Pete Peterson Contribution to Water Quality Panel Chaired by Ted Wilgus

8:35 AM ON THURS: ECONOMIC DEVELOPMENT DEPENDS ON GOOD AND DEPENDABLE WATER QUALITY

Pete Peterson's Experience with Coastal Water Quality Preservation in NC

- EMC water quality committee – chair for 16 years
- Sedimentation control commission – 2 years
- Coastal habitat protection plan steering committee – 12 years
- Research studies on coastal water quality and impacts on coastal organisms – 30 years

Past Coastal Water Quality Controls

- Federal Clean Water Act of 1972 protects shellfishing waters of the states
- State EMC water quality protection rules that promote productive and safe shellfish growth, harvest and consumption
  - HQW (High Quality Waters) standards
  - Coastal ORW (Outstanding Resource Waters) rules – protect Core Sound
  - PNA (Primary Nursery Areas) designation – protect important headwater nurseries
  - Regulation of % built-upon area near and draining to SA waters
  - CAMA (Coastal Area Management Act) setbacks to induce infiltration and prevent discharge of polluted stormwater

More NC Rule Making that Protects Shellfish

- Shellfish sanitation regulations preventing shellfish harvest from closed waters (e.g., Calico Creek) result in shellfish sanctuaries and help restore stocks
- EMC buffer rules make effective use of natural processes of nutrient reduction uptake of riparian marsh and other vegetation
- Rules limiting built-upon area on shores abutting SA waters
- Fundamental prevention of direct discharge into SA waters
- ISSC (Interstate Shellfish Sanitation Commission) enhances confidence that shellfish consumption remains safe meeting interstate standards

Additional Management Enhancing Oyster & Fish Production

- Use of Chl A to assess potential changes in risk of eutrophication causing fish & shellfish mortality represents a standard measure that is much more reliable than using highly variable DO measurements
- DMF, DCM, and USACE agreements on permitting criteria for living shorelines holds promise of increasing oyster & oyster reef habitat abundance in NC
- NC's coastal habitat protection plan (CHPP) for fish and shellfish represents an innovative ecosystem-based management plan widely promoted by federal agencies and possibly unique among the states

Pollution Challenges in the Neuse River

- Historically nutrient loading from hog waste lagoons challenged water quality resulting from the evolution of intense animal production
- Presently, tremendous growth in chicken production in the Neuse watershed is introducing a new complex organic contaminant
- Threats of federal funding cuts to EPA and other agencies may prevent necessary research on this new input of concentrated farm animal waste

The End but for Pictoral Examples of LID

Straight Piping of Storm Water

Permeable Parking Pavement

RAIN GARDEN

at Cedar Point Boat Ramp

New Paving Redirects Storm Water to Forest Floor

Oak Island Pamphlet: A Guide yo Low Impact Storm Water Management

Why Build a Rain Garden?

Rain Garden with Plantings

Check Dam

AESTHETICALLY DESIGNED RAIN GARDEN

Rain Cistern

Obvious Test of Pavement Porosity

Parking lot showing old discharge of storm water directly into the White Oak River & modifications or draining into the woods where infiltration happens


Green Solutions
thetrailfoundation.org
The Trail Foundation
Rain GARDEN
Fall Obedient Plant
Scarlet Sage
Maximilian Sunflower
After rain events, the water run-off from streets and other impervious surfaces can contain oils, chemicals, and trash. Rain gardens are small basins that catch rain water run-off before it can get into our rivers and lakes. The plants in the rain garden filter the rain water and infiltrate it into the ground where it can be used during times of drought.
For information about this project or how to get involved please visit:
TheTrailFoundation.org
Rain Garden plants are adapted to thrive in wet and dry conditions
Water flows from the street into the rain garden
Curb Cut
Plants filter the water, and it infiltrates into the ground
Let it Grow!

Austin, Tx