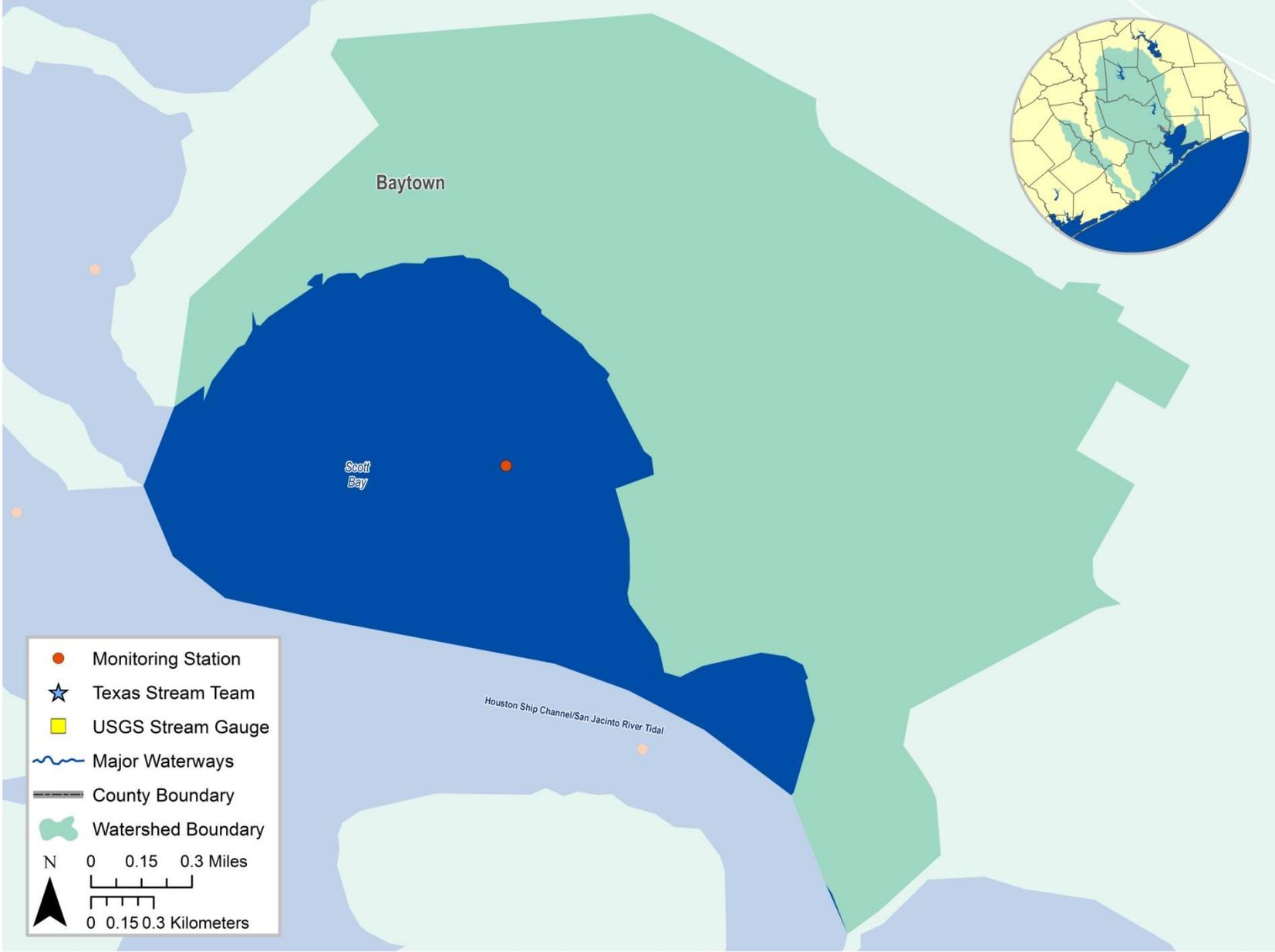
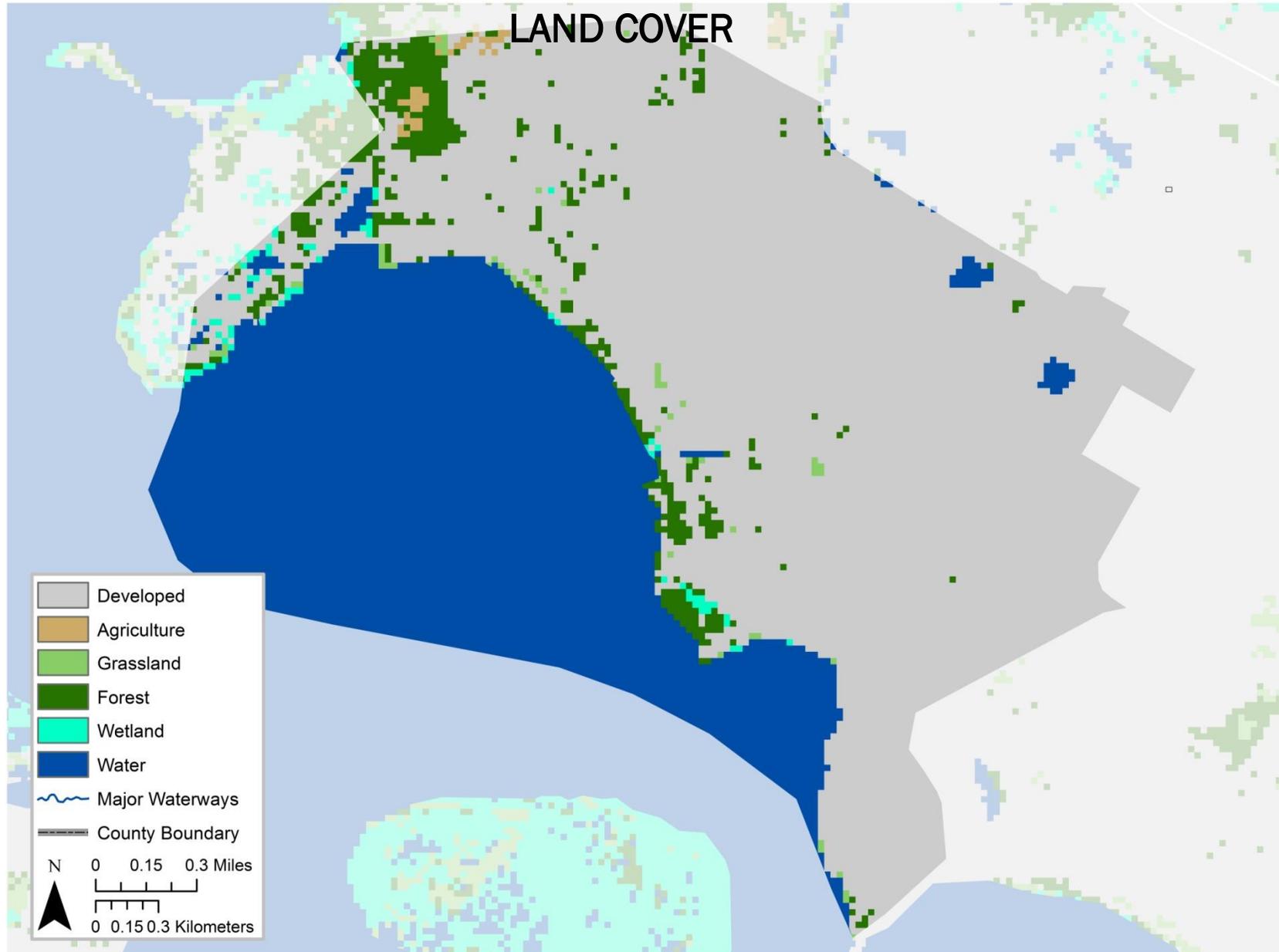


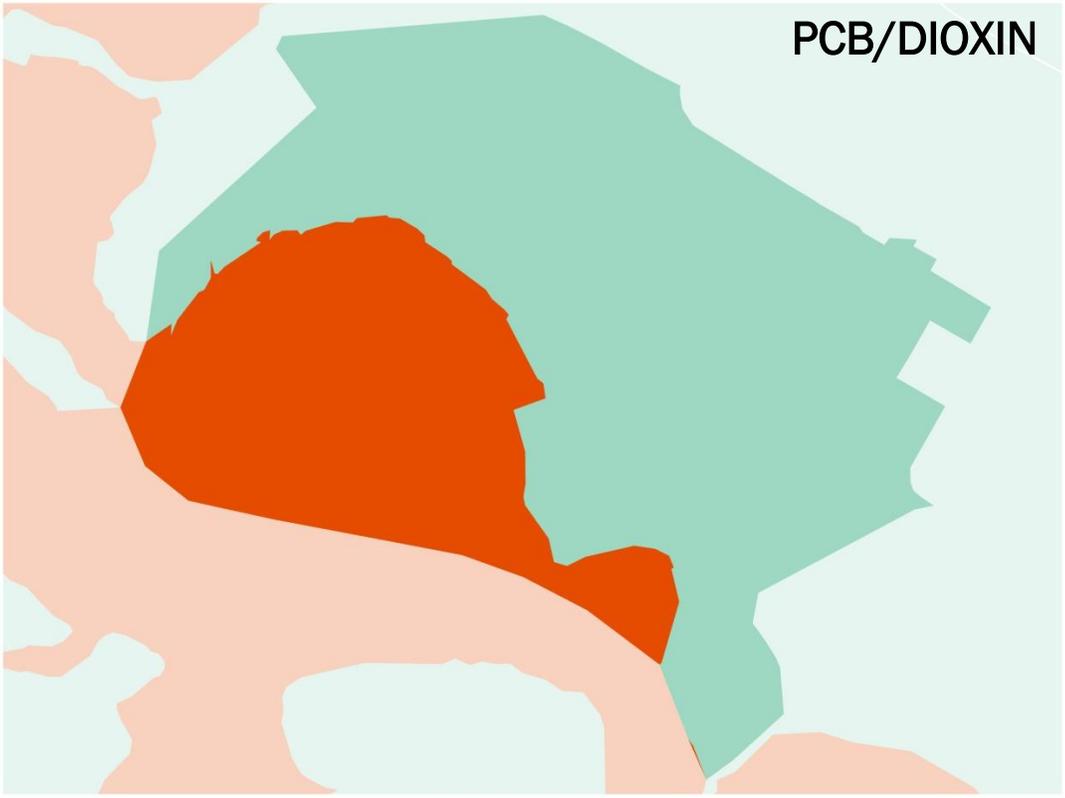
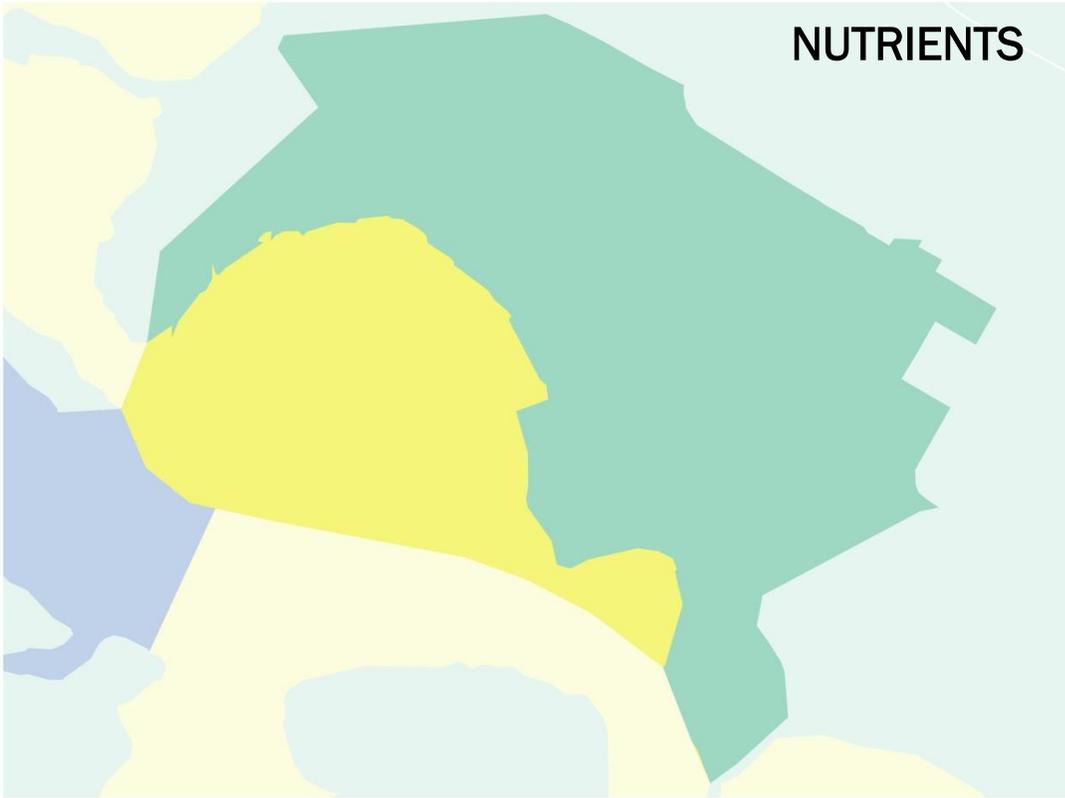
SCOTT BAY - SEGMENT 2429



SCOTT BAY - SEGMENT 2429

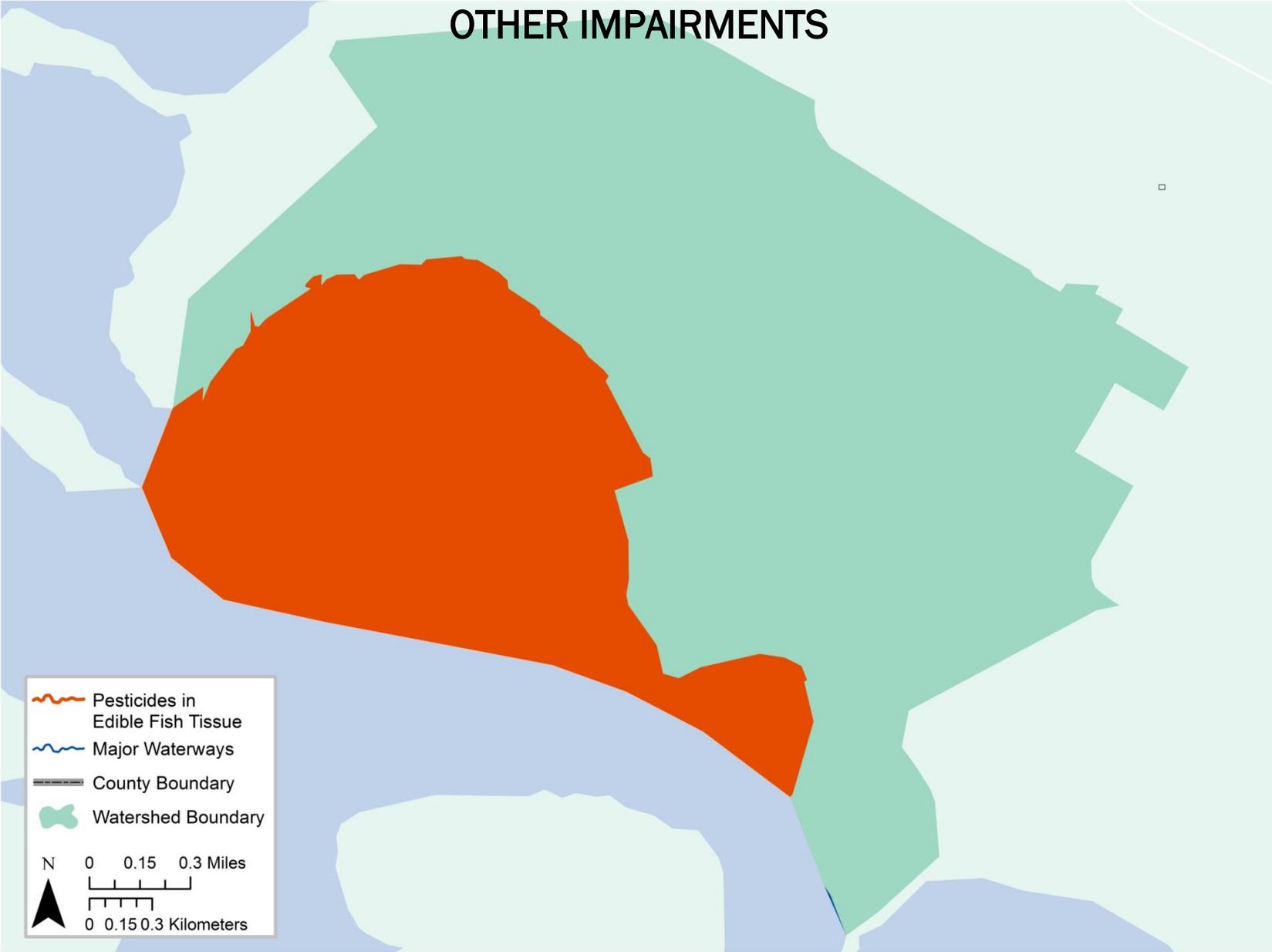
LAND COVER





SCOTT BAY - SEGMENT 2429

OTHER IMPAIRMENTS



Segment Number:	2429	Name:	Scott Bay		
Area:	1.5 square miles	Miles of Shoreline:	3.5 miles	Designated Uses:	Primary Contact Recreation 1; High Aquatic Life Use
Number of Active Monitoring Stations:	1	Texas Stream Team Monitors:	0	Permitted Outfalls:	2
Description:	A side bay located east of the Houston Ship Channel/tidal San Jacinto River north of Highway 146 on the west side of the City of Baytown.				

Percent of Stream Impaired or of Concern						
Segment ID	PCBs/Dioxin	Bacteria	Dissolved Oxygen	Nutrients	Chlorophyll a	Other
2429	100	-	-	100	-	100

Segment 2429			
Standards	Bays & Estuaries	Screening Levels	Bays & Estuaries
Temperature (°C/°F):	35 / 95	Ammonia-N (mg/L):	0.10
Dissolved Oxygen (24-Hr Average) (mg/L):	4.0	Nitrate-N (mg/L):	0.17
Dissolved Oxygen (Absolute Minima) (mg/L):	3.0	Orthophosphate Phosphorus (mg/L):	0.19
pH (standard units):	6.5-9.0	Total Phosphorus-P (mg/L):	0.21
Enterococci (MPN/100mL) (grab):	104	Chlorophyll a (µg/L):	11.6
Enterococci (MPN/100mL) (geometric mean):	35		

FY 2016 Active Monitoring Stations				
Site ID	Site Description	Frequency	Monitoring Entity	Parameter Groups
17922	Scott Bay at mid bay East	Bi-Monthly	HCPHES	Field, Conventional, Bacteria, Chlorophyll a (Qtrly)

Water Quality Issues Summary

Issue	2014 Assessment <i>I – Impaired C – Of Concern</i>	Possible Causes / Influences / Concerns Voiced by Stakeholders	Possible Solutions / Actions To Be Taken
Elevated Nutrients	2429 C	<ul style="list-style-type: none"> ▪ Fertilizer runoff from urbanized properties, such as landscaped areas, residential lawns, and sport fields ▪ Agricultural runoff from row crops, fallow fields, and animal operations ▪ Nutrient loading from WWTF effluent, sanitary sewer overflows, and malfunctioning OSSFs 	<ul style="list-style-type: none"> ▪ Implement YardWise and Watersmart landscape practices ▪ Encourage Water Quality Management Plans or similar projects for agricultural properties ▪ Install and/or maintain riparian buffer areas between agricultural fields and waterways ▪ Monitor phosphorus levels at WWTFs to determine if controls are needed
PCBs/Dioxin in Edible Fish Tissue	2429 I	<ul style="list-style-type: none"> ▪ Concentrated deposits outside boundaries of the waste pits located adjacent to San Jacinto River and I-10 bridge ▪ Unknown industrial or urban sources 	<ul style="list-style-type: none"> ▪ Remove or contain contamination from locations already identified ▪ Encourage additional testing to locate all unknown sources/deposits
Pesticides in Edible Fish Tissue	2429 I	<ul style="list-style-type: none"> ▪ Runoff from upstream agricultural areas. ▪ Contaminated groundwater discharging into surface waters 	<ul style="list-style-type: none"> ▪ Educate agricultural producers about proper pesticide application. ▪ Promote conservation practices like riparian buffers that help reduce runoff pollutants in agricultural areas. ▪ Encourage additional testing to locate all unknown sources.

Segment Discussion:

Watershed Characteristics: This watershed is south of the city of Baytown in an area that is characterized by heavy development – residential development to the north and industrial and commercial development to the east. The Houston Ship Channel (HSC) supports heavy boat and barge traffic on a consistent basis.

Water Quality Issues: Segments 2429 Scott Bay is impaired for fish consumption due to PCBs, Dioxin, and the pesticides chlordane, dieldrin, and heptachlor epoxide found in edible fish tissue. The Texas Department of State Health Services issued a Limited Consumption Fish Advisory. Scott Bay is listed on the 2014 IR for concerns for water quality based upon screening criteria levels for ammonia nitrogen, nitrate nitrogen, and total phosphorus. Over 48 percent of ammonia nitrogen, 100 percent of nitrate nitrogen, and 95 percent of total phosphorus samples were above the screening criteria levels.

Special Studies/Projects: This segment is included in two TMDL projects, the Houston Ship Channel and Upper Galveston Bay TMDL for PCBs in Fish Tissue and the Houston Ship Channel TMDL for Dioxin, which are currently underway. For more information, please refer to the detailed discussions located in the Public Involvement and Outreach section of the 2016 Basin Summary Report regarding dioxin and PCB TMDLs.

Trends: Regression analysis of water quality data revealed seven statistically significant trends for the Scott Bay watershed including increasing nitrate, salinity, specific conductance (SPCond), total dissolved solids (TDS), and total phosphorous (TP) while chlorophyll a and enterococci concentrations are decreasing over time. Scott Bay is currently listed as impaired for PCB/dioxin and pesticides in edible fish tissue in the 2014 Texas Integrated Report. Refer to the Water Quality Issues discussion above for more information about these impairments.

The 2014 Integrated Report also lists this segment as having a concern for elevated nutrient concentrations. Regression analysis of nutrient data for Scott Bay revealed a statistically significant increasing trend for [nitrate](#) and [TP](#) with the majority of samples collected since 2002 exceeding the set screening criteria for both. Additionally, [ammonia](#) concentrations have remained relatively stable during the period of record with nearly half of the samples collected measuring above the 0.10 mg/L screening level.

Recommendations

Continue collecting water quality data to support actions associated with any future watershed protection plan development and possible modeling.

Coordinate education efforts with other local TMDL and watershed protection plan efforts.

Pursue a new local partner to Clean Rivers Program to collect additional data that would help better isolate problem areas.

Support additional sampling to investigate sources of elevated dioxin and PCB levels.
