

# Willet Ave. Pond & Bullocks Cove Riverside, RI

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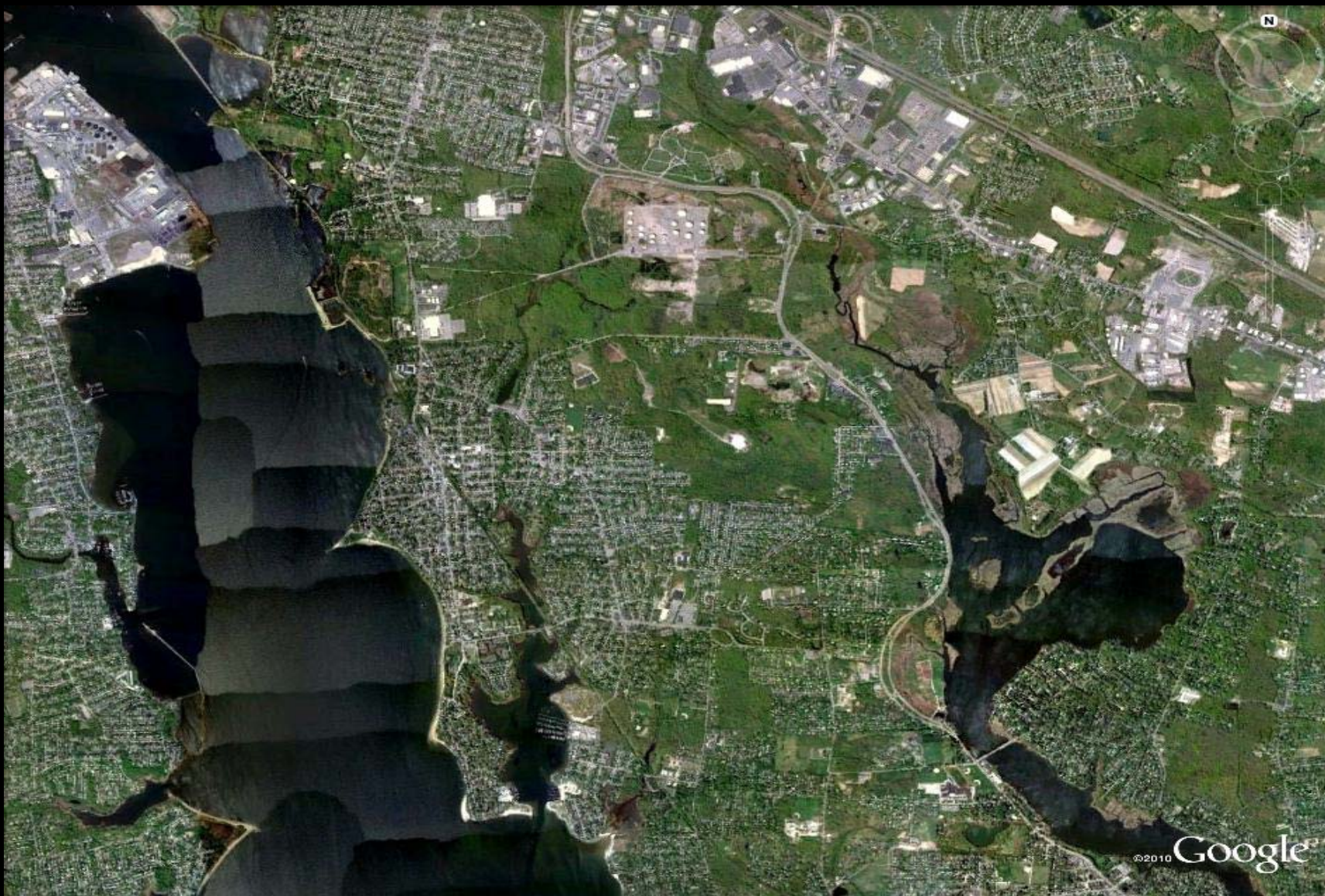
Ed Serowik  
Pilgrim High School

# A quote to begin

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**“Follow the river and you will find the sea”**

French Proverb



# A Threatened Subwatershed

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- Point and non-point sources of pollution
- The head waters begin very close to an operating home heating oil and gasoline storage facility
- This same facility 100 years ago used in-ground cement tanks and above ground pipelines.



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# Willett Ave Pond

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- Small Man-made pond. Originally (1870) used to harvest ice for the growing resort business.
- The dam created a pond of approximately 10 acres.
- Bordered by homes on the west (1940's)

# A Thriving Business Area

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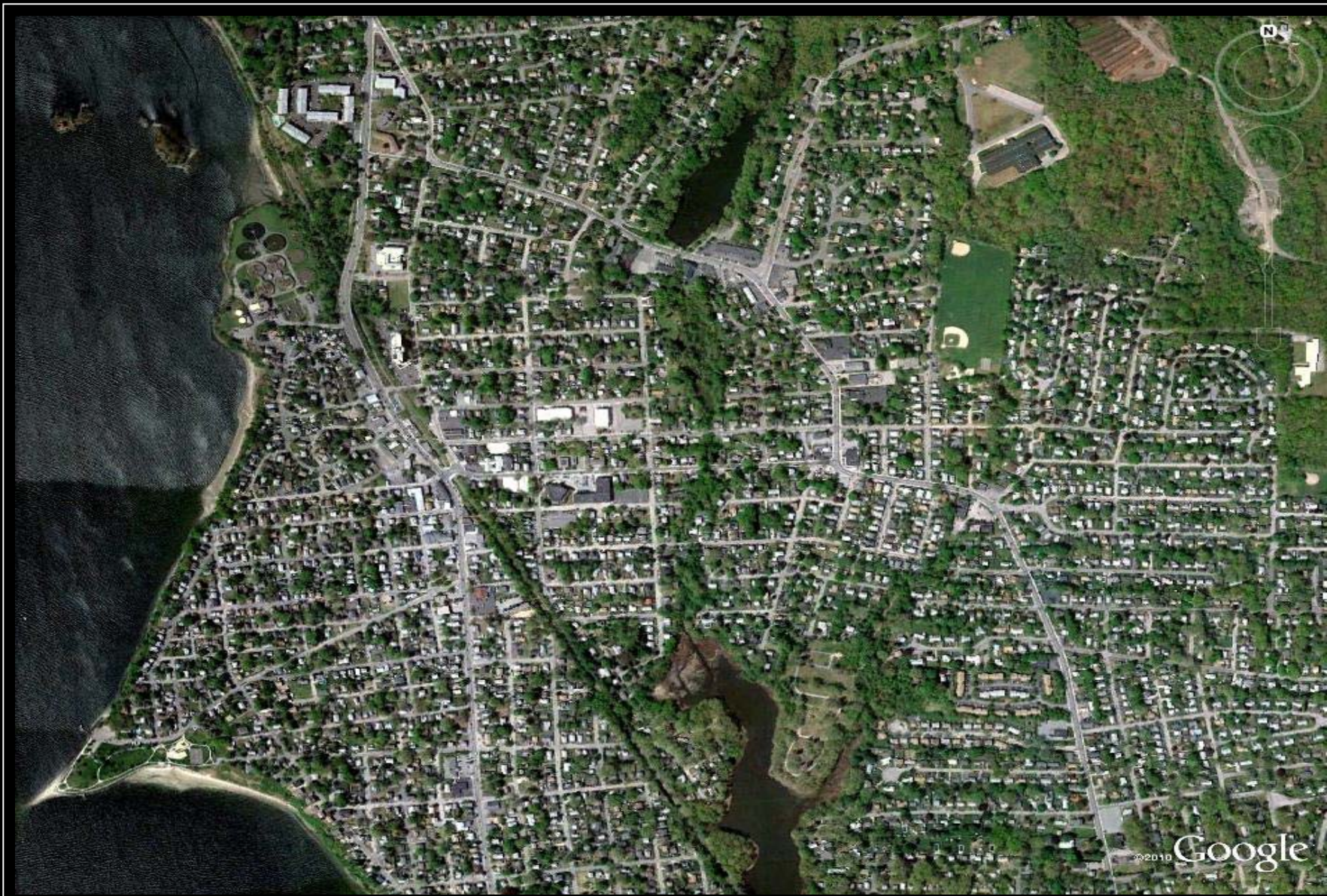


# The Carpenter Ice House

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# Willetts Ave Pond – Used and Abused

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- Throughout the 1950's and 1960's the pond was used for fishing and ice skating. As the neighborhoods grew around both it and the outflow stream (Willetts Ave Brook), the flow of water began to diminish.
- As flow is restricted algae builds up in the pond creating a stagnant waterway.

# Willett Ave Pond looking south

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# Willett Ave Pond looking north

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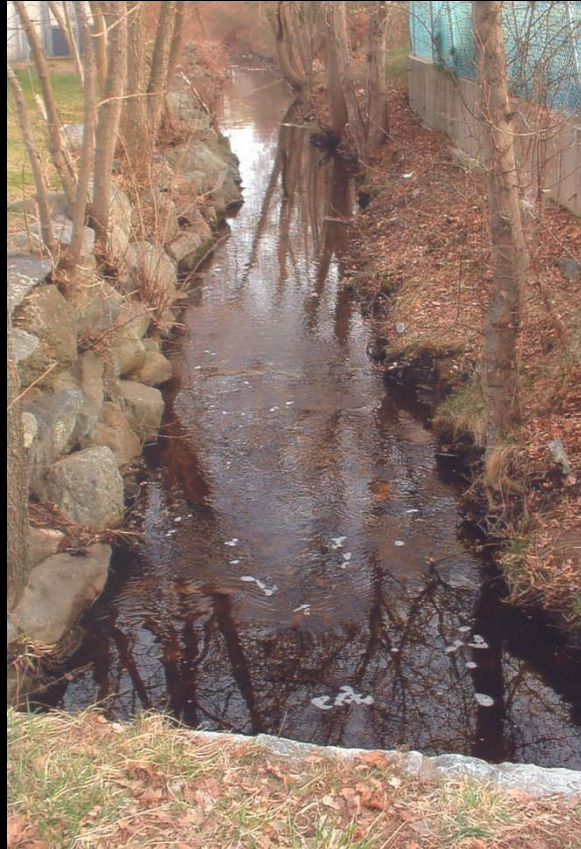
# Moving down stream

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- During the 1970's the outflow stream was corraled into a concrete-lined waterway. Storm drains prevent much the surrounding ground water from infiltrating into the soil; redirecting the storm water into the brook
- Today, much of the year this stream is dry and is used as dumping ground.

# Willett Brook

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# Willett Brook

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# Bullock's Cove

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- Separated from Narragansett Bay by a sandy outcropping beginning at Riverside Square and ending at Bullock's Point.
- Once a thriving habitat to crabs, eels, mussel and clam beds
- Portions are slowly turning into shallow grassy marshes
- Phragmites has choked out much of the cat-o-nine tails and eelgrass that once lined the cove



# Upper Bullocks Cove

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# More phragmites

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# Looking south

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# East Bay Bike Path and Sewer Line

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# Bullock's Cove

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## **Sewer main break affects Bullocks Cove, bike path**

**May 4, 2007**

EAST PROVIDENCE -- A city sewer main that runs along the East Bay Bike Path in the Riverside section of the city broke recently, and public works officials say it will take three weeks to repair.

The city discovered the break in a 21-inch sewer main, which crosses Bullocks Cove, yesterday around 7 p.m. In a news release today, Public Works Director Stephen H. Coutu said emergency crews were immediately called to install an "overland bypass system."

Sewage stopped pouring into the cove around 11 a.m. today when the bypass system began. Coutu emphasized the state Department of Environmental Management and Department of Health was notified and updated regularly.

He said officials from both state departments also requested "all water recreational activities in the area be prohibited" until 11 a.m. Thursday. The restriction will be in effect for the Bullocks Cove north of Crescent View Avenue area.

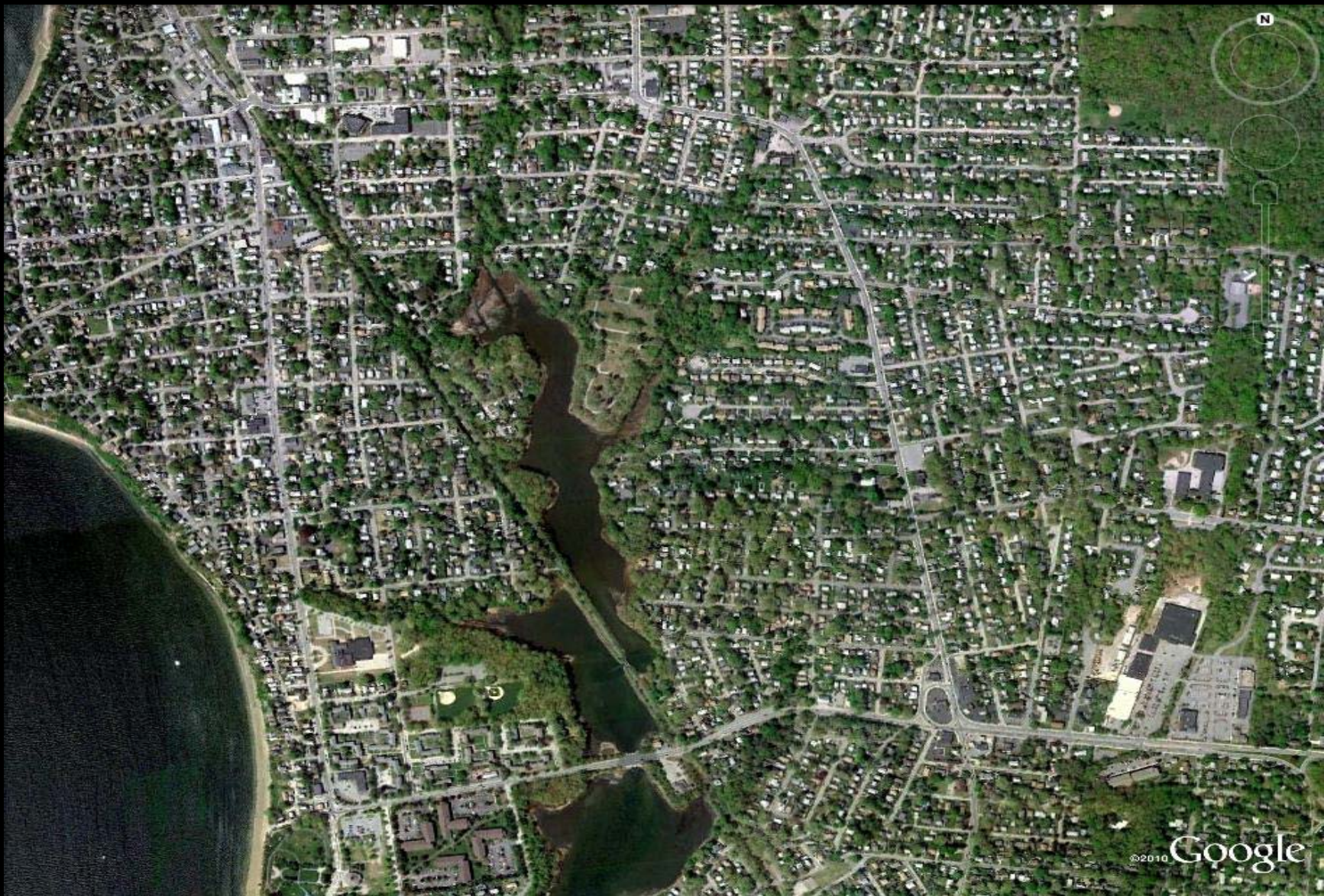
The bike path just north of Crescent View Avenue will remain closed during the construction. Coutu said a detour route for bike path users isn't necessary because "the path has been closed all winter [for repairs to Barrington sewer pipes] and now we just have our own project."

-- Journal staff writer Alisha A. Pina

# Bullock's Cove

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- Cut in half in the 1840's when a railroad berm was constructed leaving only a twelve foot wide culvert for the upper cove to drain through.
- In the 1880's two narrow foot bridges were constructed to allow railroad passengers to cross over to Crescent Park
- These bridges had wooden trestles



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# A bridge too small

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- In the 1950's, after Hurricane Carol, the wooden trestle bridge was replaced with a double culvert roadway.
- This slowed down the natural flushing action into the upper cove.
- The eroded material built up on the banks of the new roadway.



# Crescent View Ave Culverts

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# Bay Springs and Narragansett Terrece

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- The cove is the site of three boat yards
- Each yard has hundreds of boats, fueling docks, and sewerage docks.
- The cove has to be dredged periodically. This occurred most recently in 2008



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Well the Newport Bridge is out there somewhere

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# Credits

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- Google Earth
- Personal Photos
- Various Articles from the Providence Journal
- US Army Corp of Engineers