

# Delaware Department of Natural Resources and Environmental Control



## *Protecting Delaware's Water "Everyone Has a Role"*

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*Presented at League of Women Voters of SC  
Public Forum: "Safe Drinking Water? Everyone's  
Concern, Part 2"  
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# DNREC's Role:



*How does DNREC fulfill its role with respect to protecting waters of the state every day?*

- Establish laws and regulations to protect water quality
- Monitor the environment, analyze data, and conduct research
- Permit discharges, inspect facilities, and enforce limits
- Educate stakeholders and the public

# DNREC's Challenge:

*Multiple sources of pollution.*



# DNREC's Approach:



- Establish strategies/plans to address impairments such as the Inland Bays Pollution Control Strategy (PCS) and the Chesapeake Bay Watershed Implementation Plan (WIP).

## INLAND BAYS POLLUTION CONTROL STRATEGY



MAY 2008



## Chesapeake Bay Watershed



# DNREC's Approach:



## *Pollution Reduction Methods we've been using:*

- Strengthening regulations for water quality improvements
  - Updated Sediment and Erosion Control Regulations
  - Updated Septic Regulations
- Decrease pollutant limits in permits
- Eliminate point sources
  - City of Rehoboth was the final of the 13 significant point source discharges to the Inland Bays – eliminated May 2018.



# DNREC's Approach:



## *Pollution Reduction methods we've been using*

- Nutrient Management Plans - to better manage water and nutrient use on farms (implemented by Department of Agriculture).
- Conservation Cost Share Program - to design and install conservation practices on farms to improve water quality, soils, and wildlife habitat.
- Conservation Reserve Enhancement Program (CREP) – to encourage protection of wetlands and promote wetland restoration on marginal cropland.
- CAFO - permitting program to further regulate discharges from animal operations



# DNREC's Approach:



## *Water quality improvement methods we've been using*

- Work with coastal communities to plan for sea level rise, storms and flooding.
- \$4.1 million for protection of coastal communities.
  - Ocean and bay beach nourishment.
  - Erosion control and dune maintenance.
  - Storm repair and clean up.
- DNREC coastal water quality monitoring.
- Citizen Water Quality Monitoring Program (UD).

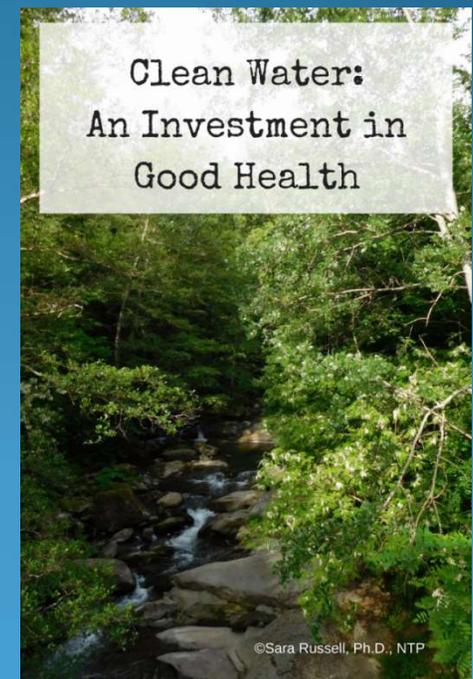


# DNREC's Approach:



## *Water quality improvement methods we've been using*

- Investing in drinking water, wastewater, and stormwater projects via loans and grants through our State Revolving Fund (SRF)
  - Clean Water SRF
    - Since 1990, \$417 million in grants and low interest loans have been awarded for wastewater and storm water projects to improve water quality. (\$267 million in Sussex County)
    - \$13.9 million in grants and low interest loans have been awarded to more than 1,300 projects for septic eliminations, well replacements , and agricultural best practices. (\$8.1 million in Sussex County)
  - Drinking Water SRF
    - Since 1997, \$186 million in drinking water grants and low interest loans to improve the quality of drinking water. (\$66 million in Sussex County)

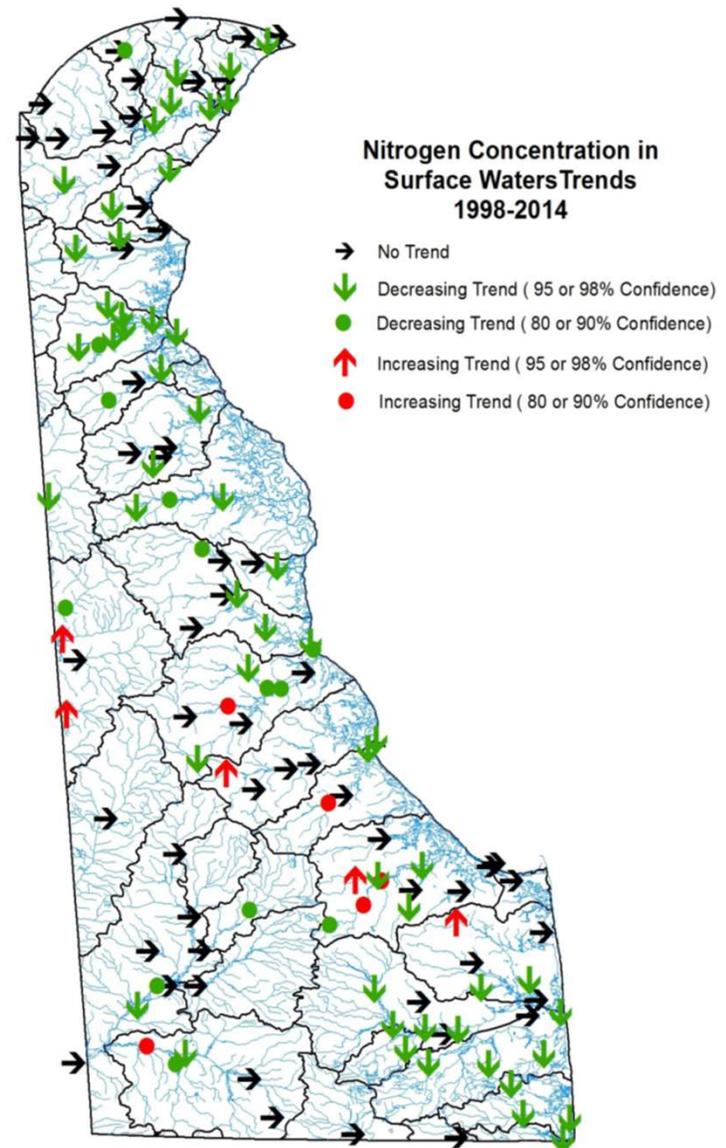


# Is it working?

## YES!

- Stable or decreasing trends of nitrogen in surface water .
- Stable trends of nitrates in groundwater.

*From DE's Combined Watershed Assessment Report (Aug 2017)*

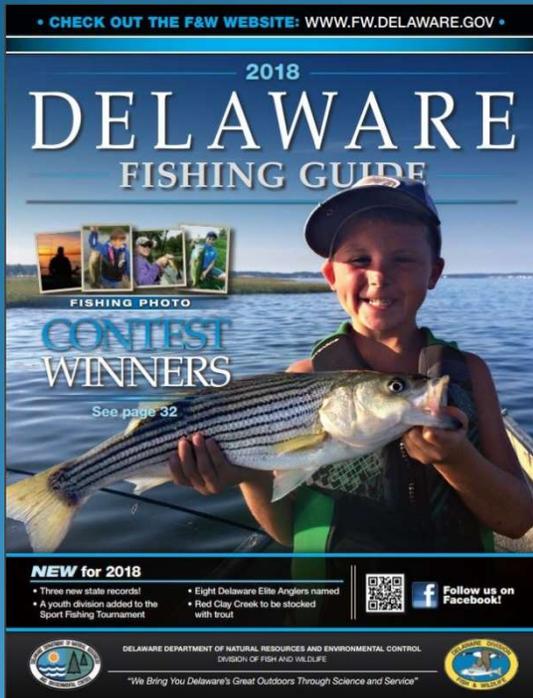


# The Evidence



Many of our aquatic species are thriving.

Striped Bass – population is considered fully restored.



Blue Crabs – have had several very good years in a row.

Large Mouth Bass – getting larger in the Nanticoke River.



Black Sea Bass – population is at very high levels.

# The Evidence



In 2018, many fish consumption advisories were relaxed or lifted in DE's waters.

- Toxic chemicals have decreased in a variety of species due to clean up efforts.



Bluefish – advice for consumption has tripled to 3 meals per year.



Striped Bass – advisory increased from 2 meals to 3 per year.



Weakfish – the consumption advisory is being lifted.

# What comes next?



- Continue to address reductions in point source discharges.
- Increase efforts to address reductions in non-point discharges.
- Increase efforts to address nutrients and other contaminants in groundwater.

Point Source



Non-Point Sources



# What comes next?



## *Continuing the Water Quality Improvement Trend*

- Innovative monitoring and tracking of pollution
  - Bacterial Diversity and Nutrient Source Tracking Studies including using DNA testing for tracking pollution back to its source.



- Enhanced facility monitoring, compliance and enforcement
  - Expansion of the state-wide groundwater monitoring network.
  - Monitoring for emergent contaminants in surface and ground water.
  - Integration of real-time compliance and enforcement tools for inspectors.

# How can you help?



- Limit the use of lawn fertilizers/chemicals.
- Take your car to the car wash rather than letting wash water run into the storm sewers or storm water conveyance system.
- Keep your grass clippings, trash, and debris out of the storm sewer.



# Final thoughts.



- Be an informed consumer – if you own a well for drinking water, have it tested.

# Conclusion



*Lots of progress has been made, but there is still a lot of work to be done.*

- Clean water is everyone's responsibility and everyone can participate in the solution.
- Contact DNREC's Environmental Hotline (800-662-8802) to report environmental concerns. "If you see something, say something!"

**Thank You!**