

Fiscal 2018 Budget Hearing

November 17, 2016



Aerial Image Courtesy Mike Polo

DNREC OPERATING BUDGET



➤ **FY2017 General Fund Budget**

\$38,023,800

➤ **FY2018 request to support:**

- State Salary Policy Contingency \$ 744,100
- New Operations at Michael Castle Trail (C & D Canal) \$ 197,200
- Statewide Tick Control Program \$ 140,900
- Youth Conservation Corps & Children in Nature \$ 72,300
- Network Infrastructure Support \$ 167,000
- Structural Changes and FTE Movements (related to ITC) **(\$ 209,000)**

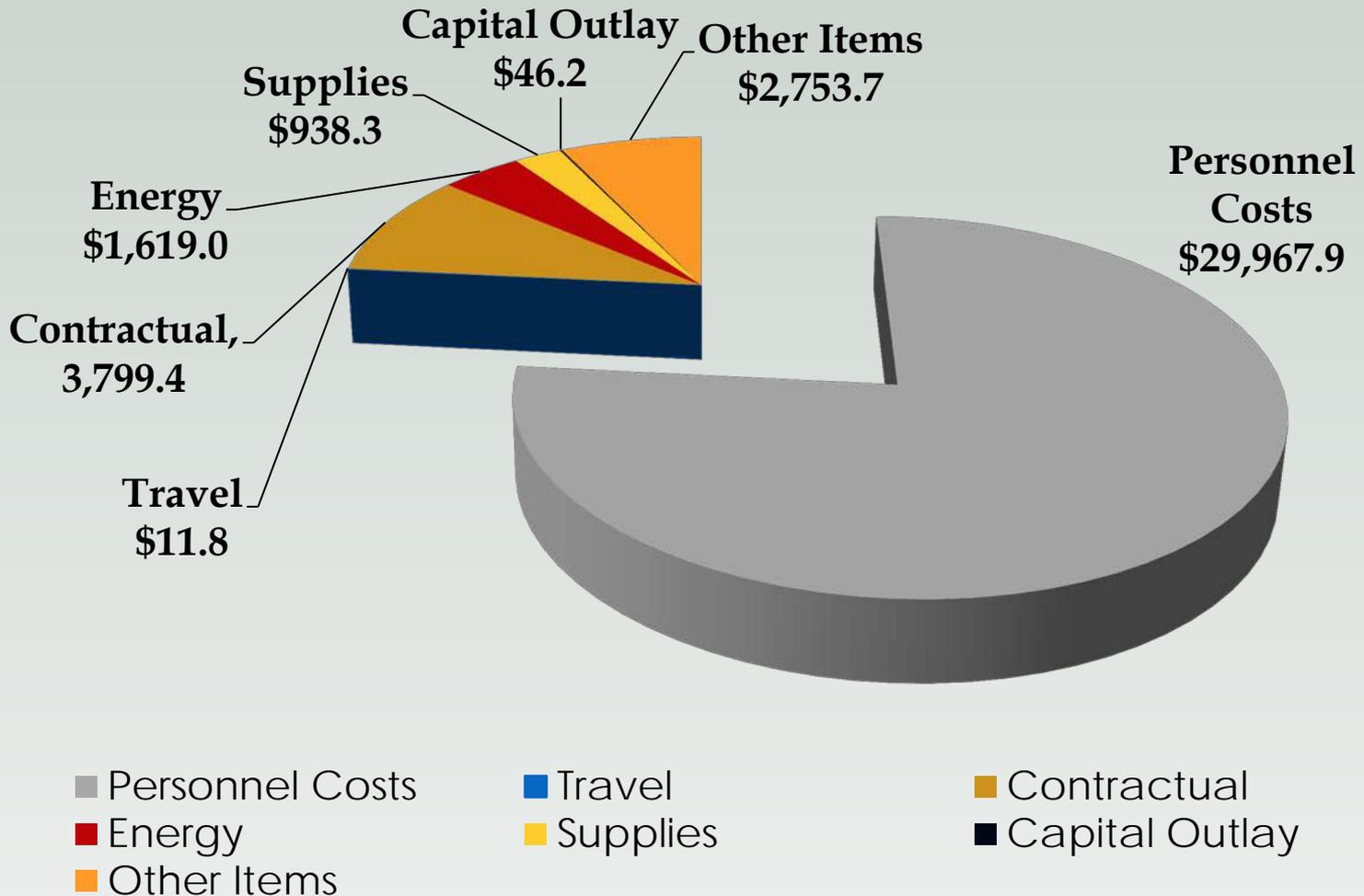
➤ **FY2018 General Fund Budget Request**

\$39,136,300

➤ **Other Requests: FY2018 Appropriated Special Fund Adjustments for Fish & Wildlife, Waterway Mgmt. and RGGI - Spending Authority Only.**

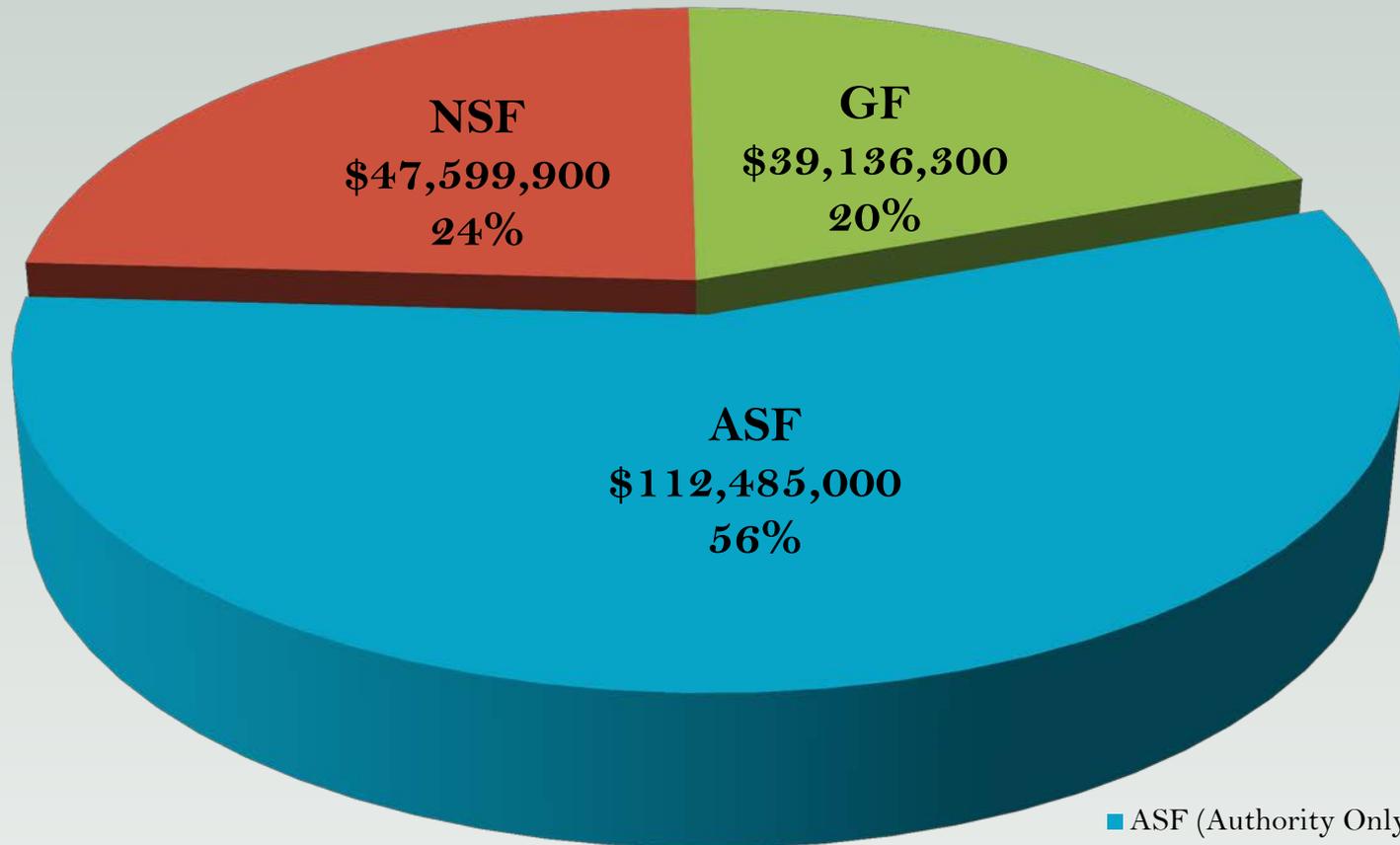
➤ **As per the Budget Guidance, proposed 1% reductions **(\$70,400)** from GF appropriations across DNREC in contractual, supply, TMDL and Energy Assistance that would result in reduced services and delayed projects.**

FISCAL YEAR 2018 GENERAL FUND REQUESTED BUDGET: \$39,136,300



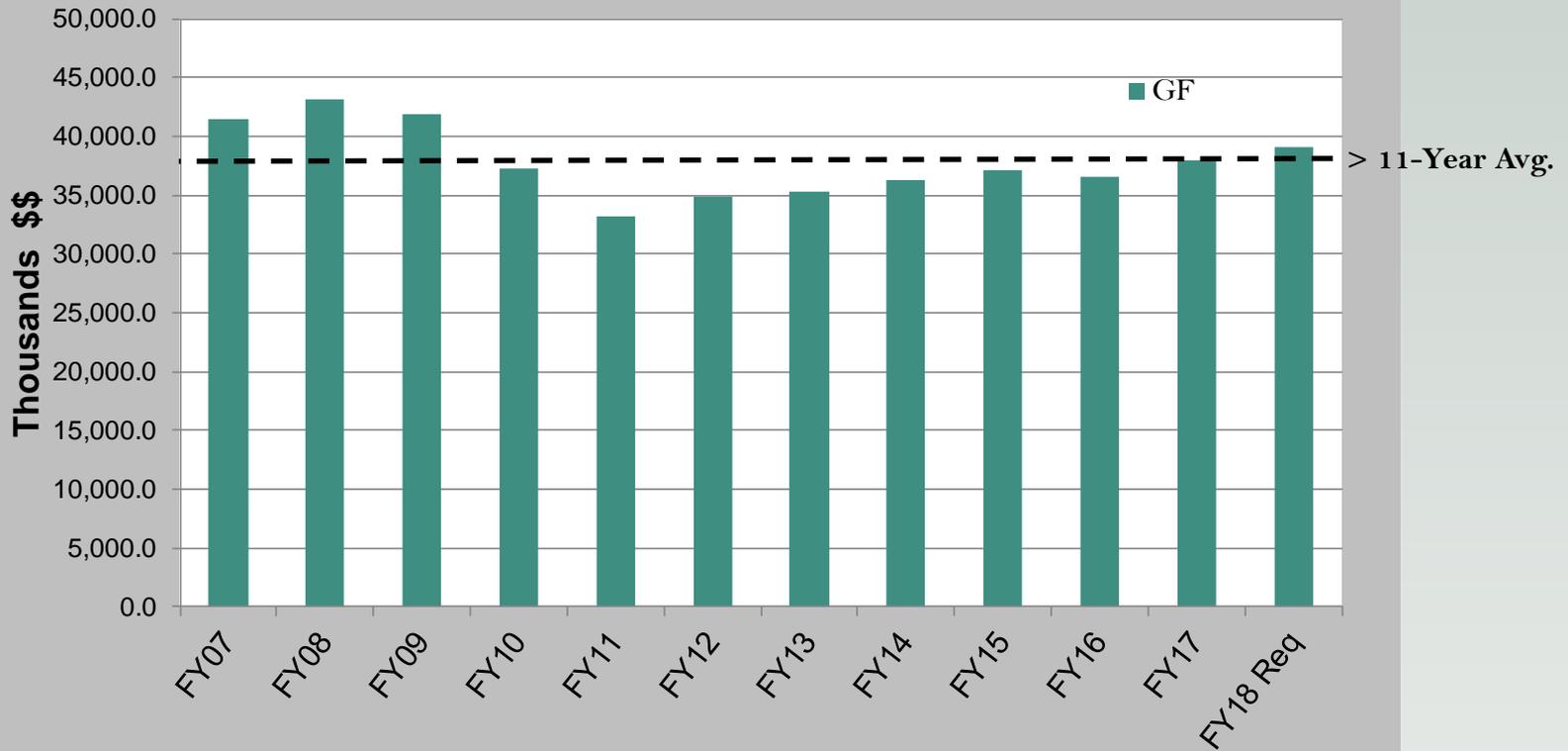
FISCAL 2018 REQUESTED BUDGET

Total of All Funds: \$199,221,200



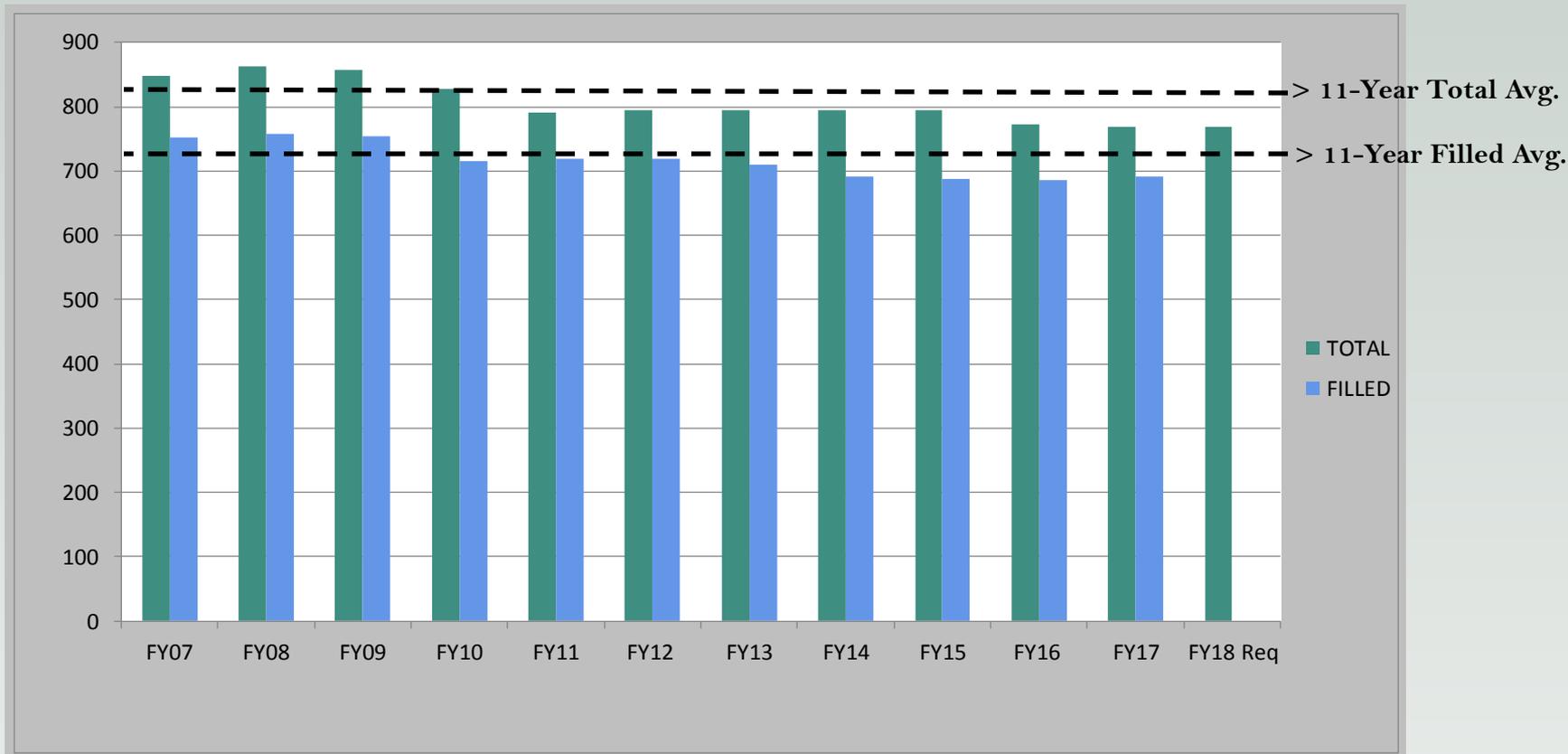
- ASF (Authority Only)
- NSF (Authority Only)
- GF

DNREC GF BUDGET HISTORY



REQUESTED FY2018 BUDGET

DNREC POSITION HISTORY



* Of the 768 FTE total positions, 691 are currently filled for FY2017.

MICHAEL CASTLE TRAIL - \$197.2K

Fiscal 2018 Request:

- Third and final phase – due south of Lums Pond State Park, east & west of Rt 896
- ~2.9 miles and a third trailhead with parking and restrooms
- Operating funds will provide for daily operations, maintenance and public safety.



Legacy – First State Trails & Pathways Initiative DNREC & DelDOT:

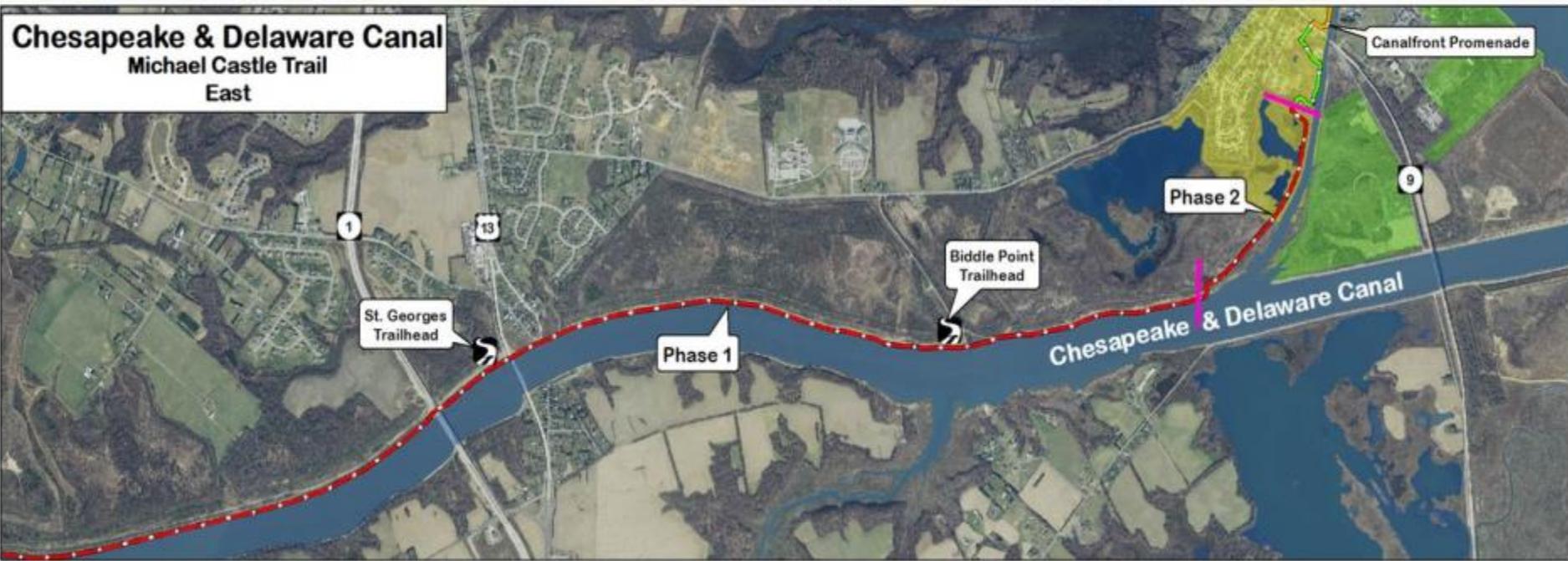
- 42.5 miles of trails have been built with another 22 miles pending construction
- An investment of \$29.16 million has been made on connecting communities
- Nearly 40% of Delaware's population live within a 10-minute bike ride of a trail
- More than 255,000 visitors have biked/hiked the Michael Castle Trail since the trail's opening in 2013

Chesapeake & Delaware Canal Michael Castle Trail West

Michael Castle Trail (12.06 mi.)	
Phase 1	7.5 mi
Phase 2	1.9 mi
Phase 3	2.7 mi



Chesapeake & Delaware Canal Michael Castle Trail East



STATEWIDE TICK CONTROL PROGRAM - \$140.9K

- Funding HB 290 for DNREC to implement Tick Control and Lyme Disease prevention elements of the June 1, 2015 General Assembly Task Force Report.
- Involves statewide development and implementation of a science-based Integrated Pest Management (IPM) strategy.
- **Expected performance:**
 - Prudent pesticide use on public lands
 - Engage biological controls
 - Research tick-host animal relationship
 - Recommend backyard habitat management practices
 - Educate public about tick problems and control
- **Anticipated Results:**
 - Reduce exposure to tick bites
 - Lower the incidence of Lyme Disease and other tick-borne maladies



YOUTH CONSERVATION CORPS & CHILDREN IN NATURE \$72.3K

Fiscal 2018 Request:

- High-quality practical work experience for young people through environmental and park-focused activities;
- Outdoor learning opportunities;
- Job and/or college preparation.



Legacy – Children in Nature:

- Fulfilled the Children in Nature Task Force recommendations and launched a Youth Conservation Corps for teenagers
- In 2016 the Corps expanded statewide with more than 40 members

NETWORK INFRASTRUCTURE SUPPORT - \$167K

- Provides vital connectivity for internal use and for customers and constituents who rely on environmental information.
- Supports 2,500+ annual software licenses and ensures current technology standards are met to maintain >230 environmental and recreational applications that require a variety of data classifications to include public, confidential and legally protected data.



STRENGTHENING COMMUNITY PARTNERSHIPS



THE CONSERVATION FUND

America's Partner in Conservation

Nemours.

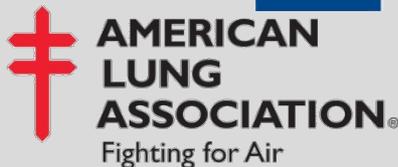
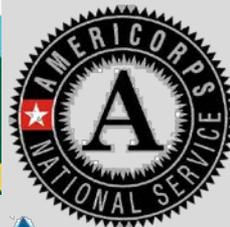


DCEC

Keeping it Clean and Green



LEAGUE OF WOMEN VOTERS
PALOS VERDES PENINSULA/SAN PEDRO



LEGACY: OUR CONSERVATION ECONOMY

Delaware Bayshore – Protected 1,614 acres -- total 120,000 acres. Enhanced public access, and habitat restoration

Delaware Wildlife Action Plan- Conservation partners, state and regional wildlife experts, key stakeholders and with public input, developed Plan that assessed wildlife and habitats, identified the challenges they face, and outlined actions needed for conservation.



Land Conservation/Ecological Preservation - Through 104 projects 7,721 acres have been protected through the Open Space Program

Waterway Management- New legislation allocates increased revenue from boat registration to Waterway Management Fund to keep channels open and safe



Reef Program - 2011 sinking of the Navy destroyer, Arthur W. Radford. At 565' longest vessel reefed along the Atlantic Coast

Redevelopment of Strategic Sites - NVF is unique model where state and private sector are co-developing a residential and destination community that includes lands for recreational use.



CLEANER, CHEAPER AND MORE RELIABLE ENERGY



EO 18 -- DNREC implemented conservation measures and changes in the R&R Building that reduced energy use by 54%; saved ~\$650k; and reduced emissions by 54%. LEED certified

Clean Energy - Delaware's power sector has been completely transformed under the Markell administration. Nine of the state's 10 "dirtiest" power plants have been shut down or switched fuel to cleaner energy sources, while the one remaining coal-fired unit installed \$300 million in pollution controls. Reduced annual emissions of sulfur dioxide, oxides of nitrogen, and mercury by more than 90% and significantly reducing in-state particulates

Energy Efficiency Investment fund (EEIF) - has helped fund over 380 projects, leveraged \$33M+ in private investments since 2012, and saved >62 million kwh per year. These energy savings translate into a combined savings of over \$6.2 million each and every year – often for 10 years or more.

Alternative-Fueled Transportation - In the first 14 months, more than 215 rebates for electric vehicles to Delaware residents and businesses result in reducing over 1.8 million pounds of carbon dioxide per year from entering the atmosphere.



SUPPORTING SAFE AND SUSTAINABLE COMMUNITIES



Universal Recycling -- Diversion rate is 43% - higher than the national rate of 34.3%, as reported by EPA.

Brownfields -- There have been 166 Brownfield sites certified during the Markell administration with 93 under active remediation; 26 completed; and 47 completed

Since 2009, more than \$35 million invested to bring properties back into productive use and increase the Delaware tax base. Sites include the Wilmington Riverfront area, key redevelopment sites in northeast Wilmington and the former Berry Plastics Site in Harrington.



Heating Fuel Underground Storage Tank Closure Assistance - Since March 2015 DNREC has received 458 applications for UST assistance from homeowners. 411 removals have been completed

SUPPORTING HEALTHY FAMILIES

First State Trails and Pathways Initiative

(w/DelDOT) - World-class statewide network of new pathways and trails for citizens and visitors for biking, hiking, walking and active living. Created jobs, both in construction and recreation-related businesses, and has steered Delawareans toward healthy activity. Regional and national recognition



Children In Nature - Thousands of children across Delaware have benefited from increasing opportunities to take part in outdoor activities



Outdoor Recreation, Parks & Trails Program -

Provided nearly \$5.5 million in matching assistance to 24 municipal and county agencies in the state.

Recreational Assets and Amenities - By leveraging federal grants and private funding, Delaware State Parks has invested more than \$35 million in park infrastructure, resulting in a 19 percent increase in campground occupancy between 2014 and 2015.



IMPROVING DELAWARE'S PREPAREDNESS



Ocean Coast Beach Protection - \$7B coastal economy
Sustaining and improving our clean beaches in Delaware has been a priority. Emphasis on shoreline resiliency through beach nourishment to protect lives and infrastructure at the same time bolstering the status of recreational beaches.

River/Bay Coast Protection - Five historic levees that provide the first line of defense for much of the City of New Castle against Delaware Bay storm surges were repaired and upgraded. The road/pathway atop the levees has also been reconstructed for recreational use by the public.

Drainage and Flood Abatement - Studies performed along 247 miles of stream to support more accurate flood risk mapping to try and reduce flood insurance for some

Dam Safety and Rehabilitation - Coordinated program with DOT to leverage state and federal funds. Priority based on assessment of state's highest risk dams.

Climate Vulnerability and Sea Level Rise Adaptation - Delaware is a recognized leader in climate change planning - made strides by developing the plans and tools for making strategic decisions for the future.



ENSURING CLEAN WATER

Watershed Improvements - Through partnerships within the state's major watersheds, focus has shifted to better controlling stormwater and runoff through restoration and green technologies such as living shorelines, rather than hardened structures such as those built with riprap.

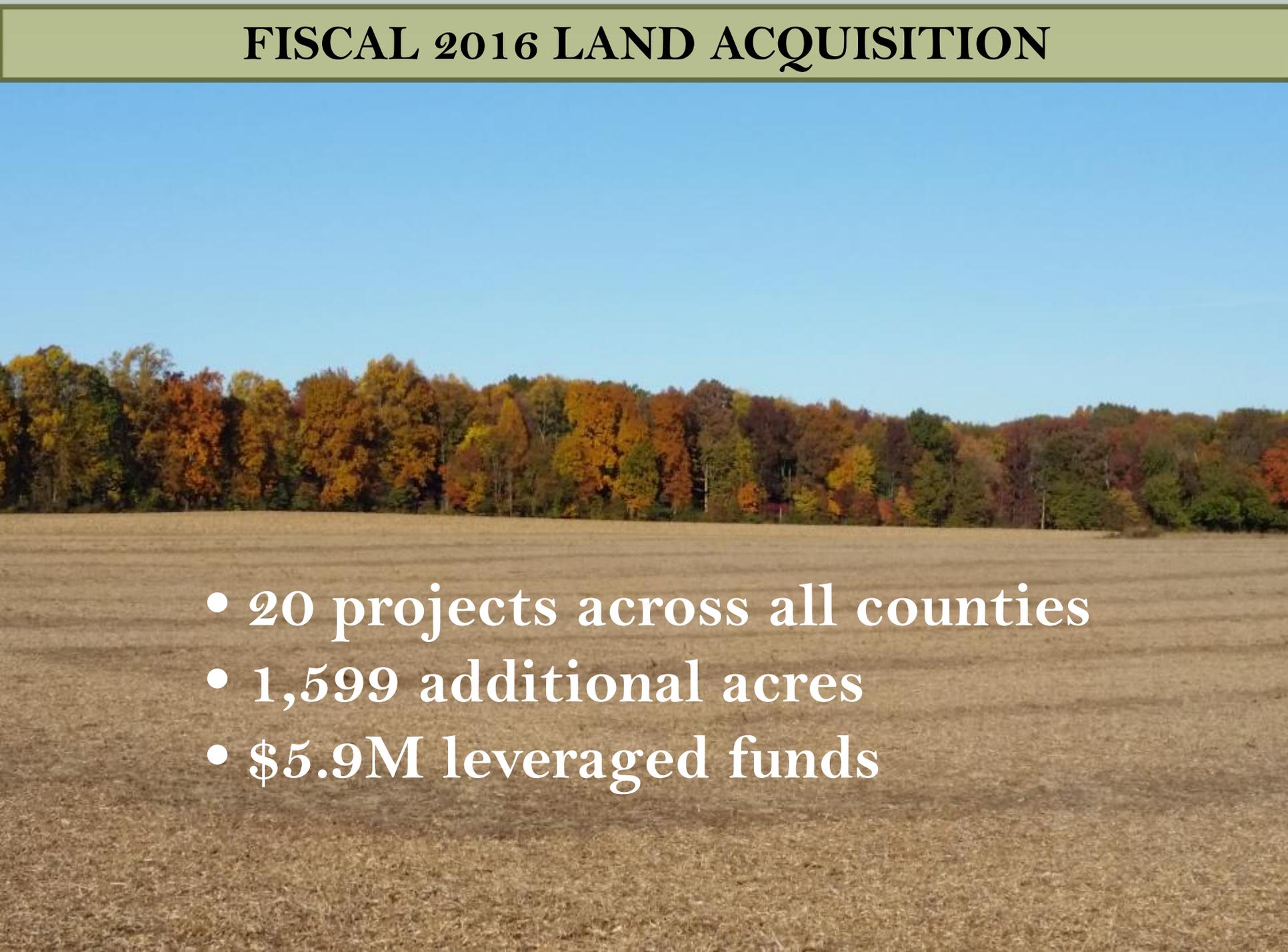
Watershed Approach to Toxics Assessment & Restoration (WATAR) - Accelerated the cleanup of toxics in Delaware's surface waters, sediments and fish by using innovative assessment methods and clean up technologies. Projects include Mirror Lake in Dover and Little Mill Creek in Elsmere



Water Infrastructure with DHSS and Finance - Combined funding of in the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund, and the 21st Century Fund, critical projects to help farmers, homeowners, municipalities and counties were built or designed.

Septic system replacements, farming best management practices, and repair and expand wastewater facilities, flooding and stormwater and erosion control projects; drinking water well protection; water quality protection of bays, rivers and streams; and energy efficiency improvements at wastewater facilities. Projects saved taxpayers money and improved water quality.

FISCAL 2016 LAND ACQUISITION

- 
- 20 projects across all counties
 - 1,599 additional acres
 - \$5.9M leveraged funds

FY2018 CAPITAL BUDGET REQUEST ~\$53.1M

• Shoreline and Waterway Management	\$7,500,000
• Conservation Cost Share	3,000,000
• Conservation Reserve Enhancement Program (CREP)	500,000
• Clean Water State Revolving Fund	1,400,000
• Tax Ditches	1,400,000
• Park and Wildlife Area Critical Facilities	8,500,000
• High Hazard Dam and Dike	1,500,000
• Trails and Pathways	3,000,000
• Resource Conservation and Development (RC&D)	3,000,000
• Redevelopment of Strategic Sites (NVF and Fort DuPont)	5,500,000
• Coastal Impoundments and Water Control Structure Rehab	587,500
• Killens Pond Waterpark Improvements	3,500,000
• Delaware Bayshore Initiative	500,000
• Critical Equipment for Operations	2,726,300
• Permitting, Registration & Licensing Technology	3,300,000
• Little Creek Boat Ramp	500,000
• Minor Capital Improvements for Operations	1,500,000
• Cape Pier Replacement	1,000,000
• Customer Relationship Management Technology	1,000,000
• Phase I Refitting of the Env. Lab in the R&R Building	902,426
• Fort Miles Museum	500,000
• Debris Pits	500,000
• Consolidation of Dover Campus Offices	1,300,000

FOCUSED ON PROTECTING AND ENHANCING DELAWARE'S NATURAL RESOURCES AND CAPITAL INVESTMENTS

- Managed lands = over 103,300 acres
- Recreational areas = 32 park and wildlife areas, 10 preserves, 124 other conservation easements, Brandywine Zoo, Baynard Stadium
- Wildlife Recreation Participants = ~423,000
- Freshwater ponds and marine fishing access areas = 58
- Miles of roads = 100+
- Miles of trails = 244
- Miles of managed shoreline = 56
- State-owned dams = 42
- Tax ditches = 2,000 miles
- Park Visitors = >5.5 million visitors
- Students/Educators (served) = 51,500+
- Anglers (registered) = 118,700
- Hunters (registered) = 21,393
- Boaters (registered) = 59,337
- Waterways = 71 miles



CRITICAL INFRASTRUCTURE INVESTMENTS

SHORELINE AND WATERWAY MANAGEMENT - \$7.5M

Benefits:

- Protection from flooding & storms
- Provides safe navigation for boaters
- Improves water quality
- Coastal economy generates \$7 billion annually and employs ~60,000



Supports:

- Ocean and Bay Beach nourishment
- Erosion control and Dune maintenance
- Storm repair and clean up
- Cost share for federal beach nourishment
- UD Citizens Monitoring of water quality
- Channel dredging and beneficial use
- Navigational markings and debris removal
- Macro-algae harvesting

SHORELINE AND WATERWAY

Photograph Courtesy of Kevin Fleming

Projects Underway:

- Rehoboth/Dewey Nourishment w/USACE
- Massey's Channel Design and Permitting
- Broadkill Beach Dune Fencing and Crossings
- Indian River & Marina Dredging and Sand Bypass Facility Improvements
- UD College of Marine Studies Harbor Maintenance Dredging

Upcoming Projects:

- Bethany/South Bethany Nourishment
- Fenwick Nourishment
- Bowers Nourishment & S. Bowers Jetty
- Ocean Beach Maintenance
- Massey's Channel Dredging
- Lewes-Rehoboth Canal Dredging
- Assawoman Canal Maintenance Dredging
- Augustine Beach Boat Ramp Maintenance Dredging

CRITICAL INFRASTRUCTURE INVESTMENTS

CONSERVATION COST SHARE - \$3.0M

- For every \$1 of State Cost Share, \$5.78 in federal and private dollars are invested to BMPs.
- Planted 55,474 acres of cover crop with available resources in 2015
- Annually reduced total nitrogen by 522,914 pounds, total phosphorus by 1,087 pounds



CRITICAL INFRASTRUCTURE INVESTMENTS

CONSERVATION RESERVE ENHANCEMENT PROGRAM (CREP) - \$500K

Supports:

- \$500k investment leverages \$1.5M of Federal USDA funds
- Removes up to 20,000 acres of marginal agriculture lands from production and enrolls the acreage in conservation practices

Benefits

- Reduce nutrient and sediment loads to impaired waterbodies of Delaware
- Improves aquatic temperature and dissolved oxygen criteria necessary to support biology and wildlife
- Increase upland wildlife habitat and create wildlife corridors



CRITICAL INFRASTRUCTURE INVESTMENTS

CLEAN WATER STATE REVOLVING FUND - \$1.4M

CWSRF Capitalization Grant Required Match:

- Anticipating \$7M in federal funding
- Loan applications received for FY2017 = \$115M
- Program has leveraged >\$268M in federal dollars since inception and closed on 84 municipal loans for nearly \$324M

Benefits:

- Reduces costs of financing
- Protects water quality and public health
- Supports local economies
- Creates and supports thousands of jobs



CRITICAL INFRASTRUCTURE INVESTMENTS

TAX DITCH / PUBLIC DITCH - \$1.4M

Provides support to 240 organizations on more than 2,000 miles of drainage infrastructure, channels, and related water management projects statewide:

- Planning, surveying & engineering
- Permitting and construction inspections



SUPPORTING HEALTHY FAMILIES - INVESTING IN RECREATIONAL ASSETS



PARK AND WILDLIFE AREA CRITICAL FACILITY REHABILITATION - \$8.5M

- Facility Maintenance
- Road & Parking Rehabilitation
- Historical Structure Repairs
- Critical Roofing
- Utility Infrastructure
- Recreational Access



PARK AND WILDLIFE AREA CRITICAL FACILITY REHABILITATION



CRITICAL INFRASTRUCTURE INVESTMENTS

DAM AND DIKE REPAIR/REPLACEMENT -

\$1.5M

- Provides emergency planning, monitoring, engineering, and maintenance repairs to state-owned dams in partnership with DelDOT
- Provides for investigation and minor repairs to state dikes
- Protects communities and infrastructure
- Highest priority projects:
 - Hearns and Records
 - Garrison Lake
 - Chipmans Pond
 - Concord Pond
 - Craigs Mill Pond
 - Mudmill Pond



SUPPORTING HEALTHY FAMILIES



TRAILS AND PATHWAYS - \$3.0M

2017-2018 Priorities

DNREC trail projects in design or construction include:

- White Clay Creek SP - Tri-Valley Trail
- Lums Pond SP - Buck Jersey Pathway
- Killens Pond State Park - pedestrian bridge connector
- Auburn Heights Preserve
- Cape Henlopen SP – east leg of the Georgetown-Lewes-Cape Trail
- Holts Landing SP – trail loop connector bridge
- Assawoman Canal Trail - Phase 2, Route 26 Underpass
- Augustine WA - Lang Marsh Loop
- Aquatic Resource Education Bayshore - Taylors Gut Trail
- Little Creek Wildlife Boardwalk & Loop Trail

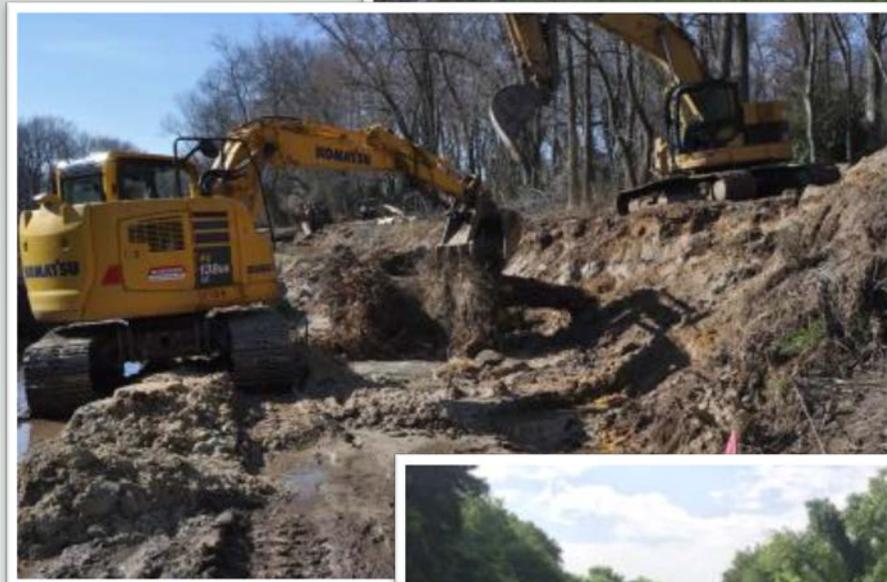
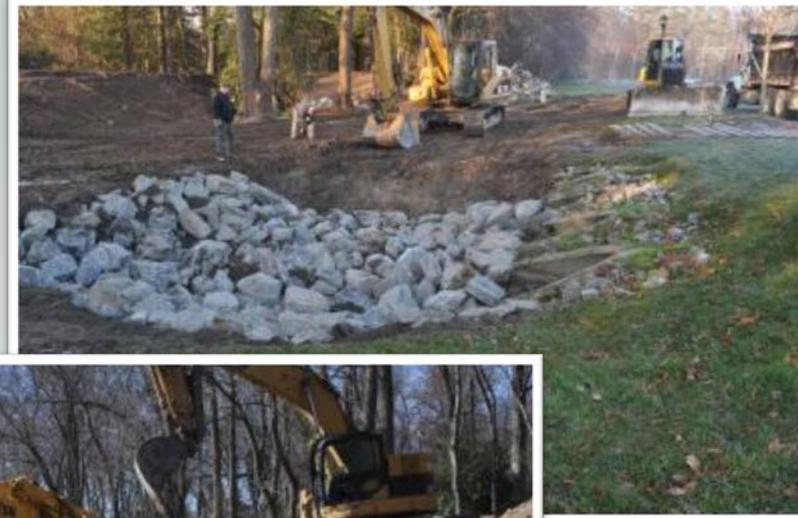


CRITICAL INFRASTRUCTURE INVESTMENTS

21ST CENTURY (RC&D) - \$3M

Provide continued funding for engineering and construction of water management projects:

- More than 1,600 projects completed since 1996 (\$61M)
- More than 700 projects approved in all counties for funding
- All current funding will be fully obligated in fiscal 2017.



PRESERVING NATURAL HERITAGE & EXPANDING ECOTOURISM

REDEVELOPMENT OF STRATEGIC SITES - \$3M

NVF:

- Remediated more than 233 tons of contaminants in the soils and groundwater (with HSCA funds)
- Continue to stabilize/rehabilitate key structures
- Continue to develop recreational amenities
- Expand open space and trails
- Establish wetland areas and flood mitigation



Fort DuPont Redevelopment and Preservation Corporation - \$2.5M

- Created July 2014 through HB310
- Charged with the management, preservation and development of the Fort DuPont
- Development plans underway include:
 - The restoration of 7 residences
 - Site design and engineering – phase 1 includes 91 homes.
 - Infrastructure improvements
 - The design of a new marina



Fiscal 2017 Funding Request:

- \$ 250k -Administrative Expenses
- \$ 130k -Property Management
- \$2.12M -Restoration of the historic War Theater; Remediation of the Mortar Bunker; & Additional Residence Restorations
- Funds will leverage historic tax credits

CRITICAL INFRASTRUCTURE INVESTMENTS

COASTAL IMPOUNDMENT & WATER CONTROL STRUCTURE REHABILITATION - \$587.5K

- Opportunities to leverage federal funds
- Priority Structures in Augustine, Woodland Beach, Little Creek, Ted Harvey, and Assawoman Wildlife Areas

Coastal Impoundments:

- Nourish beach habitats
- Protect shoreline from storm surge
- Prevent loss of coastal wetlands
- Protect recreational areas
- Reduce flooding and protect transportation infrastructure



KILLENS POND WATERPARK PHASE II-\$3.5M



LEGEND

1 CONCESSIONS STAND	28 RENOVATED BUILDING POOL WICH
2 RACING SLIDE	29 RENOVATED BUILDING LOCKER ROOM
3 PLAY STRUCTURE (2-4YR BLDG)	30 TICKETING BOOTH
4 PLAY STRUCTURE (5-8YR BLDG)	31 OVERFLOW PARKING
5 NAUTICAL	32 FUTURE PARTNERSHIP OPPORTUNITY
6 SHADE STRUCTURE	33 NEW BATHHOUSE
7 PLAYTON	34 BODY BOWLS
8 TOWER CLIP SWIMMING	35 FUTURE CONCESSIONS OPPORTUNITY
9 SWAMP GROUND	36 FINALE SLIDES
10 EXISTING PAULSON	37 NEW POOL WICH BLDG
11 PHASE 1 BODY SLIDE	38 MAIN POOL OVERVIEW
12 PHASE 2 SLIDE	39 PRIVATE SHIP SLIDE
13 CURRENT D-HALL	40 SITE DEVELOPMENT
14 CABANA	



LIFEGUARD Lifeguard and First Aid Building Renovation

LEGEND

NEW BUILDING	EXISTING BUILDING TO BE RENOVATED	CAR CIRCULATION
SHADE STRUCTURE	WATER PARK ELEMENT	BUS CIRCULATION
LOOKERS		FOOT WASH / DECK SHOWER



PRESERVING NATURAL HERITAGE & EXPANDING ECOTOURISM



DELAWARE BAYSHORE INITIATIVE - \$500K

2018 Priorities Include:

- Augustine Wildlife Area Cooper-Cross Wildlife Viewing Boardwalk and Platform
- Augustine Wildlife Area Lang Marsh Loop
- Little Creek Wildlife Viewing Boardwalk and Platform, Trail and Bayshore Visitor Center
- Aquatic Resource Education – Taylors Gut Bayshore Trail
- Kiosk, roadway wayfinding signs, interpretive signs



CRITICAL EQUIPMENT - \$2,726.3M



- Environmental and natural resource operations
- Conservation, protection and research activities
- Public services and infrastructure
 - ~103,000 acres of public land
 - 58 freshwater ponds and marine fishing / boating access areas
 - 71 miles of Delaware waterways
 - Coastal and bay shoreline
 - Environmental laboratory services



OTHER KEY INVESTMENTS

➤ Little Creek Boat Ramp - \$500K



➤ Minor Capital Improvements – \$1.5M





OTHER KEY INVESTMENTS

Cape Pier Design - \$1 M

- Closed in October 2014 due to structural integrity.
- All-wooden pier was built during World War II by the US Army.
- Several rehabilitative efforts have been undertaken **since 2007 as short-term fixes, including repairs completed in 2015.**
- Largest and most popular recreational pier in the region
- \$1M requested would provide for site investigation, design and engineering of a new pier.



OTHER KEY INVESTMENTS

➤ Fort Miles - \$500K

➤ Debris Pits - \$500K



DEPARTMENT-WIDE PERMITTING, LICENSING, REGISTRATION & DATA COLLECTION TECHNOLOGY - \$3.3M

Over decades DNREC has developed customized software solutions, many of them singular in nature, resulting in a large portfolio of 236 applications. Across DNREC there are ~42 individual applications that serve similar customer and data functions.

- Consolidation of applications, where possible, will reduce the overhead associated with duplicative applications, reduce technical support requirements, increase efficiencies by focusing on citizen needs by utilizing current technology.
- One critical example – the current F&W license and registration applications is over 10 years old and manages 350,000 licenses/permits and all sales revenue for over \$10M in annual federal support.
- Current systems reside on multiple platforms built up over years with web frontends added as each group came online and requires costly upgrades to meet state and industry standards (Server 2003) without enhanced functionality.
- Replacement solution will standardize the platform and increase administration and cost efficiencies
- New solution will ensure compliance with:
 - Interstate Wildlife Violator Compact (IWVC)
 - DE Criminal Justice Information System (DELJIS)
 - DHSS Child Support- Revocation/Suspension Program
 - Federal reporting requirements



CUSTOMER RELATIONS MANAGEMENT (CRM)

TECHNOLOGY DEVELOPMENT - \$1M

- The CRM approach analyses data about customers' historical interaction with a department and seeks to improve relationships and interactions with customers.
- To demonstrate, a single customer profile would allow customers to logon to a portal and have a shopping cart experience, where they provide their information just once, and then are able to make use of DNREC's services across the department in a seamless manner.



QUALIFIED, DEDICATED STAFF



DNREC VOLUNTEERS





Photograph Courtesy of Chris Bennett



DELAWARE'S GOOD NATURE DEPENDS ON YOU!