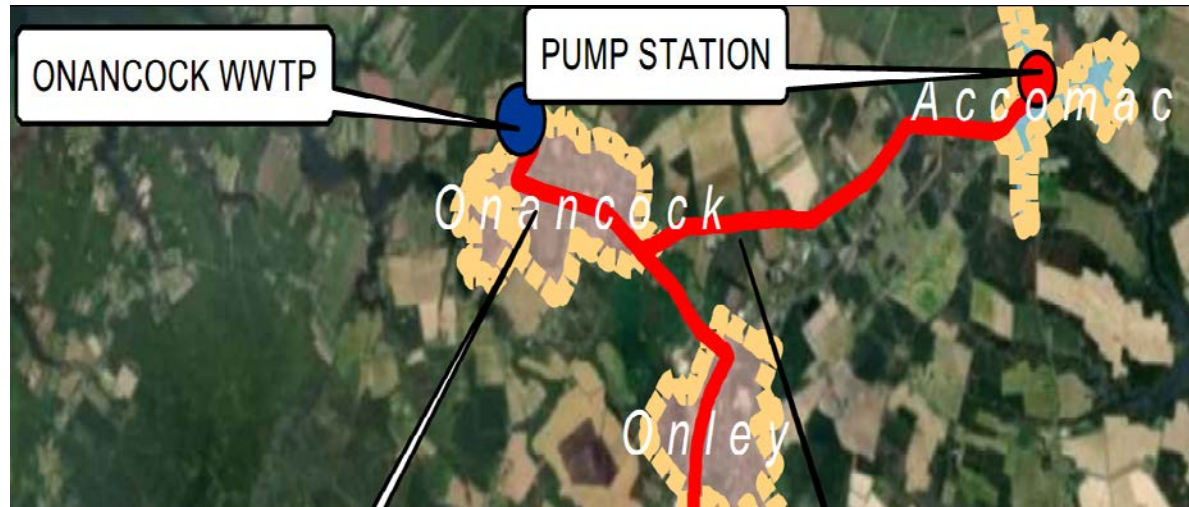
# Exmore Budget

## Sources

	<b>Phase I</b>	<b>Phase I Non-</b>	<b>Phase II</b>	<b>Total</b>
	<b>Construction</b>	<b>Construction</b>	<b>Construction</b>	
Virginia Water Facilities Revolving Fund: Principal Repayment Loan	\$ 2,757,946	\$ 249,173	\$ -	\$ 3,007,119
Virginia Water Facilities Revolving Fund: Principal Forgiveness Loan	2,756,278	249,022	-	3,005,300
USDA Loan	2,934,844	265,156	-	3,200,000
USDA Grant	5,811,909	525,091	-	6,337,000
American Rescue Plan Act SCS Grant	-	-	3,358,575	3,358,575
American Rescue Plan Act Direct Appropriation Grant	3,209,986	290,014	-	3,500,000
HUD Grant	750,000	-	-	750,000
Town Contributions	351,832	324,715	-	676,548
DHCD Community Development Block Grant	802,193	-	139,057	941,250
<b>TOTAL:</b>	<b>\$ 19,374,989</b>	<b>\$ 1,903,171</b>	<b>\$ 3,497,632</b>	<b>\$ 24,775,792</b>

## Capital Stack Cont.

- Wachapreague- ARPA- \$3M
- Town of Accomac- ARPA- \$4.5M



# Project Status

- HRSD Transmission Forcemain- Nearing completion.
  - Tie in at Nassawaddox & Exmore is live
  - Wachapreague extension underway
  - Town of Accomac extension underway
  - Connection to Onancock WWTP Main PS complete
- Town of Exmore
  - Failing treatment plant OFFLINE!
  - Main PS operational
  - Phased completion of sewer system installation underway with connections being tied in daily.
  - 717 Grinder pumps, 83k LF of forcemain



# Takeaways

- Determination
  - Keep stakeholders engaged
  - Focus on the long game
  - Find a local champion
- Regional sewer authorities/districts
  - They were created for this
- Coordinate & Collaborate
  - Multiple funding agencies needed to bring project to life
  - Communication is key to make this work
  - Technical assistance needed at the local level



# QUESTIONS?

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Clean Water Financing & Assistance Program

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