40355 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Real-time Air Monitoring Results
September 11, 2012

This data report discusses real-time air monitoring data collected between September 10th 06:00 and September 11th 06:00 in support of mitigation and remediation operations conducted near Stolthaven's facility near Braithwaite, LA.

Real-time air monitoring during entry activities resulted in reports of 4 detections with 2 detections exceeding the chemical specific action level required for donning of respiratory protection. All workers not present in respiratory protection prior to initiating these tasks were present in respiratory protection during these events until the task was completed, or after air concentrations reached a level below which respiratory protection was required. During an entry activity near Tank Farm B on September 10th at 09:35 a maximum VOC concentration of 67.0 ppm was recorded; workers egressed from site of exceedance and relocated upwind.

Real-time air monitoring for VOCs, LEL, methyl acrylate, and styrene was conducted using stationary AreaRAEs and hand-held instruments such as the MultiRAE, and colorimetric detector tubes. Table 1 and Table 2 display data summaries for AreaRAE and handheld MultiRAE data respectively. Appendix 1 shows incident site maps.

Table 1
AreaRAE Summary – September 10th 06:00 to September 11th 06:00

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	LEL	5394	0	0.0 – 0.0 %
	VOC	5394	0	0.0 – 0.0 ppm
Unit 2	LEL	5297	0	0.0 – 0.0 %
	VOC	5297	0	0.0 – 0.0 ppm
Unit 3	LEL	4446	0	0.0 – 0.0 %
	VOC	4446	258	0.1 – 9.8 ppm
Unit 4	LEL	5564	0	0.0 – 0.0 %
	VOC	5564	0	0.0 – 0.0 ppm
Unit 9	LEL	5634	0	0.0 – 0.0 %
	VOC	5634	0	0.0 – 0.0 ppm
Unit 11	LEL	5308	0	0.0 – 0.0 %
	VOC	5308	0	0.0 – 0.0 ppm
Unit 12	LEL	5650	443	2.3 – 3.4 %
	VOC	5650	0	0.1 – 0.6 ppm
Unit 13	LEL	5667	0	0.0 – 0.0 %
	VOC	5667	0	0.0 – 0.0 ppm

***Detections may include drift events -** Drift is defined as any interference in the electrochemical sensor's ability to accurately report the concentration of a chemical in the atmosphere. Humidity and temperature changes throughout the monitoring period are typical sources of drift.

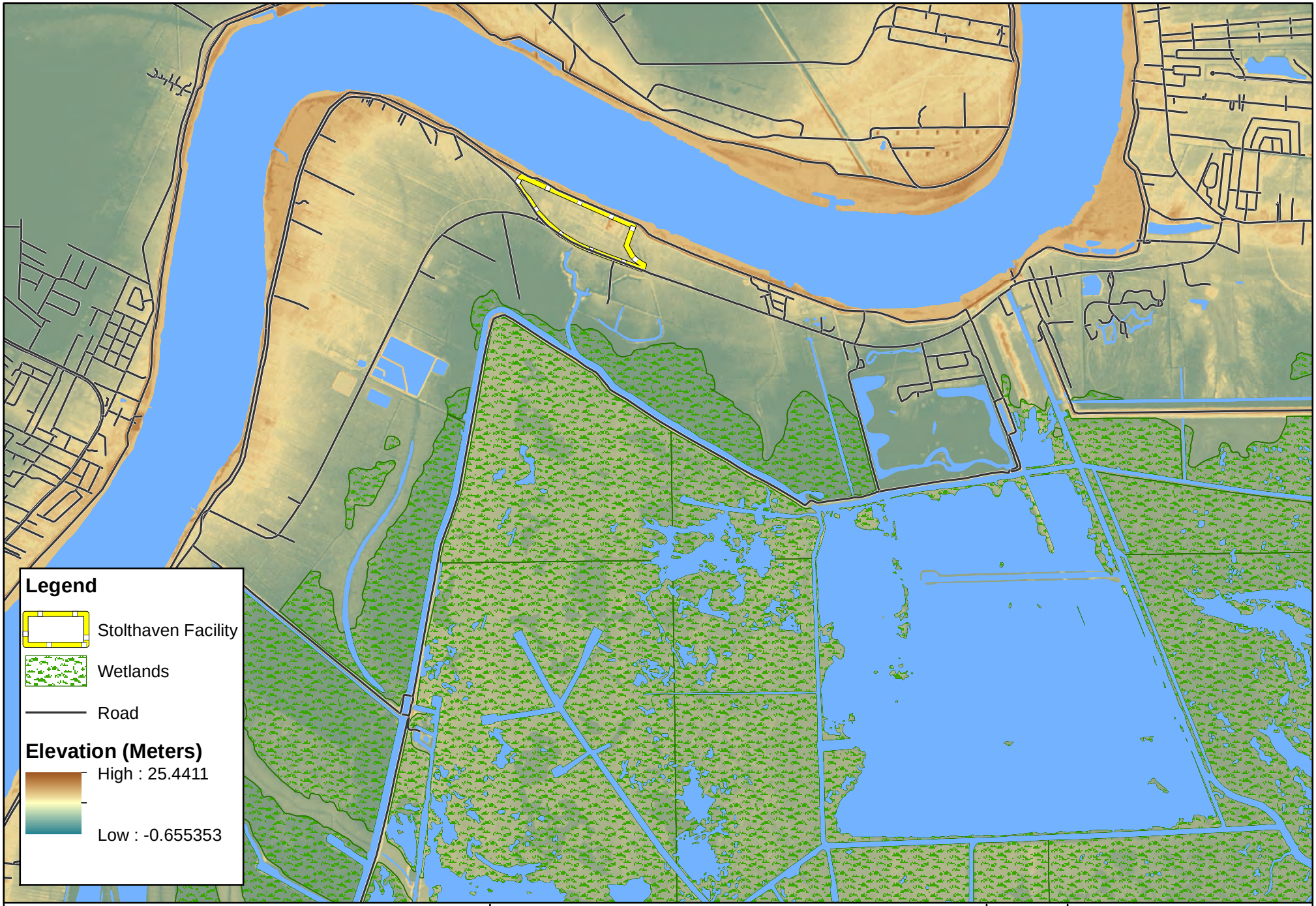
Table 2
Hand-held MultiRAE Real-time Summary – September 10th 06:00 – September 11th 06:00

Community				
Analyte	**Number of Readings**	**Number of Detections**	**Average Concentration of Detections**	**Highest Concentration**
LEL	193	0	NA	< 1.0 %
VOC	254	0	NA	< 0.1 ppm
Entry Activities				
Analyte	**Number of Readings**	**Number of Detections**	**Average Concentration of Detections**	**Highest Concentration**
LEL	180	0	NA	< 1.0 %
VOC	310	4	17.25	67.0 ppm
Methyl Acrylate	1	0	NA	<2.0 ppm
Work Area				
Analyte	**Number of Readings**	**Number of Detections**	**Average Concentration of Detections**	**Highest Concentration**
LEL	111	0	NA	< 1.0 %
VOC	124	0	NA	<0.1 ppm
Methyl Acrylate	1	0	NA	<2.0 ppm
Styrene	1	0	NA	<0.5 ppm

NA = not applicable

* In addition to the tabulated real-time data, additional air monitoring for the purpose of worker protection was performed throughout the work area. These data are used for task-specific decision-making, but may not be recorded in the tabulated data represented above.

Appendix 1: Incident Maps



Stolthaven Facility
Shaded Relief of Elevation

0 0.25 0.5 1 1.5
Miles

N

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AreaRAE Station Locations

September 11, 2012

0 250 500 1,000 1,500 2,000 2,500

Feet

N

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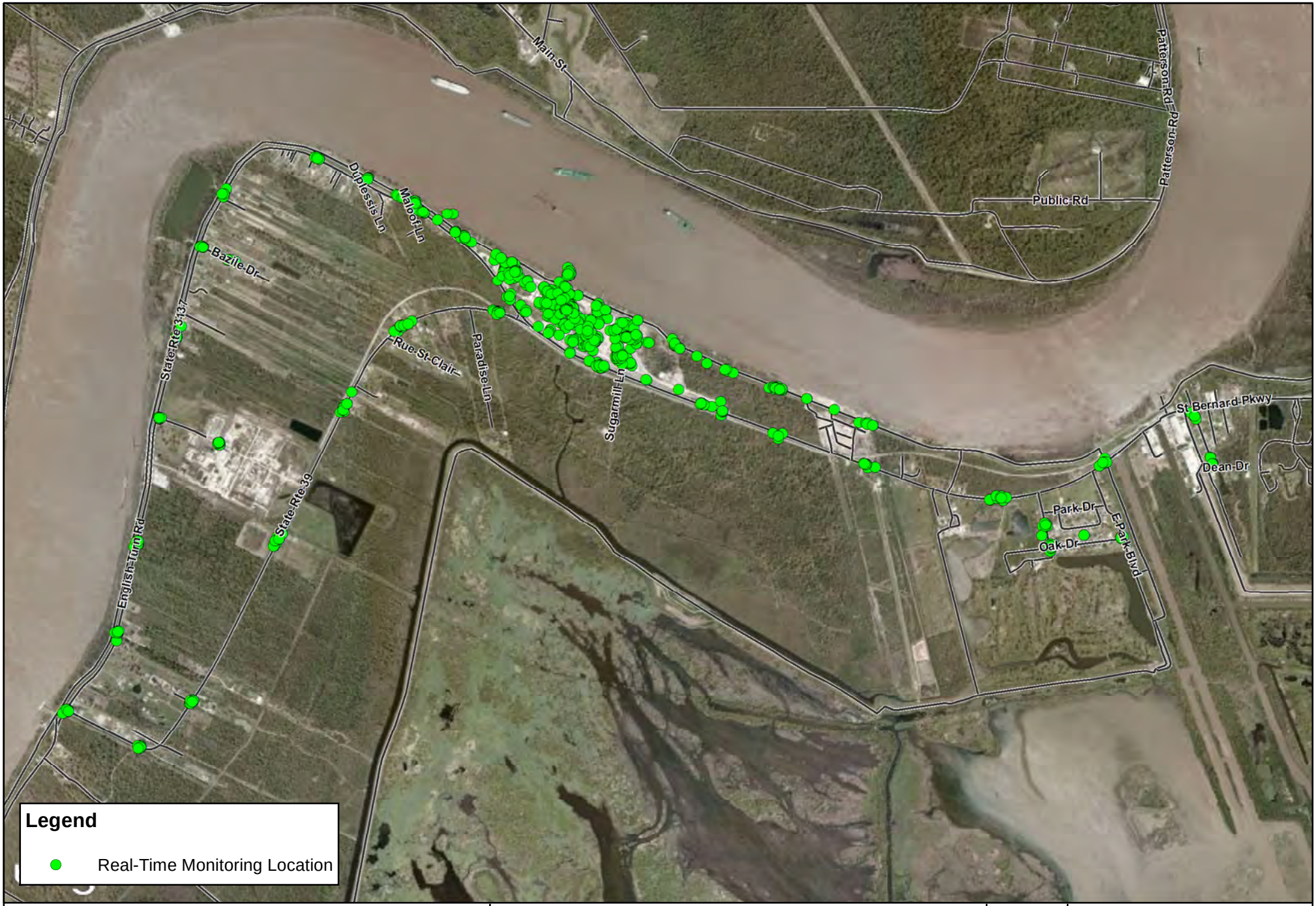

Real-Time Monitoring Locations

9/10/12 06:00 to 9/11/12 06:00

0 0.125 0.25 0.5 0.75 1 1.25
Miles

N

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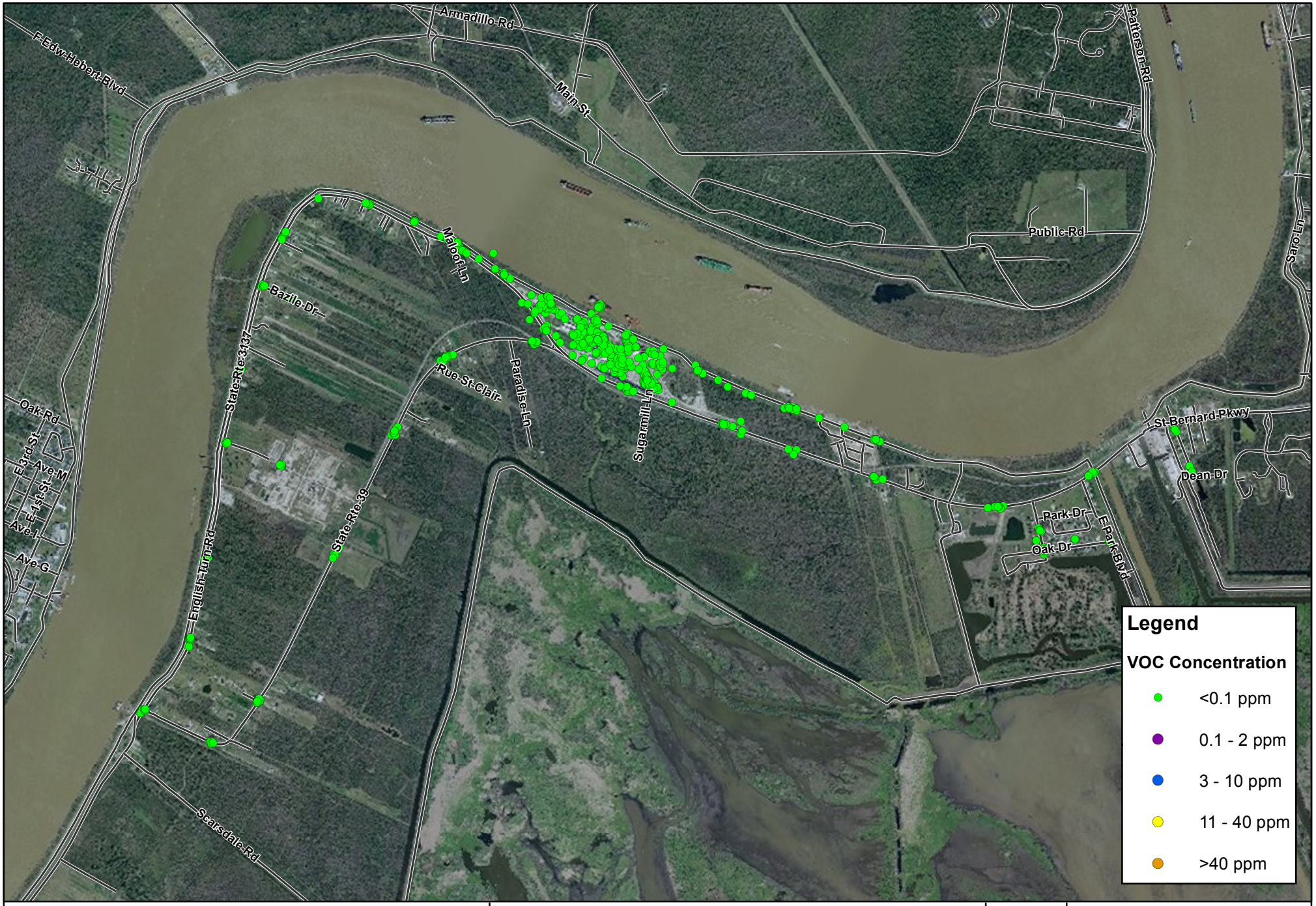

Manually-Logged VOC Concentrations 9/10/12 06:00 to 9/11/12 06:00

0 0.125 0.25 0.5 0.75 1 1.25
Miles

N

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Styrene Reading Locations

9/10/12 06:00 to 9/11/12 06:00

0 125 250 500 750
Feet

N

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Methyl Acrylate Reading Locations

9/10/12 06:00 to 9/11/12 06:00

0 125 250 500 750
Feet

N

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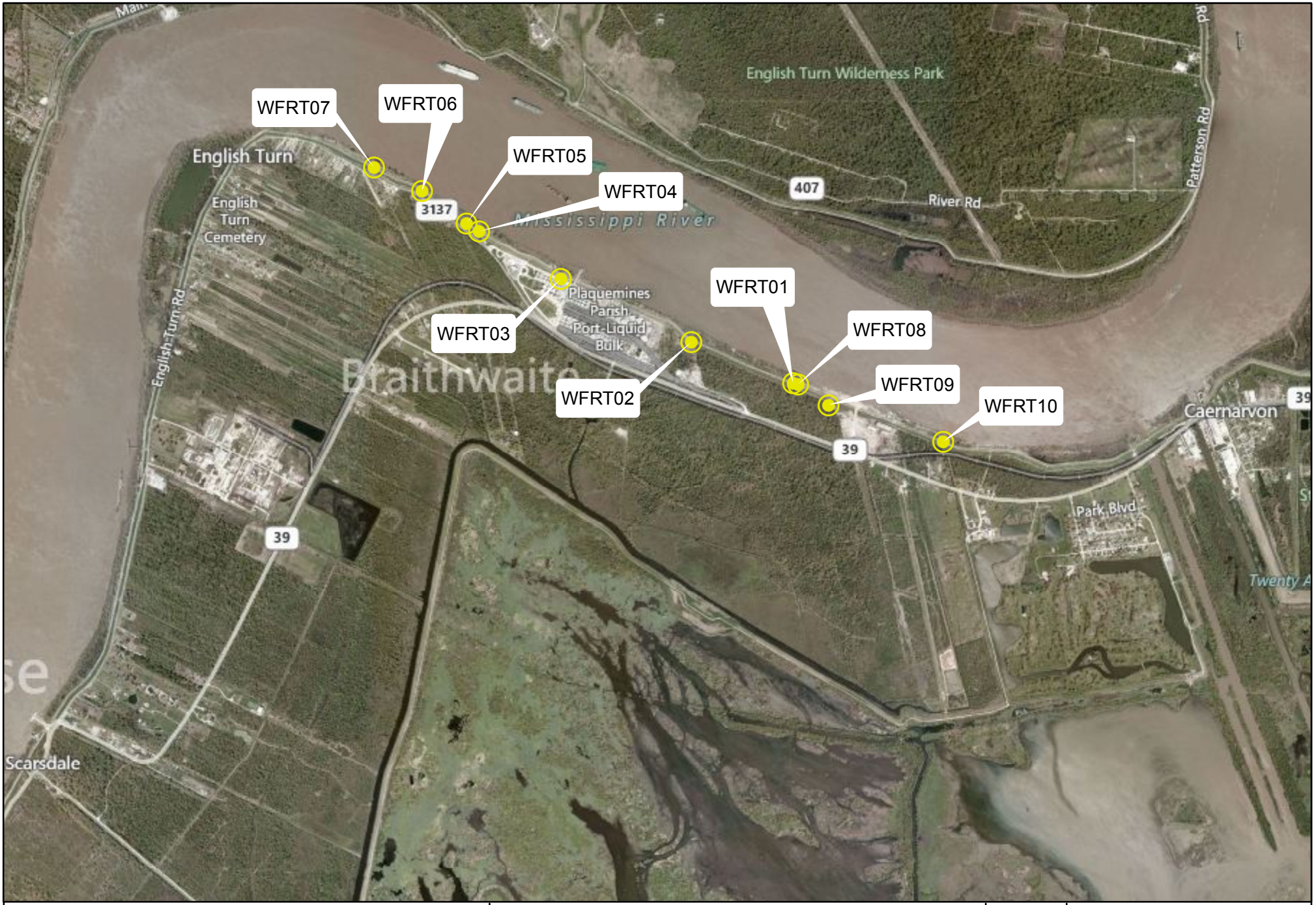

Work Area Fixed Real-Time Monitoring Locations

0 0.15 0.3 0.6 0.9 1.2 1.5

Scale in Miles

N

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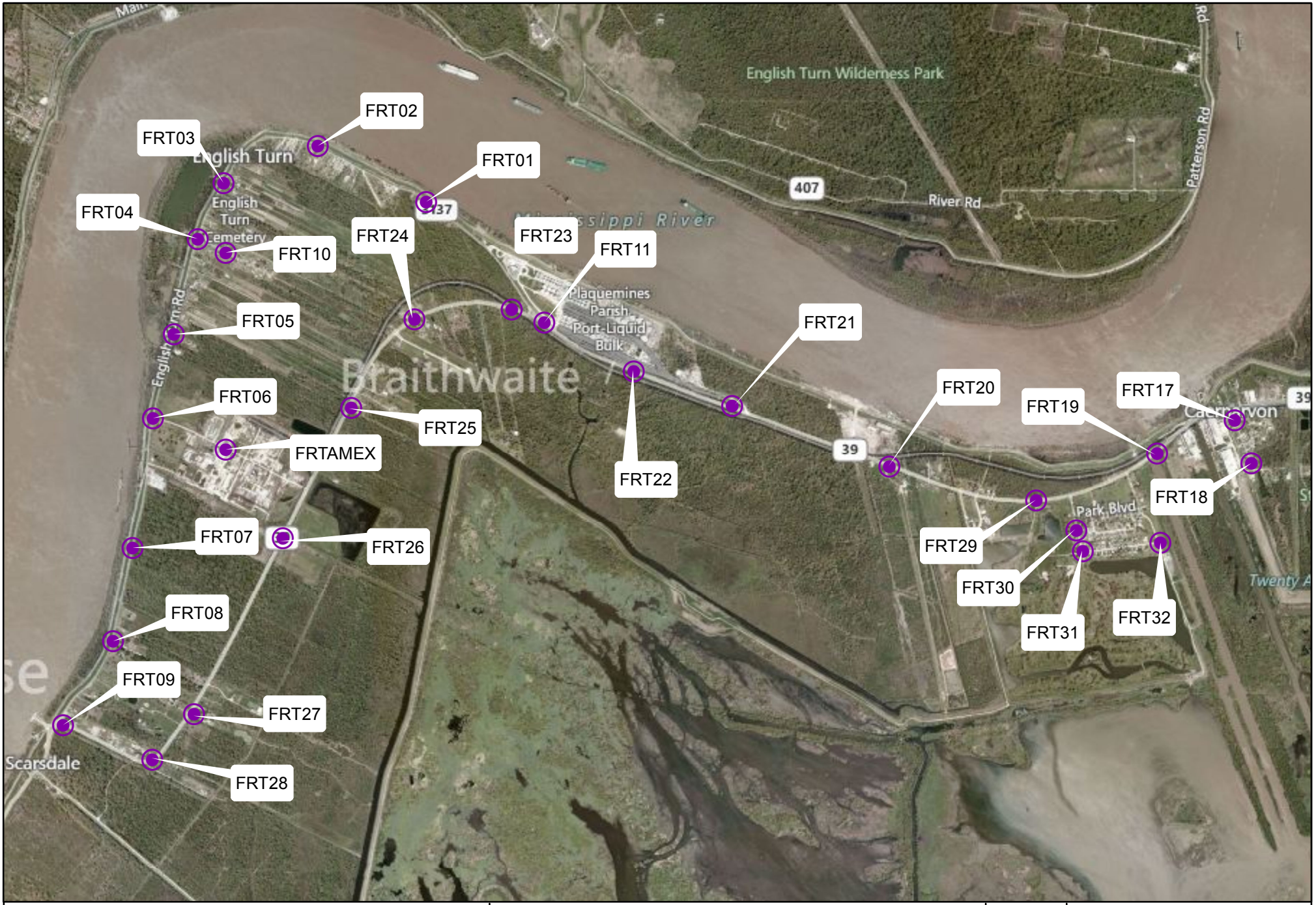

Community Fixed Real-Time Monitoring Locations

0 0.15 0.3 0.6 0.9 1.2 1.5

Scale in Miles

N

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