

An aerial photograph of the Patuxent River and Solomons Island. The river is a deep blue, winding through a landscape of dense, autumn-colored trees. A long, white bridge with many piers spans the river in the background. In the foreground, Solomons Island is visible, featuring a marina with numerous white sailboats and yachts. The sky is a pale blue with some light clouds.

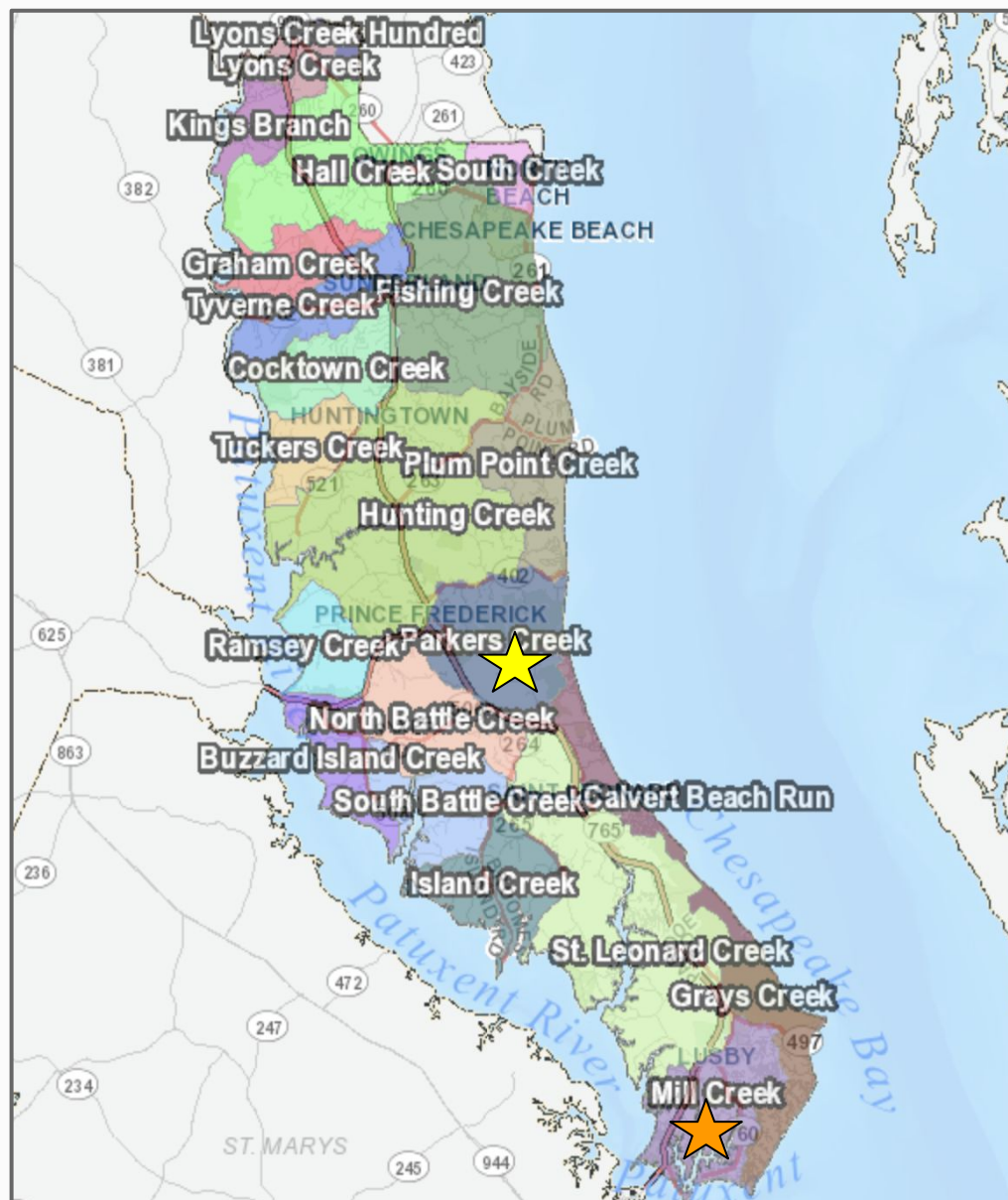
Mill Creek Watershed Awareness Meeting

January 18, 2022



Patuxent River and Solomons Island

Calvert County has 22 sub-watersheds

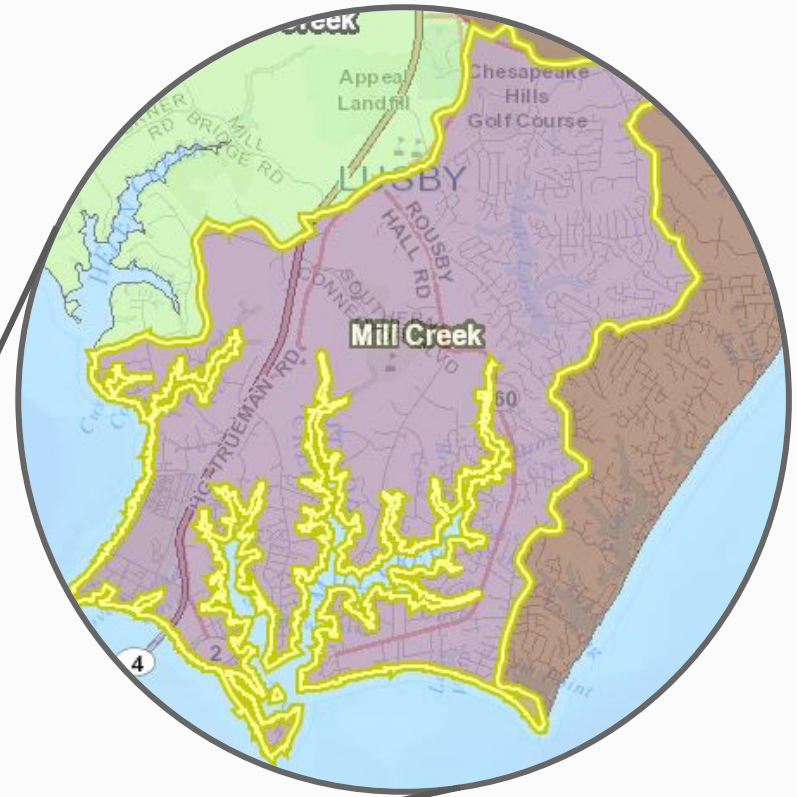
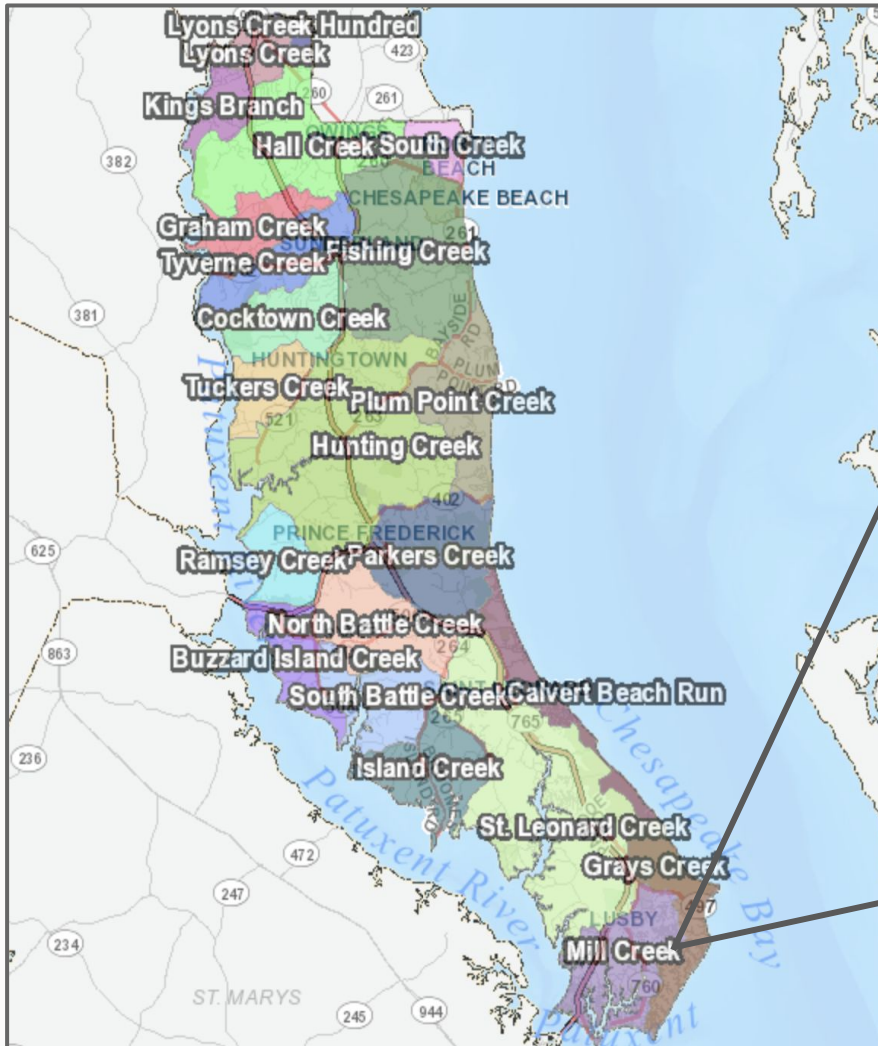




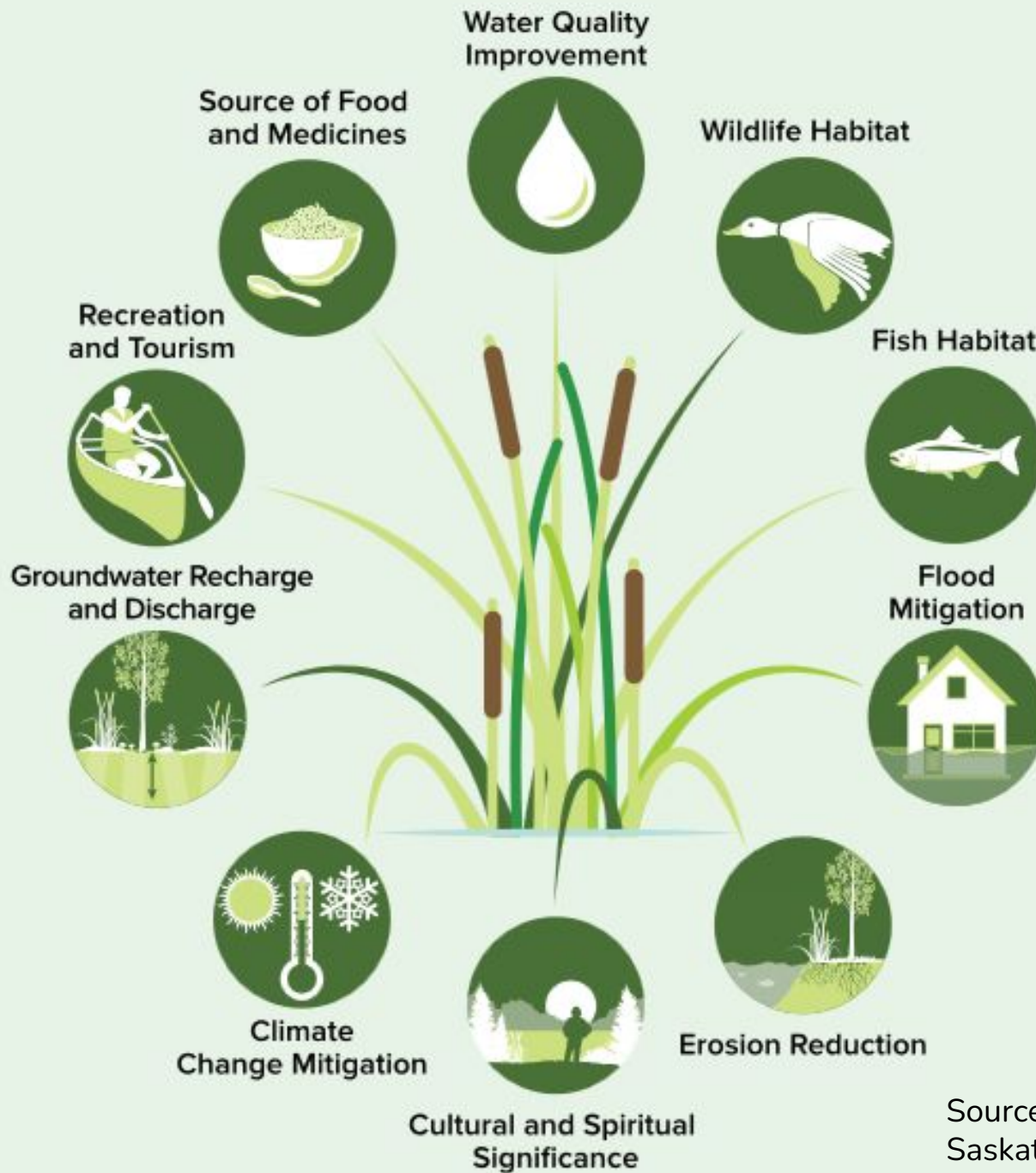
60% (4500+ acres) of Parker's Creek is preserved thanks to local action

What Does ACLT Do?

- We work with organizations and individuals across the watershed to preserve land
- Regular monitoring of the land and water, facilitating scientific research
 - Water Quality Blitz
 - Forest diversity surveys
 - Deer counts
 - Macroinvertebrate studies
- Community outreach and education
 - Hosting/attending meetings and events
 - Volunteer and student engagement with the land
 - Facilitating learning



Mill Creek is **6,337** acres in area and drains into the **Patuxent River Lower**



Source: University of
Saskatchewan

A History Rooted in the Environment

- Cannery started by Isaac Solomon, turning the town into a fishing village
 - Ship repairing and building
 - Seafood harvest
- Site of important “amphibious invasion training”
 - Training used during D-Day



More Ecosystem Services



Mill Creek has so much to offer...

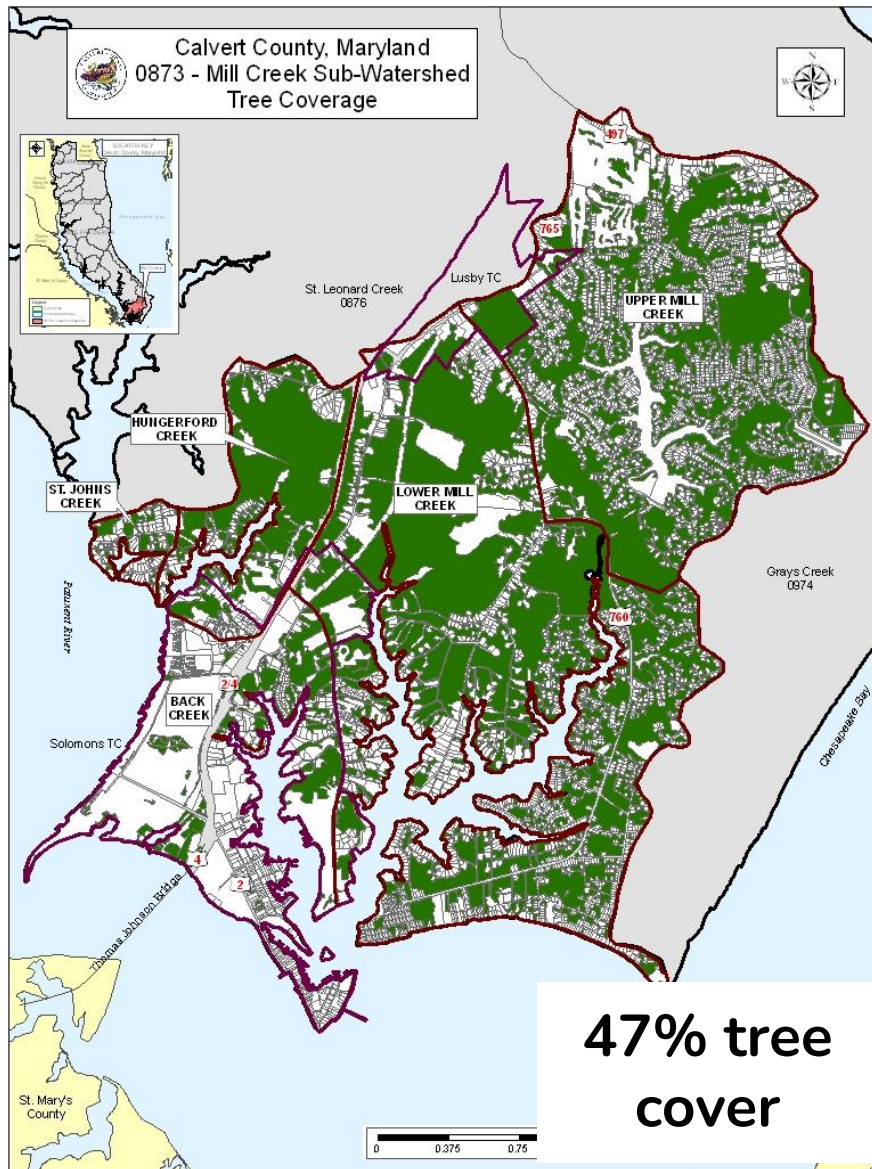


Let's keep it that way!

What do we know about Mill Creek?



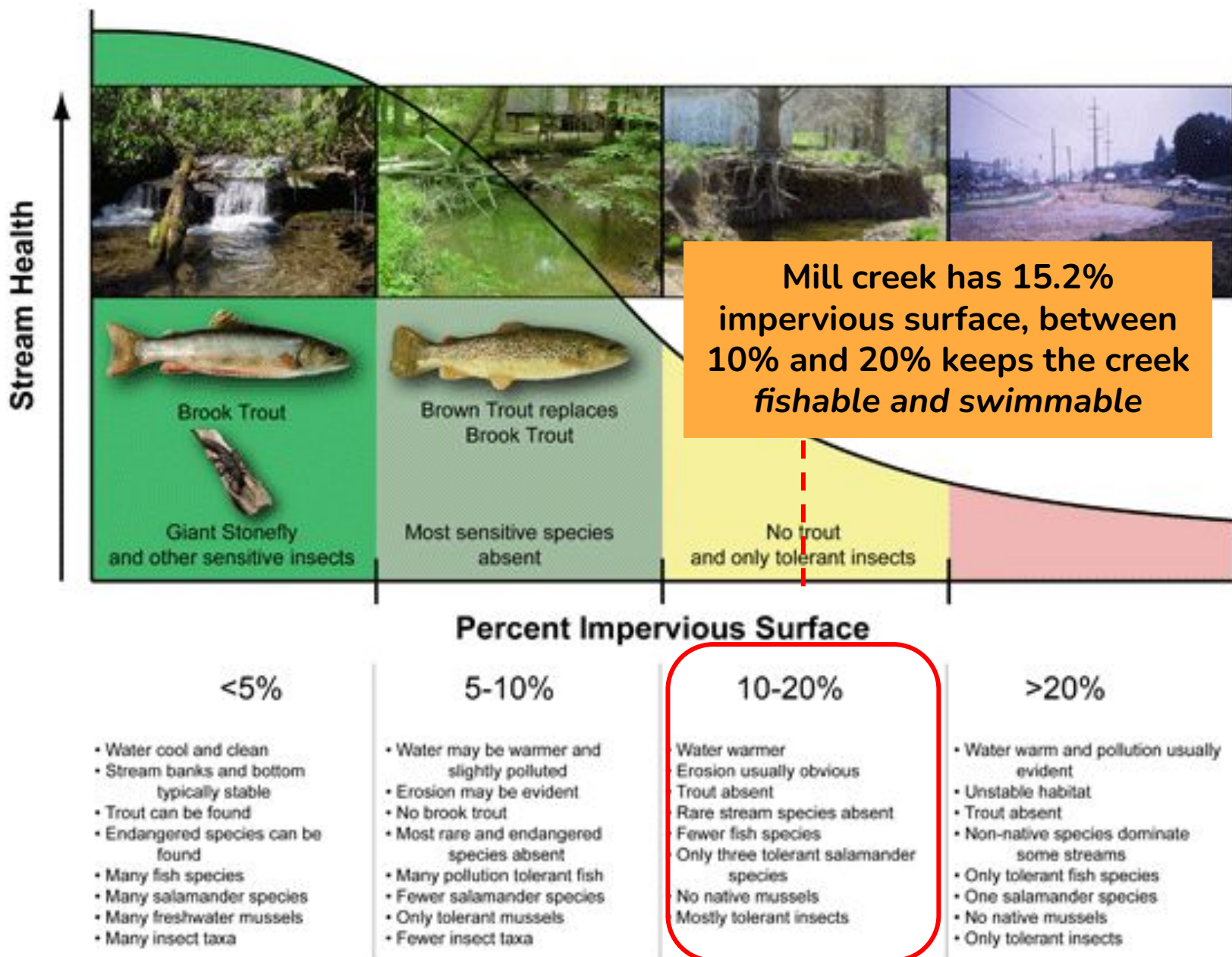
Tree coverage



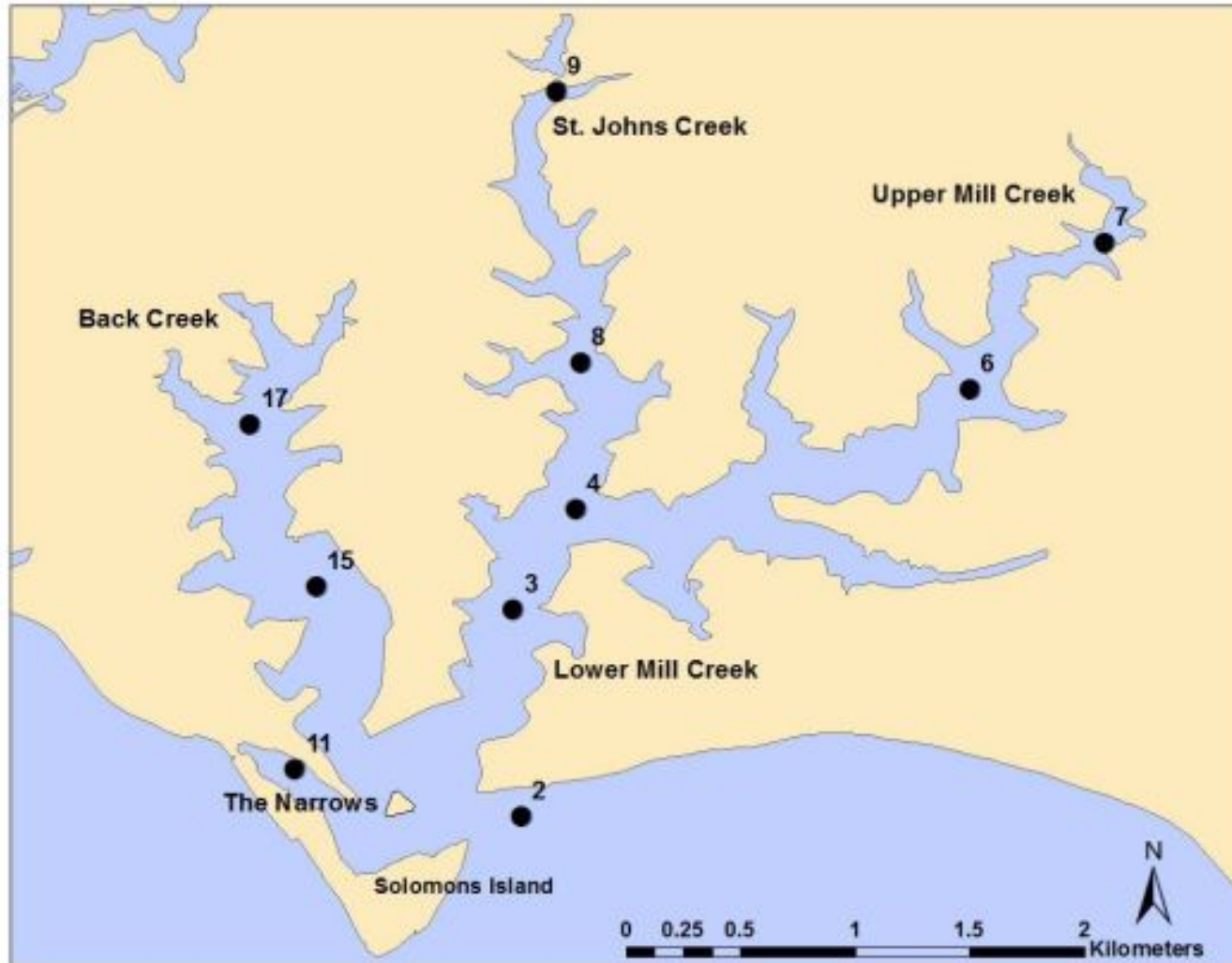
Significance of Impervious Surfaces

- Definition: hard surfaces resistant to rainwater penetration
- Concerns for waterways:
 - **Water quantity**- more water delivered to stormwater systems faster, resulting in flooding and erosion
 - **Water quality**- pollutants accumulate and rain washes them into waterways
 - **Water temperature**- pavement heats water and impacts stream inhabitants

Less Impervious Surfaces, Healthier Streams

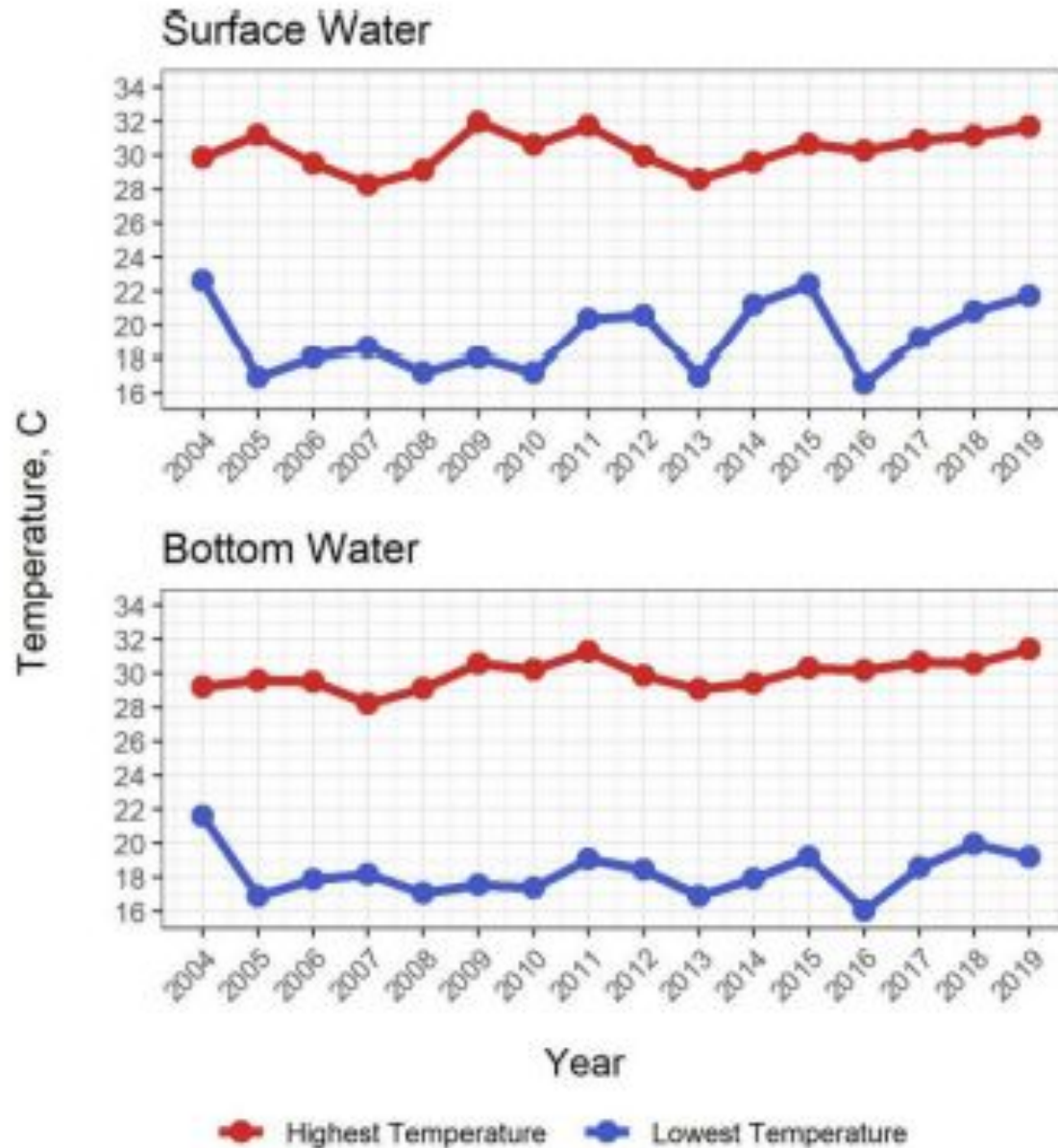


Water Quality Monitoring in Mill Creek

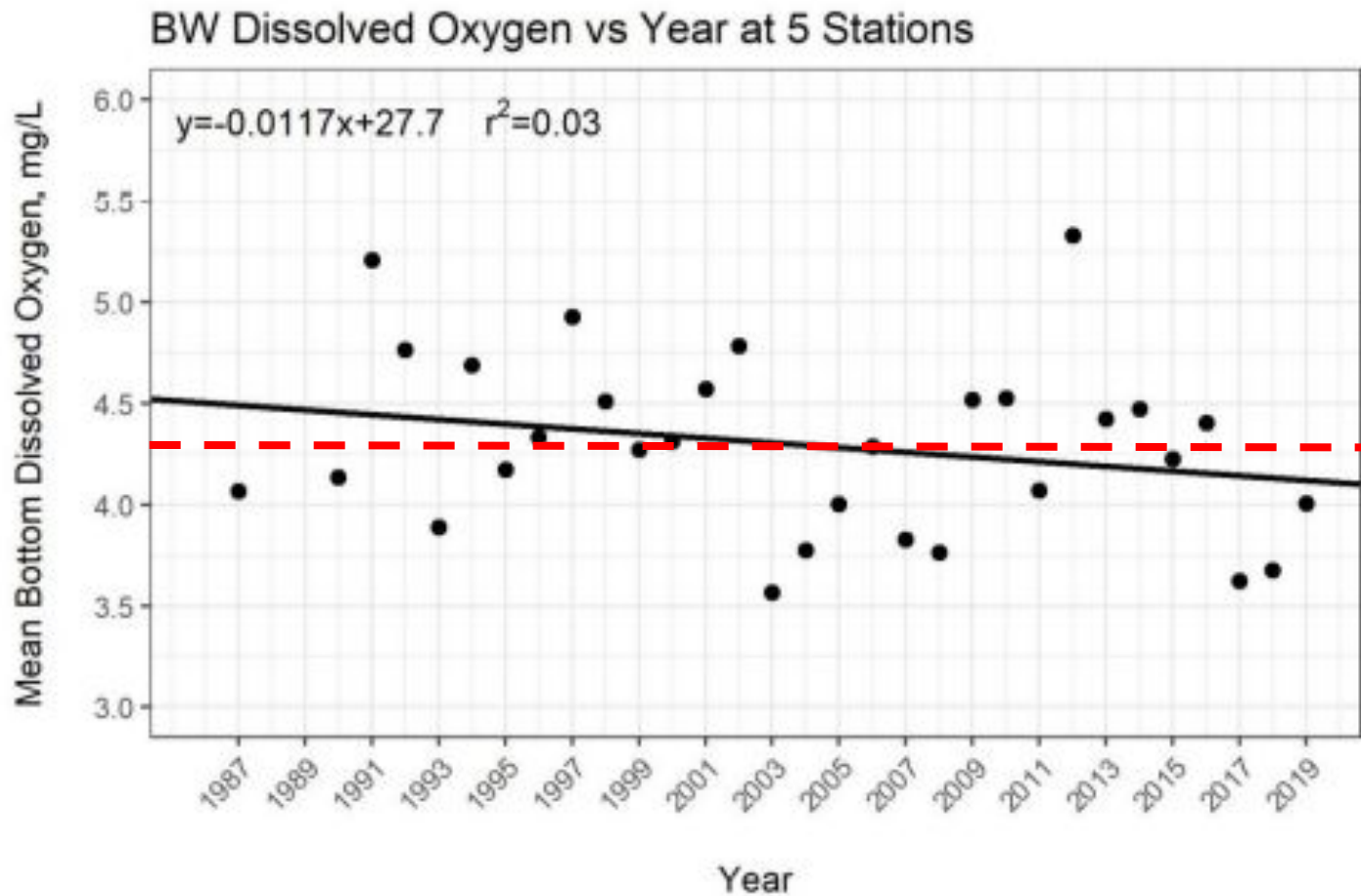


Most recent data collected in 2019 and summarized in report for the Board of County Commissioners in 2020

Water Temperature

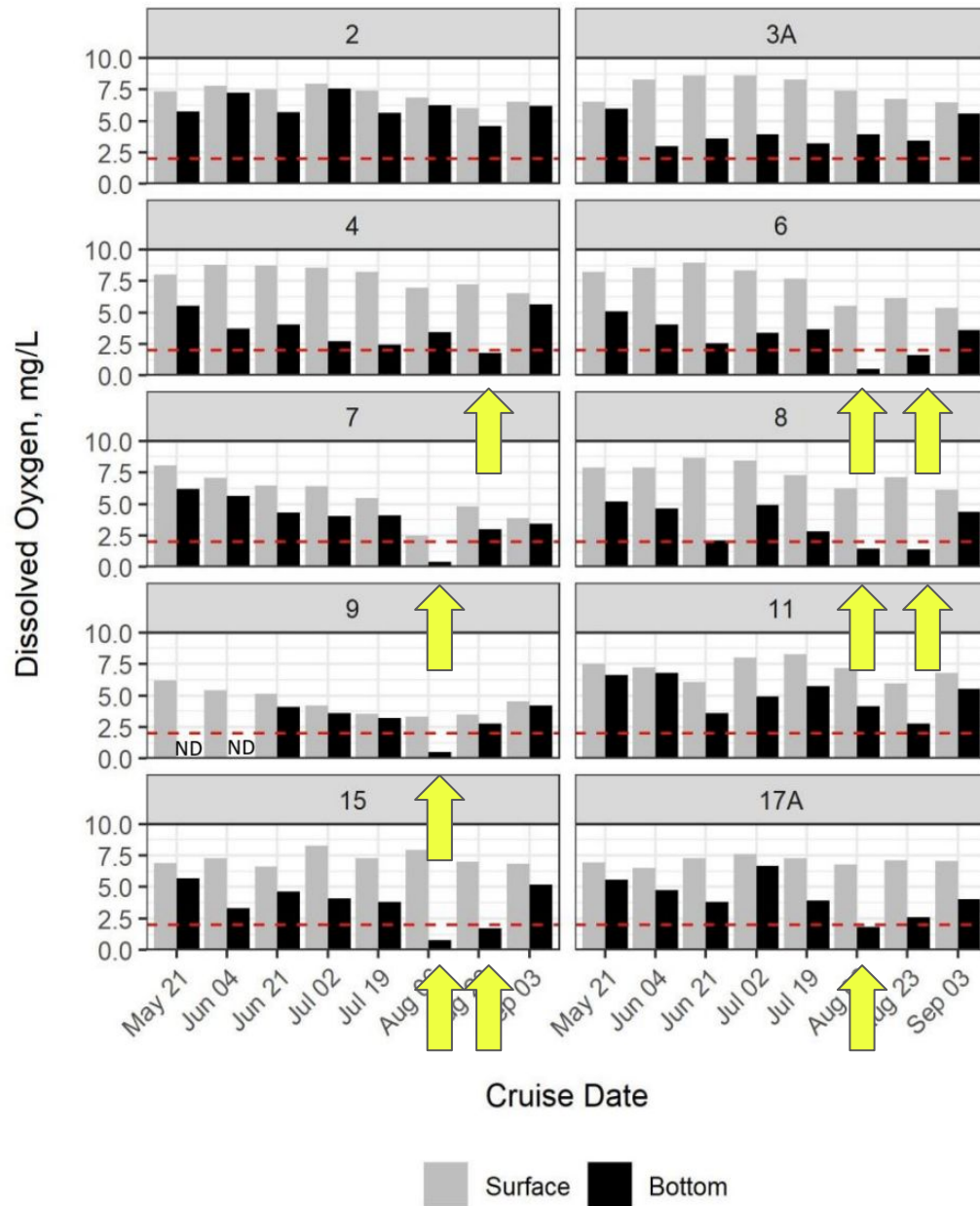


Dissolved Oxygen

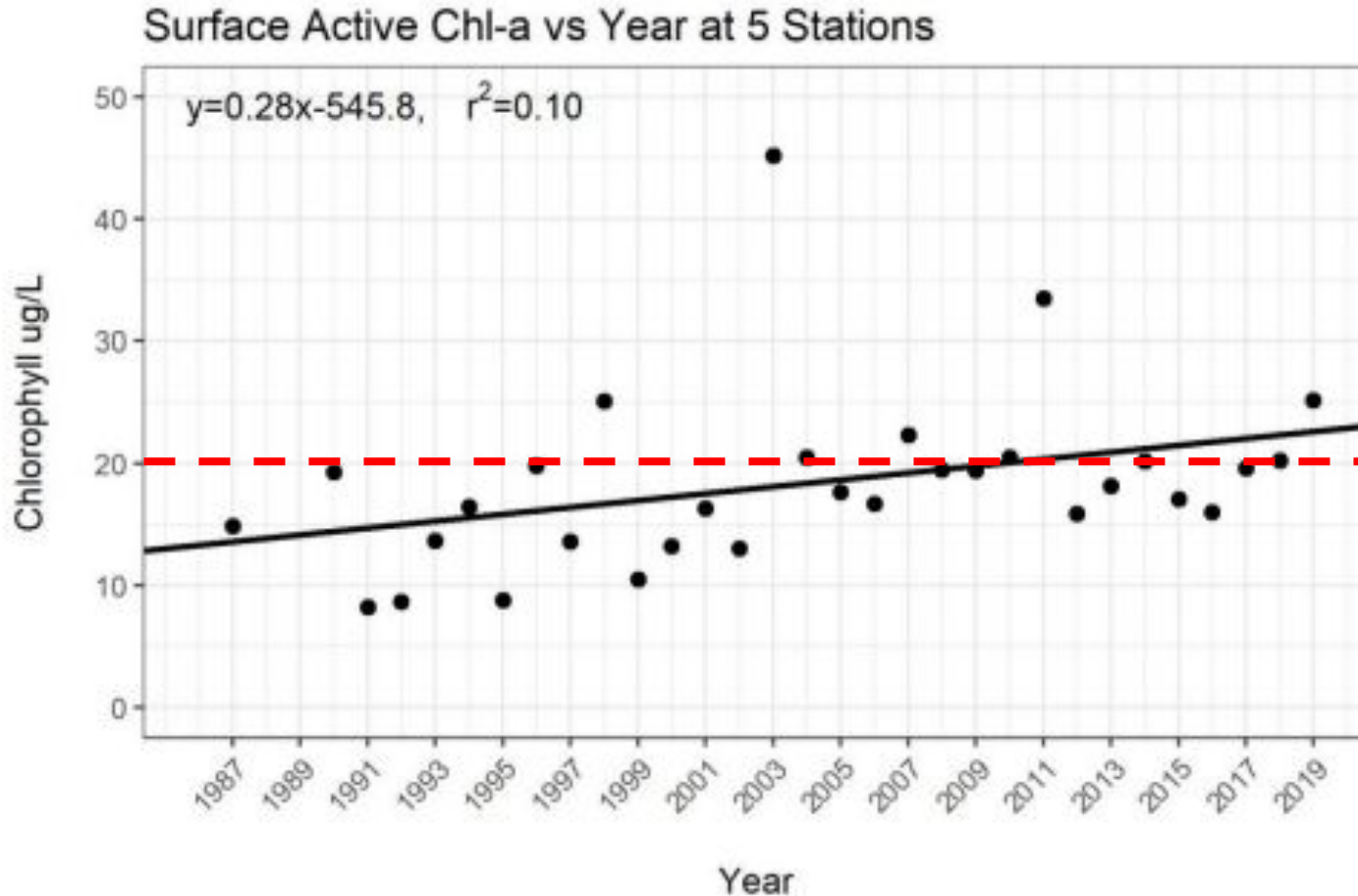


Average dissolved
oxygen= 4.29 mg/L

Hypoxic Conditions



Chlorophyll-a concentrations



Concentrations > 20ug/L indicate
presence of algal blooms



Current Friends Groups

Friends of St Leonard Creek

- Water Quality Monitoring
- Shoreline Protection
- Invasive Species Awareness
- Paddles
- Tabling at community events
- Partners with JPPM

Friends of Hunting Creek

- Water Quality Monitoring
- Stormwater Tracking
- Education
- Paddles
- Tabling at community events



What might be the goals with this group?

Educate:

- What is going on in the watershed?
- Why is watershed stewardship important?
- What are the options for stewardship?


Connect:

- Forge a deeper connection between residents and their watershed
- Facilitate watershed recreation, such as paddle outings

Mobilize

- Mobilize watershed residents to partake in active stewardship to advance the restoration of their watershed

*This group is whatever you decide it should be!
We want to help you protect the resources and environment that you care most about.*

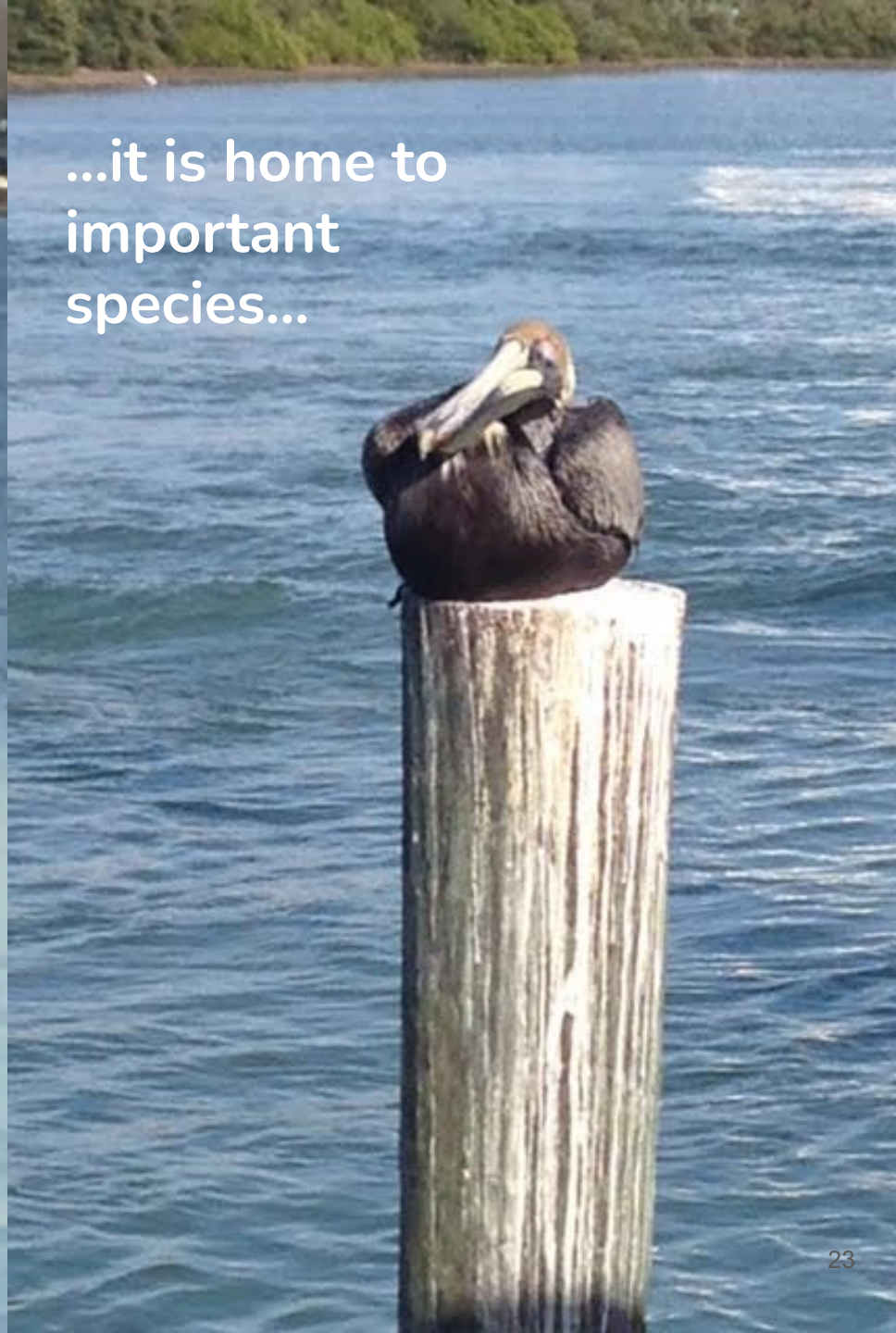


Mill creek is an invaluable watershed, but the current land and water quality trends require action to restore and maintain a healthy system.

Mill Creek is worth protecting for many reasons: It has unmatched views...




...it is home to
important
species...



...and offers many
recreational and
food services...



An aerial photograph of a waterfront area. In the foreground, a large number of sailboats are docked in a marina. To the right, a large industrial ship, possibly a tugboat or barge, is docked. The background is filled with dense green forest and some scattered houses. The water is calm and reflects the surrounding greenery.

But it needs a
passionate group of
citizens to keep it
that way.