



**Bond Bill Hearing
Capital Improvement Program
May 5, 2011**



Goals for Bond Bill Investments

- Ensuring clean water
- Reducing coastal and flooding emergencies
- Cleaning up brownfields for redevelopment
- Expanding recreational opportunities
- Conserving land and restoring wildlife habitat

Ensuring Clean Water

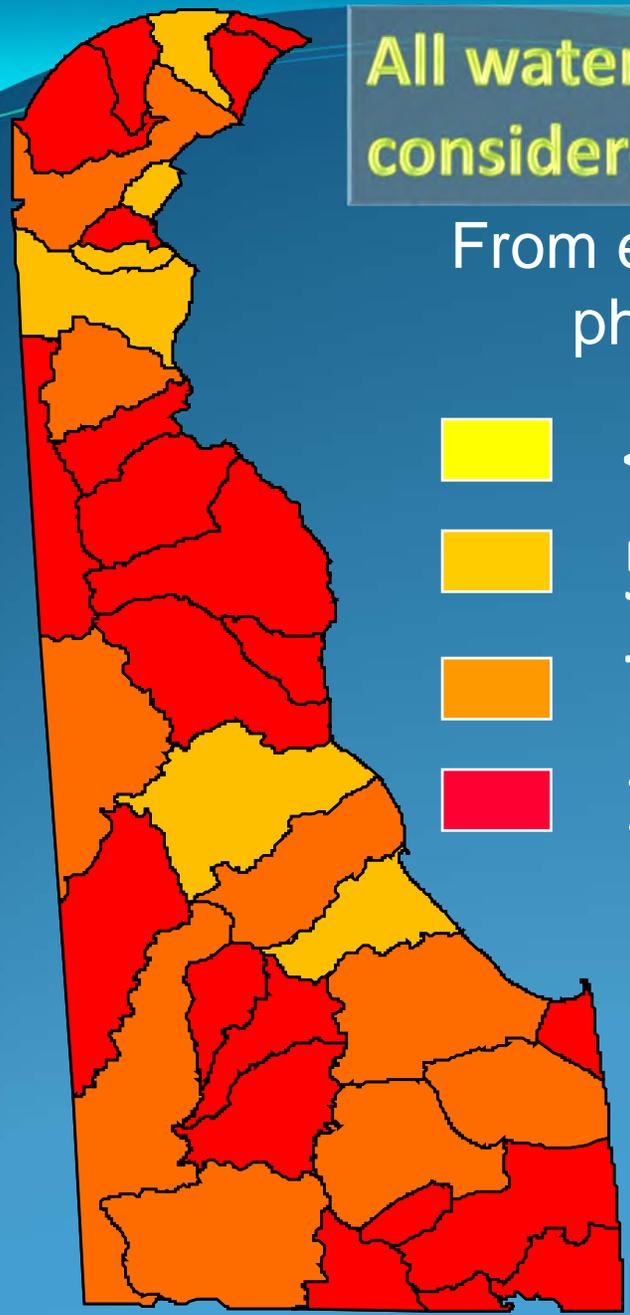


...drinkable, fishable, swimmable

Appoquinimink River

All watersheds in New Castle County are considered at least 50 percent impaired.

From excess nutrients (nitrogen and phosphorous) and bacteria.



-  <50%
 -  50-74%
 -  75-99%
 -  100%
- % of impaired stream segments in each watershed.

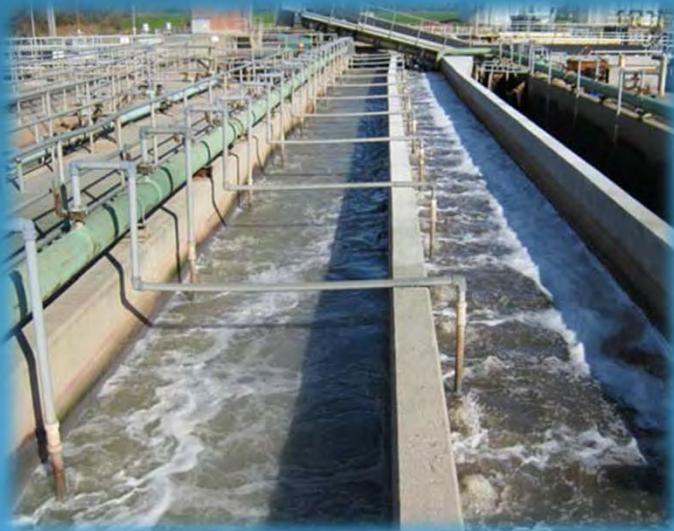
We completed pollution control strategy TMDLs for Appoquinimink and are now working on Christina.



Ensuring Clean Water

Strategic Infrastructure Investments

- Clean Water Revolving Fund: Leveraged \$18.5M of ARRA to fund \$94M of municipal wastewater, green infrastructure, and stormwater projects
- Implementing innovative forest preservation program





Beneficial **reuse** of wastewater

- Innovative public-private partnership between Middletown, Artesian Water, and two local farmers
- Utilizing treated wastewater to spray irrigate crops
- Cost savings for farmers (\$9,000 annual/100 acres)

Recent Investments: Conservation Cost Share Program



\$1.5M State Cost Share Funds on the ground in FY 11, leverage more than \$7M in Federal Funds spent.

With over 220,000 acres farmed in Delaware's Chesapeake Bay Watershed, in the years ahead, we may need \$2.5M/year in cover crop cost share funds to meet the nutrient load reduction goals in the Chesapeake Watershed Implementation Plan.



Ensuring Clean Water: Recommended Investments for FY12

- Clean Water State Revolving Fund: \$1M
(will leverage 5x Federal funding)
- Conservation Cost Share: \$1.5M
(will leverage \$7M of Federal funding)



Reducing coastal & flooding
emergencies

Recent Investments: Flood Control & Restoration Projects



Recent Investments: Water Management Projects



Over \$2,000,000 21st Century Fund expenditures in FY 11

Recent Investments

Channel markers on State and Federal Waterways; and the Floodplain mapping project



Broadkill Beach
– before and
after beach
replenishment



Recent Investments: Correctional Center VOP Projects



\$100K = \$2 / Ft. for
Ditch Maintenance



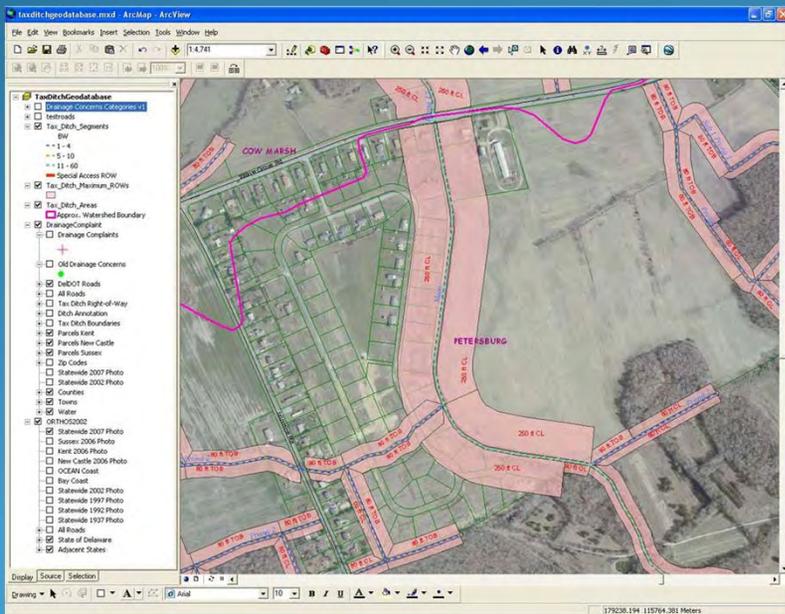
8+ miles of ditch
cleanout was
accomplished on
projects in FY 11
with the DCC labor
crew of 13
workers.

The Drainage
Program provides
project planning and
supervision.

Recent Investments: Tax Ditch Initiatives

A Partnership Among Agencies

- DNREC Division of Soil and Water Conservation
- Sussex, Kent and New Castle Conservation Districts
- Tax Ditch Organizations



1,225 Right of Way research requests performed for landowners in the past 12 months.

Tax Ditch Rights of Way have been digitized and available for web application.

Emerging Flooding Challenges: Dam Safety Program

DNREC's Dam Safety Program, along with DeIDOT's Bridge Management Section, in cooperation with DNREC's Divisions of Fish and Wildlife and Parks and Recreation are conducting the annual inspections of state-owned dams. This year, for the first time, all 43 state-owned, regulated dams will be inspected.



Emerging Flooding Challenges: Bay Beach Communities

- Developing strategies to address growing needs of Bay Beach Communities
- Stresses from flooding, erosion, subsidence sea level rise, storms
- Lack of federal funding assistance unlike ocean beaches
- Policy questions of cost-benefit, funding sources, cost sharing



Emerging Flooding Challenges: Dikes along Delaware River/Bay



Red Lion Dike: Dike failure will contaminate Delaware River with pollution from Metachem and flood Route 9. Significant erosion occurred during April storm.

Cleaning Up Brownfields for Redevelopment



Cleaning Up Brownfields for Redevelopment:

- Chrysler
- Dry cleaning operations
- Delaware State University
- Wilmington Riverfront
- Kalmar Nyckel/Challenge Program
- Habitat for Humanity

Expanding Recreational Opportunities





DNREC by the Numbers



- State Park Lands = 25,878 acres
- Park attendees = Average 4.7M visitors
- Fish & Wildlife Lands = 61,188 acres
- Wildlife-Associated Participants 395,000
(Wildlife Watchers 237,000)
- Fishing licenses = 85,421
- Hunting licenses = 19,639
- Boat Registrations = 58,000

Parks, boating access, wildlife areas, reserves, field operations



- 700 + buildings and major structures
- 130 miles roadways
- 64 boating access areas
- 39 ponds/lakes
- 24 dams (of 43 total owned by state)
- 100+ small vehicle bridges
- 125 + parking lots
- 250 waterfowl Blinds: 500 deer stands
- 75 wildlife nesting structures
- 187 miles of recreational trails

Recent Investments

John Bell House
First State Heritage Park Dover



Trap Pond Nature Center Exhibits



Killens Pond Nature Center Exhibits



Trap Pond Nature Center



Recent Investments



Assawoman Canal



Lewes Boat Ramp



Delaware City Mooring Basin



Kalmar Nyckel/Challenge Program

Recent Investments: NVF - Yorklyn

- Company abandoned site in May 2009
- State implementing plan to restore site with a public/private partnership



Existing Site Conditions

Recent Investments: NVF - Yorklyn

- Company abandoned site in May 2009
- State implementing plan to restore site with a public/private partnership



Concept Plan for the New Yorklyn

Expanding Recreational Opportunities

No Child Left Inside

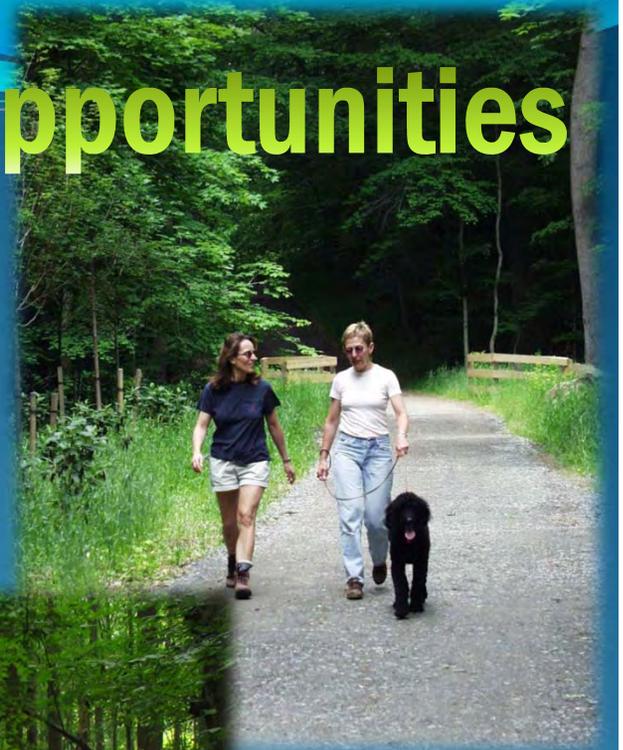
- Help promote healthy lifestyles and fight childhood obesity
- Established partnership with Nemours, DOE, DHSS, DNS & NGOs
- Developing programs such as Healthy Kids Day and Trail Challenge



Expanding Recreational Opportunities

Improving Park Trails

- Improving White Clay, Brandywine, Killens Pond, Trap Pond
- Expanding trails at Cape Henlopen, Lums Pond, Auburn Heights
- Developing C&D Canal & Assawoman Canal trails



Expanding Recreational Opportunities: Recommended Investments for FY12

- Redevelopment of Strategic Sites
 - NVF/Yorklyn: \$2.25M
 - Fort DuPont: \$250.0
- Minor capital and facility improvements: \$1.2M

Conserving Land and Restoring Wildlife Areas



Modernize Approach to Conservation

- Greater leveraging of NGO/private/Federal investments
- Use market-based mechanisms: reverse auctions, easement discounts, match preferences
- Focus in targeted, strategic areas to maximize impacts



Conserving land & restoring wildlife habitat

Habitat Protection & Restoration

- Key Partnerships w/ Nature Conservancy, Delaware Wildlands, Ducks Unlimited, Nature Society, Delmarva Ornithological Society
- Restoration provides critical habitat for red knots & others



FY12 GRB Bond Bill

Project	Requested	Recommended
Critical Facility Needs	\$2,000,000	
Water Quality Management	\$12,600,000	\$3,648,700
Redevelopment of Strategic Sites	\$2,500,000	\$2,500,000
Recreational Enhancement/Maintenance	\$2,600,000	
Storm Protection	\$2,543,000	
Minor Capital Improvement and Equipment	\$2,000,000	\$1,200,000
	Total	
	\$24,243,000	\$7,348,700

Building Delaware's Future Fund

- Preventing Coastal and Flooding Emergencies
 - Dike Repair and Emergency Prevention: \$3M
 - Dam Repair and Maintenance: \$750,000
- Expanding Recreational Opportunities
 - Building /Connecting Signature Trails: \$2M
 - Park facility rehabilitation and enhancing public recreational infrastructure: \$2M
- Conserving Land and Restoring Wildlife Habitat
 - Open Space Preservation: \$10M

Additional Strategic Opportunities

- Clean Water State Revolving Fund
- Groundwater monitoring/study NCC
- Restoration of HSCA funds for Brownfields Cleanup



Thanks for the
continuing support