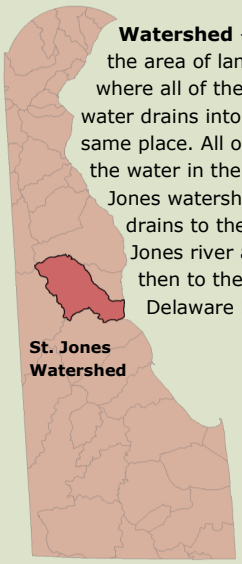
St. Jones Wetland Health Report Card

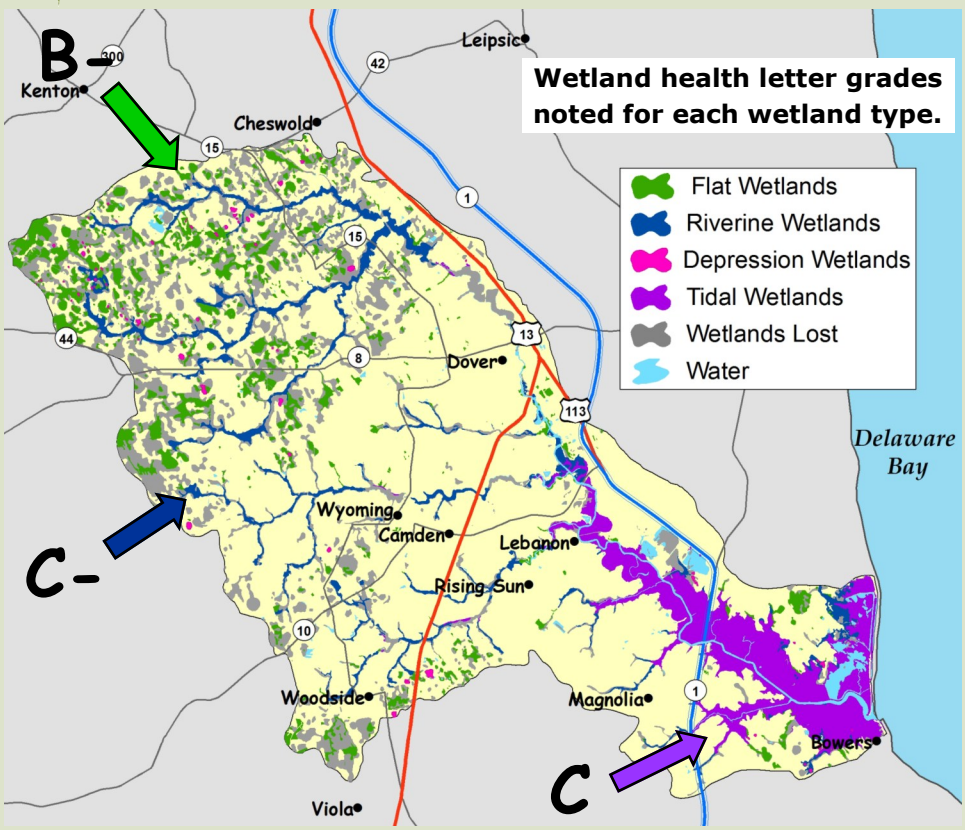
Wetlands provide valuable and often irreplaceable services on the landscape. They contribute to our quality of life by protecting us from floods and storm damage, providing habitat for rare plants and animals, and purifying our water. They store water during storms thereby reducing flooding, serve as nursery grounds for commercial fisheries, and provide recreation and education opportunities.

In Delaware, we have lost about half of our original wetlands and many of our remaining wetlands have been degraded by human activities. The St. Jones River watershed has lost over 47% of its wetlands. In the watershed, the average condition of wetlands scored a C- for riverine, a B- for flats, and a C for tidal. This supports the need to prevent additional loss and focus on improving the health of the remaining wetlands so that they can continue to provide services to the citizens of Delaware.



Watershed - the area of land where all of the water drains into the same place. All of the water in the St. Jones watershed drains to the St. Jones river and then to the Delaware Bay.

Continue to page 2 for details on where we go from here to protect our wetlands from degradation and loss…..



Wetland types and their value to the landscape.

All wetlands provide critical services that contribute to our well being. Below are highlights of different types of wetlands found in the St. Jones Watershed and some of the services they provide.

Flat Wetlands - are typically located at the upper reaches of the watershed. They are seasonally wet and often appear dry. They absorb precipitation and filter water slowly to surface and groundwaters, prevent flooding downstream, improve water quality, and provide wildlife habitat. They represent approximately 33% of the watershed's wetlands.

Riverine Wetlands - occur along streams and rivers and provide storage for flood waters and groundwater. The water that moves into these wetlands is cleansed before it moves downstream. They form corridors of valuable wildlife habitat. They represent approximately 25% of the watershed's wetlands.

Most of the wetland loss (in dark gray) in the St. Jones river watershed is comprised of flats which are vulnerable due to less regulatory protection. This loss has caused expansive habitat fragmentation in the northwest portion of the watershed.

Depressions - occur in low lying areas that form depressions such as coastal plain ponds. They are seasonally wet and provide critical habitat for amphibians. Their sample size was too small to assign them a grade for the watershed as they represent approximately 2% of the watershed's wetlands.

Tidal Wetlands - are regularly flooded by the tide and are some of the most productive ecosystems on earth supplying habitat for important fisheries. They provide coastal populations with critical services by reducing flooding and storm damage. They represent approximately 40% of the watershed's wetlands.

Delaware Wetlands

Purify | Provide | Protect

For more information:

The full St. Jones Wetland Condition Report is available at:

http://de.gov/delawarewetlands

Wetlands Outreach Specialist:
302-739-9939

Delaware Department of Natural Resources and Environmental Control

Wetland health

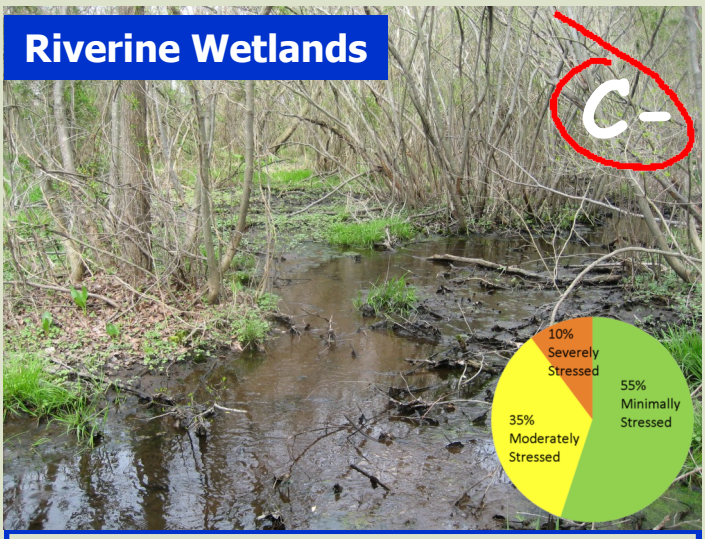
How stressors impact wetland health and how we can all work together for the St. Jones!

How are wetlands monitored?

Staff from the Department of Natural Resources and Environmental Control (DNREC) researched 116 wetland sites in the watershed with the Delaware Wetland Assessment Protocols in 2007-2008. Measurements of biological and physical indicators of wetland condition were taken including vegetation, soils, hydrology, surrounding land use, and stressors impacting the wetlands (e.g., invasive plants, ditching, filling, development and agriculture). The overall condition (grade) for each wetland type is an average based on a statistically representative sample in the watershed.

Below are the predominate stressors listed for each wetland type and recommendations to better manage or protect them. A restoration plan will be developed by DNREC and conservation partners based on the results of this study.

Riverine Wetlands

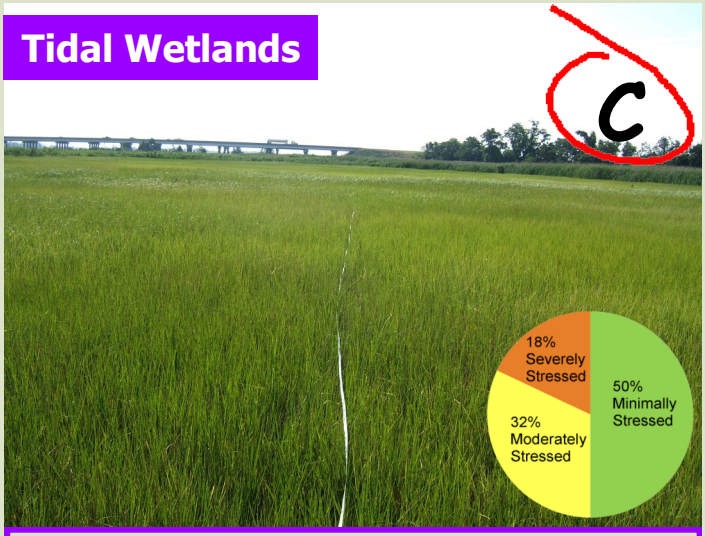


Stressors: Invasive plants, garbage, filling, and stormwater inputs.

Recommendations:

- Strengthen buffer regulations to protect wetlands from the stressors above associated with development.
- Ensure enforcement of existing Kent County buffer regulations.

Tidal Wetlands



Stressors: Ditching, invasive plants, barriers to landward migration, and soil disturbance.

Recommendations:

- Minimize hardened shorelines (e.g., rip rap, bulkhead, roads) adjacent to wetlands.
- Strengthen buffer regulations to allow room for wetlands to move landward with sea level rise.

Flat Wetlands

Stressors: Invasive plants, ditching, and soil disturbance. These habitats are highly fragmented due to wetland conversion to other land uses and limited regulatory protection.

Recommendations:

- Better regulatory protection is needed at the State and/or County level since flats are the most vulnerable for loss in the St. Jones watershed.
- Increase landowner enrollment in voluntary conservation programs.
- Forestry best management practices should be utilized.

What you can do:

Live a watershed friendly lifestyle by reducing or eliminating the use of fertilizers and pesticides on your lawn. Pollutants travel downstream!

Get involved with local land use decisions to improve buffers and reduce building in and too close to wetlands.

For details look to the **Wetlands Public Participation Guidebook** on the Delaware Wetlands website on the "How You Can Help" page.
www.dnrec.delaware.gov/Admin/DelawareWetlands

Volunteer at or visit DNREC's St. Jones Reserve.
www.swc.dnrec.delaware.gov/coastal/DNERR/Pages/StJonesReserve.aspx