

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

Project Summary Chart

Project Name	STATE CAPITAL FUNDS					
	FY 2016	FY 2017	FY 2018 Request	FY 2018 Recommended	FY 2019 Request	FY 2020 Request
1. Shoreline and Waterway Management	\$1,540,500	\$3,161,921	\$7,500,000	\$3,198,191	\$7,500,000	\$7,500,000
2. Conservation Cost Share	1,500,000	1,500,000	3,000,000	1,500,000	3,500,000	4,000,000
3. Conservation Reserve Enhancement Program (CREP)		1,000,000	500,000	160,000	500,000	500,000
4. Clean Water State Revolving Fund	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000
5. Tax Ditches	1,148,700	1,148,700	1,400,000	1,148,700	1,400,000	1,400,000
6. Park and Wildlife Area Rehabilitation/Critical Facilities	5,005,615	3,500,000	8,500,000	3,500,000	8,500,000	8,500,000
7. High Hazard Dam and Dike Repair/Replacement	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
8. Statewide Trails and Pathways	3,000,000	2,500,000	3,000,000	2,500,000	3,000,000	3,000,000
9. Resource, Conservation and Development	3,000,000	3,812,800	3,000,000		3,000,000	3,000,000
10. Redevelopment of Strategic Sites (NVF)	3,749,885	2,500,000	3,000,000	2,500,000	3,000,000	3,000,000
11. Redevelopment of Strategic Sites (Fort DuPont)	1,250,000	2,000,000	2,500,000	2,250,000	2,500,000	2,500,000
12. Coastal Impoundments and Water Control Structure Rehabilitation/Replacement			587,500		500,000	
13. Killens Pond Waterpark Improvements			3,500,000		3,500,000	3,000,000
14. Delaware Bayshore Initiative	500,000	500,000	500,000	500,000	500,000	500,000
15. Critical Equipment for Operations	740,000		2,726,300		2,000,000	2,000,000
16. Permitting, Registration and Licensing			3,300,000		1,000,000	1,000,000

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

Project Name	STATE CAPITAL FUNDS					
	FY 2016	FY 2017	FY 2018 Request	FY 2018 Recommended	FY 2019 Request	FY 2020 Request
17. Little Creek Boat Ramp			500,000			
18. Minor Capital Improvement and Equipment			1,500,000		2,500,000	2,500,000
19. Cape Pier Replacement			1,000,000		8,000,000	7,000,000
20. Customer Relationship Management			1,000,000			
21. Environmental Laboratory Renovations - Richardson and Robbins Building			902,426		4,162,312	1,711,356
22. Fort Miles Museum			500,000		500,000	500,000
23. Debris Pits	751,600		500,000		500,000	500,000
24. Consolidation of Dover Campus Offices			1,300,000		1,300,000	1,300,000
25. Water Supply Monitoring Network		713,000			810,000	
26. Dobbinsville Fishing Pier					250,000	
27. Poplar Thicket Erosion Project					2,750,000	
TOTAL	\$25,086,300	\$25,236,421	\$53,116,226	\$20,156,891	\$64,072,312	\$56,311,356

1. Shoreline and Waterway Management

PROJECT DESCRIPTION

Funding is requested to carry out the State's Beach Preservation program along the Atlantic Ocean coast and Delaware Bay shoreline, the Delaware Inland Bays sediment management, Indian River Bypass Project and University of Delaware Citizen Monitoring program efforts.

Under the State's Beach Preservation program, work typically includes beach nourishment, structural erosion control measures, public dune maintenance and emergency storm repair and cleanup. Work is done only on publicly accessible beaches and may involve cost sharing with federal and local governments. Under plans

prepared by the U.S. Army Corps of Engineers, federal cost-shared beach nourishment projects are undertaken on a three to five-year cycle for 50 years. In Fiscal Year 2018, funding is requested to provide a match for federal funds to nourish Bethany, South Bethany and Fenwick Island beaches. The funds requested will support the implementation of phase one of the 10-year Delaware Bay Beach Management Plan.

Utilizing state resources and private contractors, the Delaware Inland Bays sediment management multi-year plan includes emphasis on waterway management projects and operations and environmental restoration initiatives in and near the State's Inland Bays. Funding is requested to construct a beneficial reuse/island restoration dredging project in the federally-authorized channel in Massey's Ditch. Funding is also requested to perform ongoing waterway management operations in the State's Inland Bays by: placing navigational aids properly marking channels for the boating public;

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

removing nuisance accumulations of macro algae from near shore and shoreline areas; and removing abandoned vessels and derelict structures from waterways, to ensure safe navigation.

CAPITAL REQUEST FUNDING

	STATE	FEDERAL	OTHER*
FY 2016	\$1,540,500	\$1,400,000	\$2,225,000
FY 2017	3,161,921	1,400,000	3,225,000
FY 2018	7,500,000	1,400,000	3,525,000
FY 2019	7,500,000	20,990,000	3,525,000
FY 2020	7,500,000	11,740,000	3,525,000
TOTAL	\$27,202,421	\$36,930,000	\$16,025,000

*The sources of Other funds are the Public Accommodation Tax and Waterway Management Fund.

2. Conservation Cost Share

PROJECT DESCRIPTION

Funding is requested to expand the Conservation Cost Share program. This program is the State's principal financial support mechanism for the design and installation costs of practices that provide water quality improvements; provide wildlife habitat; and protect human health, natural resources, water supplies and Delaware's farmland soils. The program provides funds as incentives to landowners or users for the public benefit. Landowners that receive benefits must pay a portion of the cost to locate, design, install and maintain conservation practices and systems. Of the amount needed for this program, 70 percent will be divided equally among the three counties to expand their programs. The remaining balance will be directed toward nutrient management efforts statewide.

CAPITAL REQUEST FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$1,500,000	\$2,000,000	\$0
FY 2017	1,500,000	2,000,000	0
FY 2018	3,000,000	2,000,000	0
FY 2019	3,500,000	2,000,000	0
FY 2020	4,000,000	2,000,000	0
TOTAL	\$13,500,000	\$10,000,000	\$0

3. CREP

PROJECT DESCRIPTION

Funding is requested for the renewal of approximately 1,000 acres of marginal agriculture land currently protected by expiring CREP contracts. The state share of these contract renewals varies from 27 percent to 36 percent, depending on the conservation practice. The requested funding will leverage between \$2.0 and \$2.4 million in federal funds. The stream buffers and restored wetlands, established through CREP, reduce nutrient and sediment loadings; improve water temperature and levels of dissolved oxygen, which are necessary to support biology and wildlife; increase upland wildlife habitat; and create wildlife corridors.

CAPITAL REQUEST FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$0	\$109,800	\$0
FY 2017	1,000,000	2,000,000	0
FY 2018	500,000	1,000,000	0
FY 2019	500,000	1,000,000	0
FY 2020	500,000	1,000,000	0
TOTAL	\$2,500,000	\$5,109,800	\$0

4. Clean Water State Revolving Fund

PROJECT DESCRIPTION

Funding is requested to provide state matching funds for the Federal Clean Water State Revolving Fund Capitalization grant. It is anticipated that Delaware's 2018 federal grant will be approximately \$7 million, which requires a 20 percent state match. This funding request will support the Water Infrastructure Advisory Council and its 2017 Intended-Use Plan for facility projects.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL*	OTHER
FY 2016	\$1,400,000	\$6,817,000	\$0
FY 2017	1,400,000	6,525,000	0
FY 2018	1,400,000	7,000,000	0
FY 2019	1,400,000	7,000,000	0
FY 2020	1,400,000	7,000,000	0
TOTAL	\$7,000,000	\$34,342,000	\$0

*Fiscal Years 2018, 2019 and 2020, reflect estimated federal funding levels.

5. Tax Ditches

PROJECT DESCRIPTION

Funding is requested for planning, surveying, engineering, permitting, inspecting and constructing drainage infrastructure, channels and related water management projects. Constructing environmentally-sensitive projects requires minimizing temporary and permanent disturbances to all natural resources in the project area. A portion of these funds will be used to investigate watershed and drainage resources to provide information for the completion of water management improvement projects and related construction. This funding also allows the drainage program to provide technical assistance to more than 215 tax ditch organizations, private landowners and public agencies statewide.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$1,148,700	\$0	\$0
FY 2017	1,148,700	0	0
FY 2018	1,400,000	0	0
FY 2019	1,400,000	0	0
FY 2020	1,400,000	0	0
TOTAL	\$6,497,400	\$0	\$0

6. Park and Wildlife Area Rehabilitation/Critical Facilities

PROJECT DESCRIPTION

Funding is requested to rehabilitate the State's park and wildlife area systems, which currently contain over 700

buildings in 32 public access areas on nearly 100,000 acres.

Facility Maintenance

Funding is requested for deferred maintenance projects and upgrades of buildings, as well as the demolition of unsafe and unneeded structures. Projects include:

- Improvements necessary for continued Americans with Disabilities Act compliance;
- Safety improvements to facilities statewide;
- Renovations of residential buildings throughout the state parks;
- Improvements to bathhouses, concession buildings, nature centers and visitor centers;
- Installation of automated fee machines and similar public service solutions throughout the state park system;
- Improvements to campgrounds, cottages and cabins throughout the state parks;
- Painting of numerous barns, field offices, nature centers and residences statewide;
- Demolition of unsafe structures at the Aquatic Resources Education Center location;
- Replacement of siding on buildings statewide;
- Construction of an office for the Milford Mosquito Control;
- Construction of an office for Fish and Wildlife Enforcement (Little Creek);
- Repairs and upgrades at Ommelanden Range and Hunter Education Training Center;
- Construction of Woodland Wharf kayak and fishing access area for the Captain John Smith Trail on the Nanticoke River;
- Construction and emergency repair of facilities in wildlife areas including pole buildings and storage sheds;
- Replacement and repair of hunting and wildlife-viewing structures;
- Reconstruction and maintenance dredging of Augustine Beach Boating and Fishing Access Area; and
- Repairs and renovations to the lobby and entry at the St. Jones Reserve Center.

Critical Roofing

Funding is requested for the repair and replacement of several roofs on buildings in the state park system and wildlife areas including:

- Mount Pleasant Meeting House roof at Bellevue State Park;
- Indian River Marina dry stack storage building;
- Terre plain roof at Fort Delaware;

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

- Youth camps and recreational facilities at Delaware Seashore and Cape Henlopen State Parks;
- Residential and recreational structures throughout the state parks;
- Ralph D. Kellam Conservation and Recreation Center barn roof replacement at Norman G. Wilder Wildlife Area; and
- Mulberry Landing building roof replacement at Assawoman Wildlife Area.

Road Rehabilitation

Funding is requested to begin repair of the 40-plus miles of roads within the park system and wildlife areas, which are not eligible for Department of Transportation (DOT) or Federal Highway Administration funds. Inventory and assessment reports have been completed for Cape Henlopen and Killens Pond. Other park road systems will be investigated in the coming years. Projects include:

- Statewide roadway paving at several state parks, including Cape Henlopen, Killens Pond, Lums Pond and White Clay Creek;
- Parking lot projects throughout the state parks;
- Parking lot renovations at Baynard Stadium; and
- Road repairs for wildlife areas, parking lots and boat ramps statewide.

Utility Infrastructure

Funding is requested to replace aging utility and telecommunication infrastructure throughout the department's properties. These upgrades could be wholesale replacement, major maintenance, efficiency measures or installation of renewable energy systems not previously found on the property. Projects include:

- Updating of sewer, water and stormwater facilities throughout the state parks;
- Upgrading of telecommunication facilities statewide to increase connectivity for staff and visitors;
- Upgrading of electrical utilities throughout the state parks;
- Upgrading of the wastewater treatment plant at Cape Henlopen State Park, with potential to connect to city sewer;
- Energy and utility upgrades to wildlife area facilities statewide; and
- Connecting Milford Mosquito Control Facility to city sewer.

Historic Building and Structure Stabilization

Funding is requested for the repair and stabilization of historic structures within the department's inventory. This funding could be used to match federal and private grants and programs for historic preservation.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL*	OTHER
FY 2016	\$5,005,615	\$0	\$0
FY 2017	3,500,000	0	0
FY 2018	8,500,000	2,862,500	0
FY 2019	8,500,000	2,765,000	0
FY 2020	8,500,000	750,000	0
TOTAL	\$34,005,615	\$6,377,500	\$0

*The sources of Federal funds are Wildlife and Sport Fish Restoration, National Park Service and Federal Highway Byway programs.

7. High Hazard Dam and Dike Repair/Replacement

PROJECT DESCRIPTION

Funding is requested to perform emergency planning and monitoring, dam engineering, maintenance repairs and general construction for state-owned dams. Major capital improvements initiated by Department of Natural Resources and Environmental Control (DNREC) include Garrisons Lake, Concord, Chipmans, Craigs, Trap and Mud Mill Ponds. Funding will be used for the construction of these improvements and priority will continue to be dependent on final construction estimates, environmental permitting and final designs.

A full dikes and associated structure inventory is currently underway. Fiscal Year 2017 funding is being used for engineering, designing and essential apparatus for dike structure repairs. Construction funding for dikes is requested for Fiscal Year 2018 and beyond.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$1,500,000	\$0	\$0
FY 2017	1,500,000	0	0
FY 2018	1,500,000	0	0
FY 2019	1,500,000	0	0
FY 2020	1,500,000	0	0
TOTAL	\$7,500,000	\$0	\$0

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

8. Statewide Trails and Pathways

PROJECT DESCRIPTION

Funding is requested for trail and pathway development to expand recreational and transportation opportunities for Delawareans and visitors. Project funding will leverage existing and new resources from state, federal and private investments to continue Delaware's national leadership in providing a world-class interconnected network of shared-use pathways and trails that will support non-motorized travel and recreational trail opportunities.

The long-term vision for trails and pathways in Delaware includes:

- Building a world-class interconnected pathway network;
- Supporting the creation of local jobs;
- Linking communities to support local sustainable economies and grow connections between neighborhoods, towns and cities;
- Developing sustainable practices in creating the network through native landscaping and natural habitats;
- Supporting healthy communities by providing affordable, active transportation choices;
- Supporting healthy families and Children in Nature;
- Maintaining Delaware's ranking in the top 10 of bicycle-friendly states; and
- Developing strategies for the ongoing maintenance and upgrades of existing facilities.

In collaboration with DOT, Bicycle Council, Pedestrian Advisory Committee, Council on Greenways and Trails, communities and other stakeholders, the department is continuing to implement the First State Trails and Pathways Initiative.

DNREC trail projects in design or construction include, but are not limited to:

- Lums Pond State Park Buck Jersey pathway;
- Lums Pond State Park to Michael Castle Trail (C&D Canal);
- Killens Pond State Park pond-side pedestrian bridge;
- Augustine Wildlife Lang Marsh Loop;
- Auburn Heights Preserve;
- Aquatic Resource Education Bayshore Taylors Gut Trail;
- Ted Harvey Wildlife Area to St. Jones Reserve Trail;

- Little Creek Wildlife Boardwalk and Loop Trail; and
- Assawoman Canal Trail.

Many of these projects are multi-phase and will be implemented in segments over the next couple years.

This request for funding will be dedicated to support implementation of those projects identified and prioritized in the plan, including essential equipment and/or systems necessary to commission these sites and structures for public use.

The estimated operating budget impact for Fiscal Year 2019 includes 1.0 casual/seasonal and \$15,000 in Personnel Costs and \$4,000 in Supplies and Materials.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$3,000,000	\$0	\$0
FY 2017	2,500,000	0	0
FY 2018	3,000,000	850,000	0
FY 2019	3,000,000	850,000	0
FY 2020	3,000,000	850,000	0
TOTAL	\$14,500,000	\$2,550,000	\$0

9. Resource, Conservation and Development

PROJECT DESCRIPTION

Funding is requested to continue the design and construction of small to mid-range drainage and water management projects statewide.

Current funding is expected to be fully expended during Fiscal Year 2017, leaving more than 700 projects awaiting some level of funding.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$3,000,000	\$0	\$0
FY 2017	3,812,800	0	0
FY 2018	3,000,000	0	0
FY 2019	3,000,000	0	0
FY 2020	3,000,000	0	0
TOTAL	\$15,812,800	\$0	\$0

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

10. Redevelopment of Strategic Sites (NVF)

PROJECT DESCRIPTION

Funding is requested for the continued remediation and redevelopment of the former NVF facility in Yorklyn, along the Red Clay Creek. The department completed a series of acquisitions that allow for the remediation of the site, while providing open space, flood mitigation, wetland creation and economic development. Asbestos abatement, demolition and a new access road were completed. Fiscal Year 2017 funding supports renovations of an Auburn Heights office and parking lot, trail connections with historic bridges, construction of a new amphitheater and other visitor-oriented projects. Fiscal Year 2018 funding will continue to focus on the redevelopment of the site into park amenities, open space, flood mitigation and wetland areas. The site will have several acres of flood retention capacity and will serve as the center of an expanding trail system, connecting several existing parcels of state property to local communities. Phase one of the trail system opened to the public in August 2012 and phase two of the trail system is under construction and scheduled to be completed during Fiscal Year 2017.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$3,749,885	\$0	\$0
FY 2017	2,500,000	0	0
FY 2018	3,000,000	0	0
FY 2019	3,000,000	0	0
FY 2020	3,000,000	0	0
TOTAL	\$15,249,885	\$0	\$0

11. Redevelopment of Strategic Sites (Fort DuPont)

PROJECT DESCRIPTION

Funding is requested for the continuation of the redevelopment project at the Fort DuPont complex adjacent to Delaware City. The department began the conceptual redesign and proposed repurposing of the facility in 2011, with input from various agencies and community leaders. A project website was developed to solicit comments and ideas from the community and citizens of the State. Meetings were coordinated with stakeholders and the steering group, as well as two

public workshops. The master plan was completed and the project is being implemented in phases. The Fort DuPont Redevelopment and Preservation Corporation was authorized by the General Assembly in June 2014, and an Executive Director was hired. The requested funding provides for critical improvements to the site to attract investors and provides for architectural and engineering fees, site improvements, demolition costs and the restoration of existing residential and commercial buildings.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$1,250,000	\$0	\$0
FY 2017	2,000,000	0	0
FY 2018	2,500,000	0	0
FY 2019	2,500,000	0	0
FY 2020	2,500,000	0	0
TOTAL	\$10,750,000	\$0	\$0

12. Coastal Impoundments and Water Control Structure Rehabilitation/Replacement

PROJECT DESCRIPTION

Funding is requested to restore and protect coastal impoundment habitats along the Delaware Bay at the Augustine, Woodland Beach, Little Creek, Ted Harvey and Assawoman Wildlife Areas from storm surge and extreme high tides. Repairs are needed to prevent loss of coastal impoundment wetlands to open water and to reduce flooding and damage to SR 9. Projects will help protect adjacent communities from extreme storms; support management of gradual adaptation as sea levels rise; and restore quantity, quality and stability of habitat for more than 25 species of waterfowl and more than 40 species of shorebirds, marsh birds and wading birds.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL*	OTHER
FY 2018	\$587,500	\$1,762,500	\$0
FY 2019	500,000	1,500,000	0
TOTAL	\$1,087,500	\$3,262,500	\$0

*The source of Federal funds is the Wildlife Restoration program.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

13. Killens Pond Waterpark Improvements

PROJECT DESCRIPTION

Funding is requested for phase two of a four phase renovation to the Killens Pond Waterpark. Phase one, completed in Fiscal Year 2016, consists of new slides, a new entrance, decking, pumps and mechanical and drainage work. Phase two includes a new sprayground, bathhouse, pavilion, play features and several shade structures.

Funding will support continued improvements to the pools, walkways and pool decking; bathhouses, showers and lockers; ticket and concession buildings; and pool mechanics building and infrastructure.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2018	\$3,500,000	\$0	\$0
FY 2019	3,500,000	0	0
FY 2020	3,000,000	0	0
TOTAL	\$10,000,000	\$0	\$0

14. Delaware Bayshore Initiative

PROJECT DESCRIPTION

Funding is requested for the Delaware Bayshore Initiative, which is recognized by the U.S. Department of the Interior as part of the America's Great Outdoors Initiative. Funding will leverage existing and new resources from Open Space, department fees and incentive programs, Land Conservation Funds, Penalty Funds/Coastal Zone Act Offsets, Federal Land and Water Conservation, federal grant funds and bond and private investments.

This project will build upon the legacy of former Governor Russell W. Peterson, who recognized the ecological significance of this region 40 years ago and proposed the landmark Delaware Coastal Zone Act to protect the Bayshore from industrial development.

The Delaware Bayshore Initiative is aligned with efforts that focus on conservation, recreation, education and community engagement. It also supports economic growth by making the Bayshore a world-class ecotourism destination. It will improve the quality of life for residents and visitors through healthy outdoor

recreation opportunities that enhance and prepare Delaware for the future.

Achieving the vision of the Delaware Bayshore becoming a premier global destination for birding, wildlife watching, hunting and outdoor recreation will require:

- Ecological restoration, including the enhancement of stream and wetland corridors and the restoration of coastal wetland, meadow and forest habitats;
- Resource protection including the installation of barriers and signage that prevent motorized vehicle access, vandalism and damage to habitat areas;
- Connections between local communities and waterways by providing trails, pathways and access areas;
- Repair and maintenance of trails and viewing areas for safe recreational experiences;
- Enhanced access to waterways by providing safe kayak and canoe access points and ensuring safe parking capacity at access points;
- Enhanced visitor engagement through the development of wildlife watching platforms, towers and blinds, trail enhancements, signage and interpretation structures, development of web and cell phone applications and interpretative guides, maps and waypoint signs and other promotional material and guides to attract regional, national and international visitors;
- Volunteer promotion by supporting opportunities for local communities and families to participate in habitat restoration projects and stewardship activities; and
- Assistance to local communities for planning and design of amenities that support public access to Bayshore resources and provide information about the culture and history of the Bayshore area.

Funding is requested to leverage federal funding in support of key projects for Fiscal Year 2018, including habitat restoration and recreational amenities to improve hunting, fishing and wildlife viewing opportunities that will drive significant tourism and support local communities.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL*	OTHER
FY 2016	\$500,000	\$1,000,000	\$0
FY 2017	500,000	1,000,000	0
FY 2018	500,000	500,000	0
FY 2019	500,000	500,000	0
FY 2020	500,000	500,000	0
TOTAL	\$2,500,000	\$3,500,000	\$0

*The sources of Federal funds are Wildlife and Sport Fish Restoration program and Federal Highway Scenic Byway Program, as well as other federal funding opportunities.

15. Critical Equipment for Operations

PROJECT DESCRIPTION

Funding is requested for the acquisition/replacement of critical equipment essential in performing environmental and natural resource operations, conservation, protection and research activities. These critical equipment assets have a useful life of over 10 years and provide public services and infrastructure support to nearly 100,000 acres of public land, 700 buildings, 16 state parks, 16 wildlife management areas, 10 natural preserves, two national estuarine research reserve sites, 65 freshwater ponds and marine access areas, all Delaware waterways and environmental laboratory services.

CAPITAL REQUEST

FUNDING

	STATE	FEDERAL	OTHER
FY 2016	\$740,000	\$0	\$0
FY 2018	2,726,300	0	0
FY 2019	2,000,000	0	0
FY 2020	2,000,000	0	0
TOTAL	\$7,466,300	\$0	\$0

16. Permitting, Registration and Licensing

PROJECT DESCRIPTION

Funding is requested to provide for the development of a department-wide Permitting, Registration and Licensing system. A modernized system will streamline the customers' experience to a single interface for licenses, tags, permits, leases and registration sales. The automated customer-centric system will encompass all sales channels and enable comprehensive tracking and

reporting analysis; be compatible with all computers and mobile devices; and be compatible to English and Spanish-speaking customers.

Additionally, the new system will allow the Division of Fish and Wildlife to enter into the Interstate Wildlife Violator Compact (IWVC), as required by Delaware law. The IWVC is an interstate agreement between member states to enhance compliance with hunting, fishing and other wildlife laws of member states and to provide for the fair and impartial treatment of wildlife and fisheries violators.

The new system will also enhance compliance with other state and national entities, as follows:

- Provide an interface with Child Support Enforcement to ensure the suspension or denial of renewals of any license to ineligible citizens;
- Provide automated reporting to Delaware Criminal Justice Information System to identify stolen boats and/or determine if boats being registered are stolen; and
- Provide automated reporting to U.S. Fish and Wildlife Service and the National Marine Fisheries Service to report hunting harvest data associated with migratory bird hunting, license certifications and the number of both exempt and nonexempt anglers.

Funding is also requested to expand the department's use of EQUIS™ to streamline operating procedures and data storage/retrieval.

The system expansion will:

- Increase transparency to the public around Delaware's current environmental posture;
- Provide overhead efficiencies by storing sample results electronically;
- Integrate with the Environmental Information System, allowing for the stratification of data and eliminating the need for multiple applications;
- Provide a consolidated view of air, soil and water samples, permits, enforcement actions and various other data elements; and
- Allow state leadership to make strategic decisions around Delaware's environmental health for a given location or for larger areas encompassing many locations.

The operating budget impact for maintenance costs will be identified in the design phase.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2018	\$3,300,000	\$0	\$0
FY 2019	1,000,000	0	0
FY 2020	1,000,000	0	0
FY 2021	1,000,000	0	0
FY 2022	1,000,000	0	0
TOTAL	\$7,300,000	\$0	\$0

17. Little Creek Boat Ramp

PROJECT DESCRIPTION

Funding is requested for a new boat ramp in Little Creek to boost ecotourism by providing water access for small and medium-sized boats.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL*	OTHER
FY 2018	\$500,000	\$675,000	\$0
TOTAL	\$500,000	\$675,000	\$0

*The source of Federal funds is Sport Fish Restoration program.

18. Minor Capital Improvement and Equipment

PROJECT DESCRIPTION

Funding is requested for Minor Capital Improvement and Equipment projects for the department's public facilities. The proposed projects include building and facility repairs/rehabilitation, including, but not limited to: Delaware Seashore; Fort Delaware; Cape Henlopen; Brandywine Creek and Brandywine Zoo; Wildlife Regions 1, 2 and 3; DuPont Nature Center; Mallard Lodge; Aquatic Resources Education Center; Ted Harvey; North Bowers; Little Creek Fisheries Building; Blackbird Creek; and St. Jones.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2018	\$1,500,000	\$0	\$0
FY 2019	2,500,000	0	0
FY 2020	2,500,000	0	0
TOTAL	\$6,500,000	\$0	\$0

19. Cape Pier Replacement

PROJECT DESCRIPTION

Funding is requested for the design and permitting of a new Cape Henlopen State Park pier to replace the existing structure. The design and permitting process is expected to take two years.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2018	\$1,000,000	\$0	\$0
FY 2019	8,000,000	0	0
FY 2020	7,000,000	0	0
TOTAL	\$16,000,000	\$0	\$0

20. Customer Relationship Management

PROJECT DESCRIPTION

Funding is requested to provide for a Customer Relationship Management (CRM) system to improve the department's interaction with customers. The CRM system has the ability to compile information from a range of communication channels, including a department's website, telephone, email, marketing materials, social media and applications.

A single customer profile would allow customers to logon to a portal and have a shopping cart experience, where they provide information once, and are able to make use of DNREC's services in a seamless manner. A CRM would streamline data processing, provide information on how to better interact with Delaware citizens and deliver the data necessary to make strategic decisions around fees, services and support.

The project includes upgrading the existing Environmental Information System, application interfaces and system procurement.

The operating budget impact will be identified in the design phase.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2018	\$1,000,000	\$0	\$0
TOTAL	\$1,000,000	\$0	\$0

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

**21. Environmental Laboratory Renovations
- Richardson and Robbins Building**

PROJECT DESCRIPTION

Funding is requested to renovate the DNREC Environmental Laboratory Section in the Richardson and Robbins Building. The project will include repairs to mechanical systems, consolidation of shared laboratory functions, removal of office functions from the physical laboratories and maximizing space for laboratory operations.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2018	\$902,426	\$0	\$0
FY 2019	4,162,312	0	0
FY 2020	1,711,356	0	0
TOTAL	\$6,776,094	\$0	\$0

22. Fort Miles Museum

PROJECT DESCRIPTION

Funding is requested for improvements to the Fort Miles Museum road and parking area and renovations to the front entrance of Bunker 519.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2015	\$150,000	\$0	\$0
FY 2018	500,000	0	0
FY 2019	500,000	0	0
FY 2020	500,000	0	0
TOTAL	\$1,650,000	\$0	\$0

23. Debris Pits

PROJECT DESCRIPTION

Funding is requested for the remediation of debris pits on private property where ground subsidence has caused significant property and/or structural damage to primary residences and appurtenances. The average cost of remediating a property is between \$30,000 to \$50,000.

There are presently over 150 properties on the waiting list for remediation, with an estimated seven to eight year wait time for remediation.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER*
FY 2016	\$751,600	\$0	\$0
FY 2018	500,000	0	100,000
FY 2019	500,000	0	100,000
FY 2020	500,000	0	100,000
TOTAL	\$2,251,600	\$0	\$300,000

*The source of Other funds is voluntary match.

24. Consolidation of Dover Campus Offices

PROJECT DESCRIPTION

Funding is requested to consolidate the department's existing leased space to eliminate the dispersion of office spaces currently occupied, increase the cost effectiveness of appropriated funds and create a more cohesive environment that will improve productivity and establish a walkable campus within downtown Dover. The project plan is to renovate the Richardson and Robbins Building over three years.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2018	\$1,300,000	\$0	\$0
FY 2019	1,300,000	0	0
FY 2020	1,300,000	0	0
TOTAL	\$3,900,000	\$0	\$0

25. Water Supply Monitoring Network

PROJECT DESCRIPTION

Funding is requested to construct and operate an expanded water supply monitoring network. Following discussions with the Governor's Water Supply Coordinating Council, work plans and budgets have been developed for two priority areas: one in central Kent County surrounding Dover and one in eastern Sussex County. These areas are undergoing significant population growth and are beginning to experience conflicts between water users from the agricultural, public and industrial sectors and threats of saline water

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

intrusion due to rising sea levels. The network will augment existing ground and surface water monitoring networks.

Experience gained from long-term operation of a water supply monitoring network by the Delaware Geological Survey (DGS) found there are large areas where crucial information on the condition of the aquifers are largely unknown. In order to track the condition of water supply resources, new and replacement wells and surface water monitoring infrastructure are needed. DGS will be the lead agency in the design and installation of the network, in cooperation with DNREC and public and investor-owned water purveyors.

Information gained from this project will enable the agencies to define areas of acceptable and unacceptable water quality and quantity, ensuring a sustainable supply for future growth.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2017	\$713,000	\$0	\$0
FY 2019	810,000	0	0
TOTAL	\$1,523,000	\$0	\$0

property to the State. The engineering has been completed to support the implementation of the erosion control work.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2019	\$2,750,000	\$0	\$0
TOTAL	\$2,750,000	\$0	\$0

26. Dobbinsville Fishing Pier

PROJECT DESCRIPTION

Funding is requested for the construction of a new fishing pier and parking area, along the Delaware River shoreline in Dobbinsville, south of the City of New Castle.

**CAPITAL REQUEST
FUNDING**

	STATE	FEDERAL	OTHER
FY 2019	\$250,000	\$0	\$0
TOTAL	\$250,000	\$0	\$0

27. Poplar Thicket Erosion Project

PROJECT DESCRIPTION

Funding is requested to complete shoreline stabilization at the Poplar Thicket property along the Indian River Bay, as part of the agreement with The Nature Conservancy and the landowner for the transfer of the