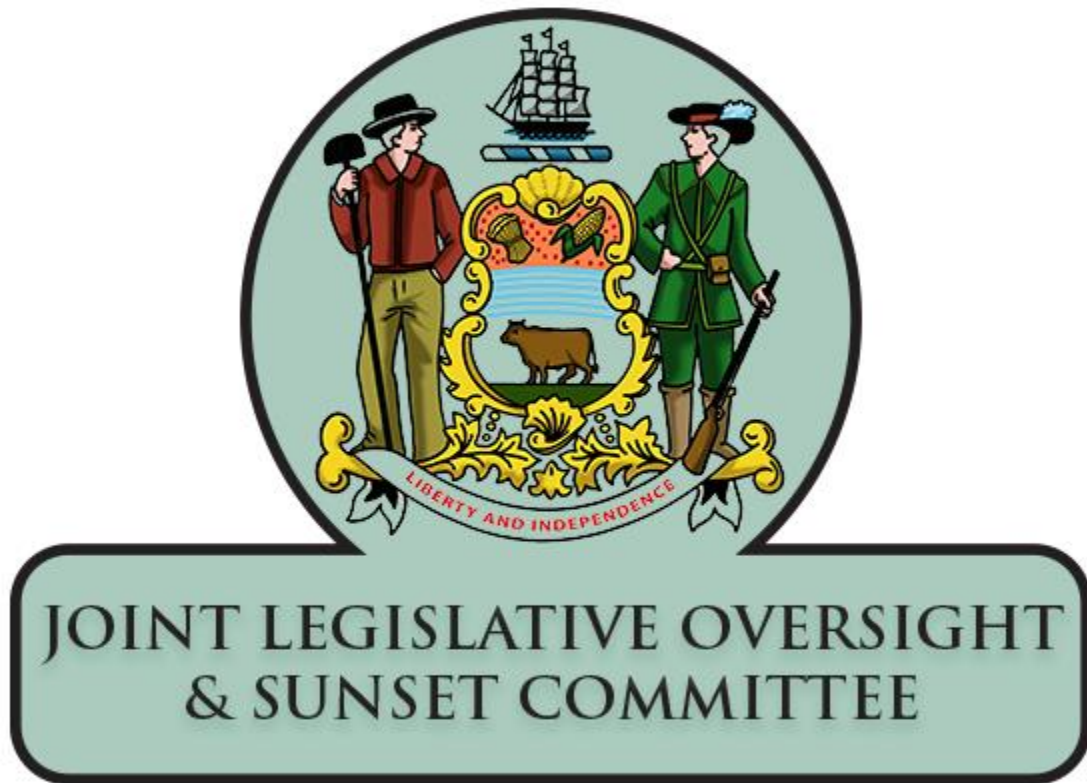


2020 Draft Report

Conservation District Operations (DNREC Division of Watershed Stewardship)

150th General Assembly, 2nd session



*Respectfully submitted to the
Joint Legislative Oversight and Sunset Committee
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INTRODUCTION

About JLOSC and the Review Process

The Joint Legislative Oversight and Sunset Committee (“JLOSC” or “Committee”) is a bipartisan body comprised of five members of the Senate appointed by the President Pro Tempore and five members of the House of Representatives appointed by the Speaker of the House. JLOSC completes periodic reviews of agencies, commissions, and boards. The review’s purpose is to first determine the public need for the entity and if need exists, to determine whether the entity is effectively performing to meet the need. JLOSC reviews aim to provide strength and support to entities that are providing a State recognized need. JLOSC performs its duties with support provided by the Division of Research’s dedicated and nonpartisan staff in the form of two JLOSC analysts, a legislative attorney, a legislative fellow, and an administrative assistant.

A note about this Draft Report

The information provided in this report is taken from the Joint Legislative Oversight and Sunset Committee Performance Review Questionnaire, as it was completed by the agency under review. When appropriate, the analyst who prepared this report made minor changes to grammar and the organization of information provided in the questionnaire, but no changes were made to the substance of what the agency reported. Any points of consideration which arose in analyzing the questionnaire and compiling this report are addressed in the section titled, “Additional Comment from the Committee Analyst.” It is the intent of the analyst to make any substantive changes which may be required, as the result of findings made through the review processes, in the final version of this report.

The statutes governing and applying to the agency under review are included as appendices to this draft report. They are included only as a reference for JLOSC members and may not be included in the final report.

FACT SHEET

March 6, 2020

Review of Drainage Program



Joint Legislative Oversight
& Sunset Committee

Tax Ditch

- Tax ditch organizations are political subdivisions whose primary purpose is to establish channel outlets for essential drainage, flood protection, and stormwater control practices.
- 3 distinct funding sources:
 - 3921 Funds (General Assembly).
 - Annual Bond Bill allocation (General Assembly).
 - Maintenance Tax (Tax Ditch Organization).
- Drainage Program provides administrative support for development, operation, maintenance, and other efforts associated with tax ditches.
- GIS map of all 234 individual tax ditch organizations is available through DNREC.

Drainage Projects (RC&D)

- Partnership between DNREC and Delaware's 3 county Conservation Districts.
 - NCCD leads projects in NCC while DNREC leads projects in Kent and Sussex counties.
- State appropriations provide for development and completion of projects.
 - From FY96 to present, 1,663 projects totaling over \$68 million were completed.
 - Appropriations from the Bond Bill has ranged from \$0 to \$5 million (FY 18, FY 19, FY 20).
- Project Prioritization List updated annually.
 - Ongoing process is flexible allowing funds to be directed to most critical projects.
 - Factors considered: public safety, flooding frequency, project status, damage, funding, age.
- 1,076 unfunded projects with deficit of \$88 million.

Challenges & Opportunities for Improvement

- Stable funding source would allow for better planning and an increase in completed projects.
- High demand for engineers and surveyors in the private sector has made hiring and retaining staff difficult.
- Aspects of the tax ditch system are not functioning well, and the drainage program is recommending a task force be established to investigate the causes and propose solutions to benefit the program.
- A realignment of the Drainage Program could lead to increased effectiveness. See below:

REALIGNMENT



TAX DITCH

TAX DITCH LAW

Implementation, organizational support, outreach, education, evaluations

STATEWIDE SURVEY WORK & PERMITTING

For DNREC and Conservation District managed projects

PUBLIC DITCH

RC&D PROGRAM

Drainage concerns, coordination with Districts, project development

OVERSIGHT

Contract development and oversight, project oversight, landowner permission, small projects

EXECUTIVE SUMMARY

The Drainage Program within the Conservation District Operations section is tasked with multiple responsibilities under two distinct umbrellas: tax ditches and drainage projects.

Tax Ditch: In 1951, a new drainage law allowed the creation of political subdivisions called tax ditches. The primary purpose of these ditches is to establish channel outlets for essential drainage and flood protection. From these outlets, individual landowners can construct private channels for use in management of their lands for all resources and installation of various conservation and stormwater control practices. The Drainage Program provides administrative support for the development, operation, maintenance, and efforts of the 234 individual tax ditch organizations statewide.

Tax Ditch funding can be divided into 3 distinct sources. 2 appropriations made by the General Assembly (3921 Funds and annual Bond Bill funds) and one maintenance tax.

Drainage Projects: Resource, Conservation and Development (“RC&D”) projects are implemented by a partnership between DNREC and Delaware’s 3 county Conservation Districts. The New Castle Conservation District leads projects located in New Castle County. DNREC leads projects in Kent and Sussex Counties, with assistance from the Kent and Sussex Conservation Districts.

Each year the Drainage Program, in consultation with the Conservation Districts, prepares a list of prioritized RC&D projects in each county. Project prioritization is used as a tool to guide project development. It is an ongoing process that is flexible and allows funds to be directed to the projects that are most critical. From FY 1996 to the present, 1,663 RC&D projects totaled \$68,539,286. There remain 1,076 unfunded projects, with an estimated deficit of approximately \$88 million.

Challenges:

Stable Funding: Over the years, the state budget process has yielded large fluctuations in allocations to the Drainage Program. A stable funding source would allow for better planning and, in turn, an increase in completed projects.

Staffing and Retention: In recent years, increased development statewide has created a high demand for engineering and surveying positions in the private sector. With state salaries not as competitive, the Drainage Program has had difficulty attracting qualified applicants.

Opportunity for Improvement:

Drainage Program Realignment: A realignment of the Drainage Program’s functionality could lead to increased effectiveness. The Drainage Program could function as 2 separate operating units within the Conservation Programs section of the Division:

1. The Tax Ditch Program.
2. The Public Ditch Program.

JLOSC PERFORMANCE REVIEW QUESTIONNAIRE

AGENCY HISTORY

Prior to 1951, drainage organizations in Delaware were established as corporations or ditch companies to address drainage issues on a larger scale. In 1951, a new drainage law allowed the creation of political subdivisions called tax ditches. The law had three elements:

1. Tax ditches were meant to be permanent organizations.
2. A maintenance tax for keeping the channels in good working order was required.
3. Tax ditch organizations would be formed for the purpose of conservation of the soil, water, wildlife, forest, and other resources of Delaware.

To accommodate and support the growing tax ditch systems, the Drainage Program was established in Title 7, Chapter 41 of the Delaware Code as “Drainage of Lands and Management of Waters; Tax Ditches.”¹ The law mandates the Division of Watershed Stewardship to carry out a comprehensive drainage program providing a uniform system for establishing, financing, administering, maintaining, and dissolving tax ditch organizations in the State. Over the years, the Drainage Program has grown significantly. The largest growth occurred because of a legal settlement of \$220 million dollars in the mid-1990s. The Resource, Conservation and Development (“RC&D”) 21st Century Funds earmarked a portion of the settlement funds towards the management, oversight, and implementation of targeted drainage projects.

In 1993, a Supreme Court decision affirmed the state’s right to collect abandoned property held by Delaware incorporated brokers. In early 1994, SB 288 created the RC&D 21st Century Fund (“Fund”), authorizing the Secretary of Finance to deposit settlement dollars into the Fund. The strategy for the Fund was outlined in the fiscal year (“FY”) 1996 Bond Bill with ten programs identified in three areas: Preserving the Environment, Revitalization of Communities, and Improving Education and Economic Competitiveness. Under Revitalization of Communities, RC&D was targeted for funds in order to “enhance the health of communities by ameliorating watershed and drainage issues statewide.” These programs have dollar match requirements in addition to loan options to leverage funds from public and private sources.

The Department of Natural Resources and Environmental Control (“DNREC”) was designated as responsible for the funding earmarked to focus on management, oversight, and implementation of the funds, which led to the creation of the “Public Ditch Team” within the Drainage Program. RC&D projects are implemented by a partnership between DNREC and Delaware’s three county Conservation Districts. Continued funding has allowed these partnerships to address the ever-increasing demand for new RC&D projects. The size and scope of the drainage projects considered for the Fund fluctuate significantly as do the annual appropriations from the Bond Bill.²

¹ See Appendix A for complete governing statute.

² See Appendix B for the RC&D Annual Report for FY19.

PURPOSE

The Drainage Program within the Conservation District Operations section is tasked with multiple responsibilities under two distinct umbrellas: tax ditches and drainage projects.

Tax Ditch: The primary purpose of tax ditches is to establish channel outlets for essential drainage and flood protection. From these channel outlets, individual landowners can construct private channels for use in management of their lands for all resources and installation of various conservation and stormwater control practices.

Tax ditch channels range in size from approximately 6 to 80 feet wide and 2 to 14 feet deep. Size varies based on the size of the site and topography of the area. The Drainage Program provides administrative support for the development, operation, maintenance, and efforts of the tax ditch systems. With 234 individual tax ditch organizations statewide, this support is critical for dependable drainage and flood protection. Tax ditch organizations range in size from the 56,000-acre Marshyhope Creek tax ditch to the two-acre Alban Park tax ditch in suburban Wilmington. These tax ditch organizations manage over 2,000 miles of channels and provide direct or indirect benefits to approximately 100,000 people and almost one-half of the state-maintained roads. Additionally, tax ditches and the support provided by the Drainage Program assist in the reduction of saturated soils allowing for efficient farming practices and the development of residential property. However, with the increased development of residential property, the processes surrounding tax ditches have become more challenging.

Drainage Projects: RC&D projects are implemented by a partnership between DNREC and Delaware's three county Conservation Districts. The New Castle Conservation District leads projects located in New Castle County. DNREC leads projects in Kent and Sussex Counties, with assistance from the Kent and Sussex Conservation Districts.

Each year the Drainage Program, in consultation with the Conservation Districts, prepares a list of prioritized RC&D projects in each county.³ Project prioritization is used as a tool to guide project development. It is an ongoing process that is flexible and allows funds to be directed to the projects that are most critical. This flexibility has been necessary in recent years because it has allowed funds to be directed to areas damaged by the record rainfall. The following factors are considered when prioritizing projects:

- Public safety.
- Frequency of flooding.
- Project status.
- Property damage.
- Ability to leverage other funds.
- Project age.

From FY 1996 to the present, RC&D projects total \$68,539,286 for 1,663 completed projects. There remain 1,076 unfunded projects, with an estimated deficit of approximately \$88 million.

³ See Appendix C for Proposed RC&D Projects for FY20.

MISSION

DNREC's Mission Statement

DNREC's mission is to ensure the wise management, conservation, and enhancement of the State's natural resources, protect public health and the environment, provide quality outdoor recreation, improve the quality of life, and educate the public on historic, cultural, and natural resource use, requirements, and issues.

Conservation Programs Section Mission Statement

The Conservation Programs Section's mission is to use an adaptive approach of education, research, technical, and financial assistance to improve water quality, conserve and protect natural resources, and preserve public health and safety.

Drainage Program Mission Statement

The Drainage Program's mission is to provide effective, environmentally balanced water management services that are sustainable to citizens of Delaware for the preservation of public health and safety.

GOALS & OBJECTIVES

Tax Ditch: The Drainage Program's goals and objectives are outlined in Title 7, Chapter 41 of the Delaware Code and include the following:

- Assistance with preparing and filing tax warrants.
- Assist in the efforts to pursue court ordered changes.
- Conduct tax assessments and property ownership updates.
- Provide technical and financial assistance to districts for final design, construction, repair, and maintenance.
- Assist with compliance of federal and state requirements for construction, repair and maintenance activities.
- Assist with maintenance and inspection of tax ditch systems.
- Update list of tax ditch systems and information.
- Modify court orders as required to meet ever changing needs of the tax ditch organizations.
- Resolve problems within and for the tax ditch organizations.
- Assist in commissioner appointments.

Technical assistance includes the following services that further address core responsibilities including:

- Drainage concern responses.
- Environmental permitting.
- Surveying.
- Construction review.
- Engineering guidance

Additional services focus on managing the data and mapping needs of internal and external customers. Additional services include:

- Tax ditch geographical information systems (“GIS”) data.
- Tax information.
- Officer contact database.
- Organization information.
- Application development and maintenance for internal customers.

Lastly, the Drainage Program provides in-depth technical outreach and educational services about drainage and tax ditches including:

- Online services.
- Guidance documents.
- Training to tax ditch officers and other stakeholders.

RC&D Projects: The DNREC Drainage Program, in cooperation with the Conservation Districts, is tasked with managing the Fund and ensuring RC&D projects are prioritized, developed, designed, engineered, and completed as available funding permits.⁴ The goals and objectives for the successful management of the Fund include the following:

- Receive, respond, and address a drainage complaint in a timely manner.
- Develop an appropriate recommendation for funding.
- Forward to appropriate agency if not within DNREC, DeIDOT, or Conservation Districts.
- Secure project approval by legislature for addition to RC&D Fund project list.
- Develop project, secure landowner permission, and conduct survey of the project area.
- Develop appropriate environmental permit applications.
- Design, fund, construct, and monitor project for stabilization and success.

JOINT LEGISLATIVE OVERSIGHT AND SUNSET COMMITTEE REVIEW

JLOSC last reviewed the Conservation Districts in 2008.⁵ Several recommendations were adopted specific to each Conservation District including providing post-retirement health benefits, continuing oversight and public education surrounding retention ponds, making websites more user friendly, and providing more public awareness for the Board of Supervisor elections. The following adopted recommendations were specific to DNREC’s Division of Soil and Water Conservation of DNREC:

- DNREC to increase fines, “stop work” on a site, and update storm water regulations.
- Report back with recommendations on how to tighten up the Certified Construction Reviewers process.

⁴ See Appendix D for the list of the Prioritized Active RC&D Projects.

⁵ See Appendix E for the 2008 Joint Sunset Committee Final Report.

PUBLIC INFORMATION

The Drainage Program provides a vast amount of information and resources to Delaware residents, landowners, consultants, contractors, non-profit organizations; federal, state, and county agencies; and the tax ditch organizations across the State.⁶ The information that is available to the public relates to tax ditches and tax ditch organizations and their functions and responsibilities. Additionally, the Drainage Program provides detailed technical assistance to interest groups when addressing drainage concerns and issues regarding water quality improvement projects on private properties.

Landowners: Drainage Program staff provide technical assistance to landowners across the State with reported drainage concerns, including:

- Site visit and evaluation of reported concern.
- Field survey of problem area.
 - Process of survey data to provide potential solution or path forward towards resolution.
- Technical assistance and guidance in obtaining proper environmental permit coverage for a landowner's proposed project or activity.
- Technical assistance and guidance for landowners who petition for the creation of a tax ditch organization.
- Preliminary and final design of potential solutions.
- Engineers' cost estimate for proposed projects.
- Secure funding for proposed project.
- Administration and technical management of projects through construction.
- Obtaining all necessary landowner agreements for conducting projects when on private property.

Tax Ditch Officers: Information most frequently requested and supplied to the 234 tax ditch organizations on an annual basis include the following:

- Tax ditch organization system maps.
- Tax ditch organization assessment lists.
- Tax ditch system inventory and inspections.
- Tax ditch warrant change evaluation and guidance.
- Tax ditch expected revenue versus actual revenue reports.
- Tax ditch financial reporting guidance, record, audits, IRS inquiries, banking, and bonding guidance.
- Tax ditch annual meeting attendance, support, and advertisement assistance.
- Census Bureau survey assistance.
- Tax ditch right-of-way obstruction assistance.

Tax Ditch Organizations: The following items and information are provided to each tax ditch organization at least manually and as requested:

⁶ Reference information for stakeholders can be found here:
<http://www.dnrec.delaware.gov/swc/Pages/DrainageTaxDitchWaterMgt.aspx>.

- Tax ditch field survey - frequency depends on problems faced by organization.
- Tax ditch maintenance work stakeout - frequency depends on maintenance planned for the tax ditch organization.
 - Tax ditches may have multiple maintenance projects planned at various times throughout the year.
- Tax ditch maintenance inspections - frequency depends on maintenance activities planned and the scope of projects.
 - Maintenance activities pop-up throughout the year on multiple tax ditches.
- Tax ditch maintenance work permit applications - Drainage Program staff evaluate the site and determine permit needs to complete activities requested.
- Tax ditch pipe sizing requests - frequency depends on tax ditch organizations' needs.
 - Includes sizing all pipe crossings to be located within tax ditch channels whether they are replacements or new installations.
- Obtained tax ditch maintenance permits distributed and filed for tax ditch records.
- Hosting pre-construction meetings for tax ditch maintenance activities.
 - Drainage Program staff conduct pre-construction meetings with contractors selected by tax ditch organizations to review project scope, design, permit conditions, etc. prior to start of tax ditch maintenance activity.
 - Requests pop up throughout the year, on multiple tax ditches; tax ditch may have more than one project requiring a pre-construction meeting.

County Government Offices: The following information is supplied to each county's Data Processing section to ensure appropriate processing of a tax ditch on property tax bills issued by the counties annually:

- Tax ditch assessment updates.
- Data and GIS files that reflect changes throughout the tax ditch watershed.

Drainage Program staff supplies the following information to the Prothonotary's Office and Recorder of Deeds of each county on an annual basis for all tax ditch organizations:

- Tax ditch warrant change documentation and submission.
- Tax ditch certified lists.

DeIDOT: Drainage Program staff supplies the following information to DeIDOT:

- Review of DeIDOT's proposed plans as it relates to tax ditch channels.
- Minimum pipe size and specifications for road crossings in tax ditch channels.
- Stake out for road crossing installation or replacements in tax ditch channels.

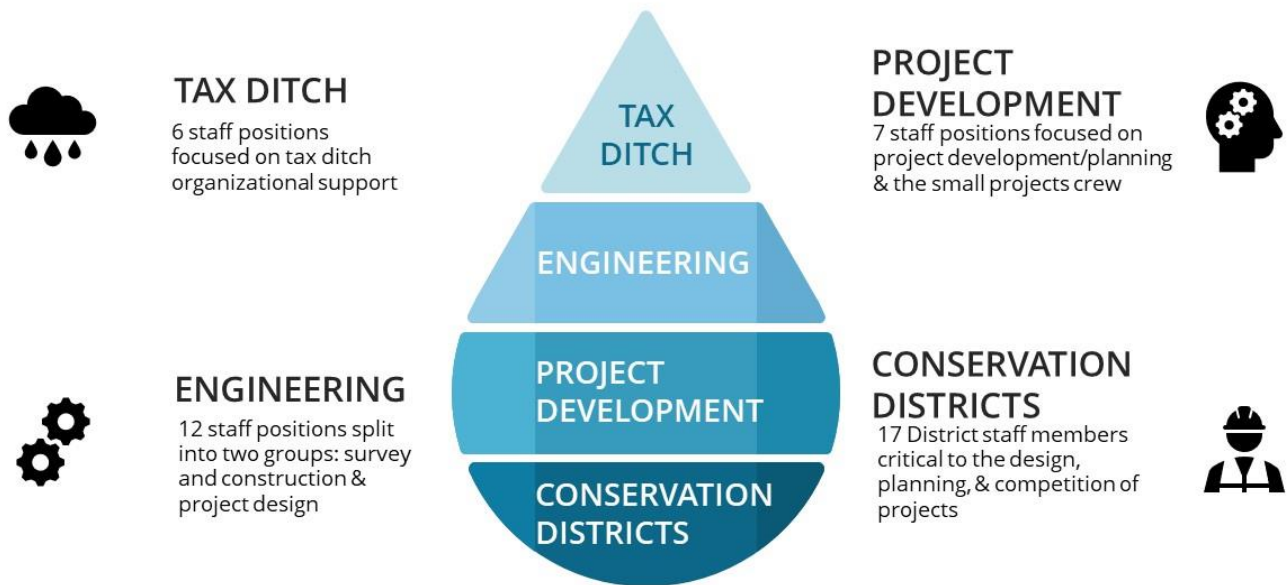
Taxable Parcels, Contractors, and Consultants: There are 60,383 parcels across Delaware located within a tax ditch watershed. The Drainage Program provides the following information to the owners of these taxable parcels, contractors, and consultants. The following items are often requested on a daily basis:

- Tax ditch right-of-way ("ROW") inquiry responses.

- o Tax ditch ROW inquiry web application.
- o Tax ditch map web application.
- Site evaluations for reported drainage or tax ditch concerns.
- Tax ditch annual meeting minutes on record in the Drainage Program office.
- Court-ordered change assistance for tax ditches including the following:
 - o Coordination among landowner, consultant, and tax ditch officers regarding landowner request.
 - o Drafting and editing document to request change to court order.
 - o Distribution of final court order change document for necessary signatures.
 - o Distribution of instructions for filing document to change court order to landowners once completed.
- Site plan review and coordination with tax ditch officers.
- Tax ditch stakeout for landowner’s proposed and planned project for a tax ditch channel.
- Technical assistance and guidance for proposed projects at the landowner’s request and on their property as it relates to tax ditch channels and the associated right-of-way (ROW).

COMPOSITION & STAFFING

The Drainage Program is currently divided into three distinct teams: Tax Ditch, Engineering, and Project Development.⁷



⁷ See Appendix F for the applicable Organizational Charts.

Positions not represented above are Project Manager II (“PMII”) and Administrative Assistant I. Staffing levels currently include 27 positions (10 Merit and 17 Conservation District) of which 11 positions (5 Merit and 6 Conservation District) are currently vacant. In the past, as many as 35 full-time employees were appointed to the Drainage Program. These numbers have declined as budget conditions have demanded staff level reductions.

The Drainage Program relies heavily on the 17 Conservation District staff members. These employees are defined as District co-op employees and are dedicated to the Drainage Program to fulfill the critical roles such as engineers, planners, surveyors, construction technicians, and other technical support specialists. Current vacancies are all in Kent County, as follows:

- Engineer, Planning and Surveying Technician IV.
- Engineer, Planning and Surveying Technician III.
- Engineer, Planning and Surveying Technician I.
- Engineer III.
- Engineer III.
- Construction Tech I.

The need to solve drainage and watershed issues has increased in the southern region of the State. To meet the increased need, the Drainage Program is adding positions and allocating additional resources. However, the recent construction boom in Sussex County has created a high demand for these technical positions within the same classifications (e.g. surveyors, engineers, and project managers). With higher pay availability in the private sector, the Drainage Program has experienced a higher than normal turnover rate. State salaries in these technical fields are no longer competitive with the private sector, and the Drainage Program has subsequently faced the difficult challenge of attracting qualified applicants for vacant positions.

ENACTED LEGISLATION IMPACTING DIVISION

DNREC was created in 1969-1970, along with the Division of Soil and Water Conservation.

- The Division of Soil and Water Conservation later became the Division of Watershed Stewardship. See Chapter 80, Title 29.
- The Drainage Program is under the Division of Watershed Stewardship and operates under the Division’s statutory authority. The Drainage Program provides administrative and technical support to tax ditch organizations under the 1951 Tax Ditch Law, last revised in July 2008. See Title 7, Chapters 39 and 41.

- Under DNREC's authority and general programs, the three soil and water conservation districts now known as Sussex Conservation District, Kent Conservation District and New Castle Conservation District were established in 1953. See Title 7, Chapter 39.
- Under DNREC's authority and supervision, tax ditches provide a basis for a uniform system for establishing, financing, administering, maintaining and dissolving tax ditch organizations in Delaware. Established in 1951 and last revised in 2008.
- Under DNREC's authority and supervision, a basis is provided for a uniform system of establishing, financing, administering, maintaining and dissolving lagoon organizations so that the improvement and management of lagoon waterways may be accomplished in a workable and practicable manner See Title 7, Chapter 43 established in 1951 and last revised in 2008.

Federal Laws and Regulations Impacting Division

- Permit requirements by the U.S. Army Corp of Engineers.
- Tax Identification Numbers for Government Entity required by the Internal Revenue Service for tax ditch organizations.
- U.S. Department of Commerce, Census Bureau - Responds to Census surveys required for tax ditch organizations.
- Environmental Protection Agency ("EPA") – Travel by boat in a tax ditch required to follow the U.S. rule of waters.
- Endangered Species Act ("ESA").
- National Oceanic and Atmospheric Administration ("NOAA").
- U.S. Fish and Wildlife Service ("USFWS").
- National Pollutant Discharge Elimination System ("NPDES"), federal EPA and state authority.

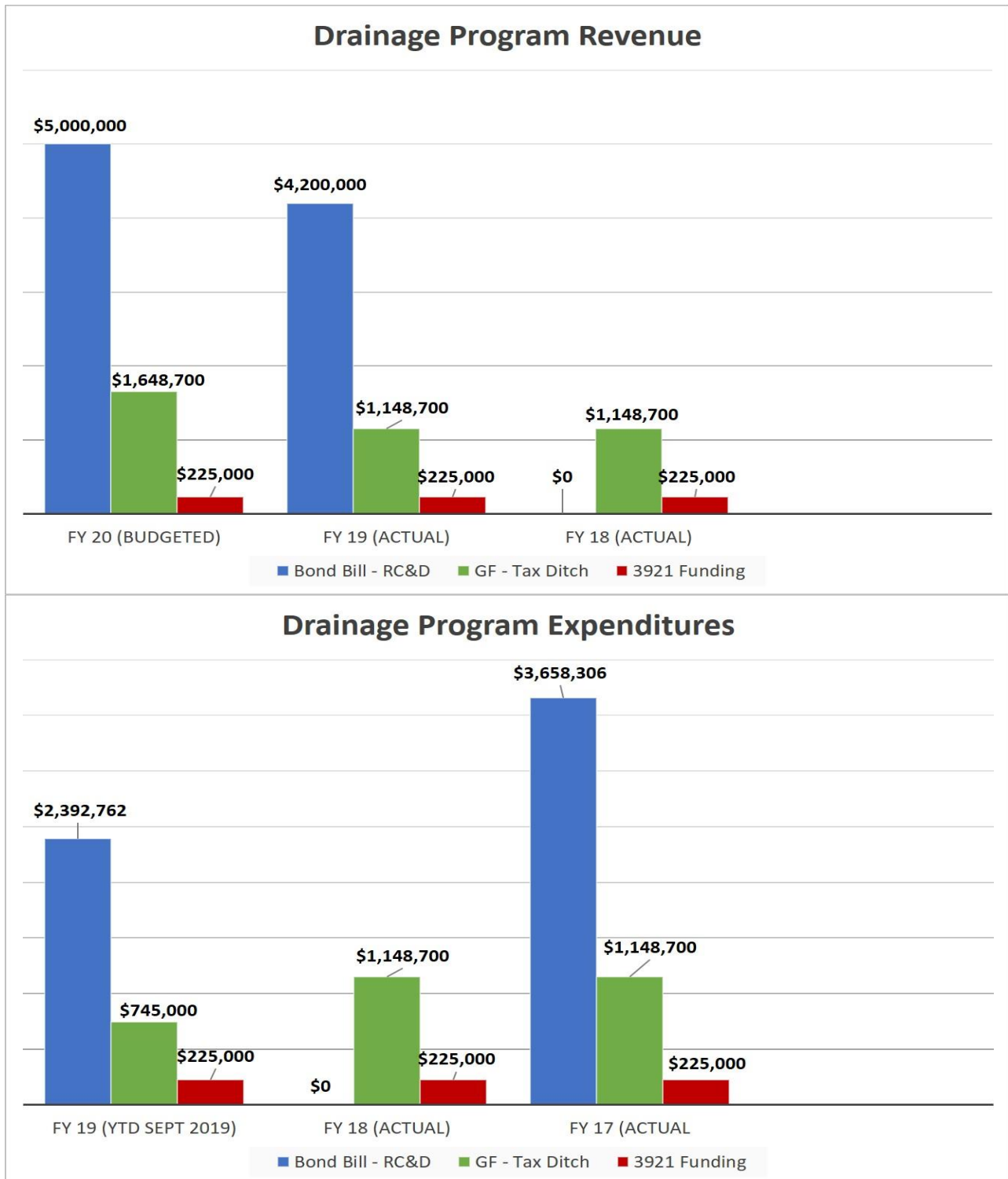
FREEDOM OF INFORMATION ACT COMPLIANCE

The Department of Watershed Stewardship follows DNREC's "Policies and Procedures Regarding FOIA Requests."⁸

When the Drainage Program assists a tax ditch organization with a "jump start" meeting, §4159, Title 7 requires notices be mailed first class to each of the taxable parcels within the watershed for the subject tax ditch. Drainage Program staff take meeting minutes, which are and available upon request.

⁸ See <https://regulations.delaware.gov/AdminCode/title8/900.pdf>.

FISCAL INFORMATION⁹



⁹ See Appendix G for RC&D Expenditures for FY19.

Tax Ditch Funding

Tax Ditch funding can be divided into 3 distinct sources. 2 appropriations made by the General Assembly and 1 maintenance tax authorized under Title 7, Chapter 41.

1. State and County Matching Funds aka "3921 Funds"¹⁰

Sections 3921 through 3922, Title 7 authorize an annual state appropriation of \$75,000, with matching county funds. The Division of Watershed Stewardship passes the funds directly to each conservation district. The funds may be used to pay or assist in paying all costs, including personnel required for planning, construction, installation, and maintenance of tax ditches, public group ditches, highway ditches, and resource conservation projects in Sussex, Kent, and New Castle Counties.
2. Tax Ditch Bond Bill Funds
Annual tax ditch appropriations through the Bond Bill (GF) are used to support all tax ditch program efforts at the state level.¹¹ This funding is used to:
 - Continue to provide technical assistance to the state's 234 tax ditches.
 - Develop both tax and public ditch projects, including drainage and watershed investigations, planning, surveying, engineering, permitting, and contract administration.
 - Assist with grant opportunities such as U.S.D.A. Natural Resources Conservation Service's Regional Conservation Partnership Program and Chesapeake Bay Grants.
3. Tax Ditch Organization Funds
Delaware Code gives tax ditch organizations formed under Chapter 41, Title 7 the power to levy maintenance taxes and outlines how rates are established, and taxes are collected. Most tax ditch organizations collect only the minimum necessary to complete needed maintenance with the assistance of state and county matching funds.

Drainage Projects Funding

State appropriations provide for the development and completion of RC&D drainage projects administered through a partnership between DNREC and the conservation districts. As previously noted, New Castle Conservation District leads projects in New Castle County.¹² DNREC leads projects in Kent and Sussex Counties, with assistance from the Kent and Sussex conservation districts. Current projects range from \$500 to \$4 million with the annual appropriations from the Bond Bill ranging from \$0 to \$5 million; no appropriations were allocated from FY 2009 to FY 2016 or FY 2018. The Bond Bill allocated \$4.2 million in FY 2019 and \$5 million in FY 2020.

¹⁰ See Appendix H for the 3921 District Agreement.

¹¹ See Appendix I for the Tax Ditch Agreement.

¹² See Appendix J for the New Castle Conservation District Agreement.

ACCOMPLISHMENTS

Tax Ditch

Gum Branch Tax Ditch: The Gum Branch Tax Ditch was originally divided into nine separate sections from 1961 until 2019. Each section collected tax for maintenance of the respective section or prong and the Main. The tax ditch organizations needed to borrow funds for maintenance.

Under the current law, tax ditch organizations are unable to borrow enough funds because of how the sections were originally established. The Drainage Program assisted the Gum Branch Tax Ditch in combining their 9 independently taxed and managed ditch sections into only one. At a special meeting on March 27, 2019, the affected landowners discussed and voted to combine the sections and borrow funds to perform needed maintenance work. The Drainage Program assisted the Gum Branch Tax Ditch in obtaining a loan from MidAtlantic Farm Credit. This was a first for a Delaware tax ditch organization and may be a model for other communities to obtain needed funding at a reasonable rate to perform necessary maintenance work.

Tax Ditch Auditing Procedures: The Drainage Program and State Auditor's Office developed auditing procedures for tax ditch organizations.¹³ Training workshops for tax ditch officers were hosted across the State. Since then, the number of records submitted to the Drainage Program and conservation district offices has significantly increased, meaning more tax ditches are complying and eligible for state and county cost share funds.

Planning Grant: The Drainage Program coordinated efforts with the USDA - National Resource Conservation Service to develop an application for a watershed planning grant for the Upper Nanticoke. The grant was awarded, and planning activities will begin in FY2020.

Drone Technology: Staff certification and the development of policies and protocols for the implementation of drone technology have been conducted, allowing for tax ditch system inspections and aiding with the update of operation and maintenance plans.

Web Based Information Access: A GIS map of all tax ditches statewide is available online for public access and use. Similarly, a ROW inquiry is also available for landowners and the real estate community to acknowledge tax ditch channels and associated ROWs on a parcel.

¹³ See Appendix K for the Tax Ditch Audit Procedures Guide.

Drainage Projects

From FY 1996 to the present, 1,663 completed RC&D projects totaled \$68,539,286. The Drainage Program, with its partners at each conservation district, saw several critical projects completed in FY 2019. Over \$3 million worth of projects were accomplished and FY 2020 is anticipated to exceed that amount. The New Castle Conservation District has been especially productive, completing 30 of their 50 highest priority projects. In Sussex County, a \$1.6 million project will improve drainage to over 50 properties and 4 state-maintained roads. In Kent County, a project reconstructed over 6,000 feet of privately-owned ditches.¹⁴

CHALLENGES

Stable Funding: State appropriations for RC&D projects and tax ditch management are the primary source of funding used to administer watershed and drainage related projects. Over the years, the state budget process has yielded large fluctuations in allocations to the Drainage Program. A stable funding source would allow for better planning and, in turn, an increase in completed projects.

Staffing and Retention: High turnover of staff has resulted in several vacancies. In recent years, the increased development statewide has created a high demand for engineering and surveying positions in the private sector. As such, the Drainage Program has faced higher than normal vacancy rates. Additionally, as State salaries are not as competitive as the private sector in these technical fields, the Drainage Program has faced the difficult challenge of attracting qualified applicants for vacant positions.

Shifting Resource Needs: A major shift in RC&D project locations has seen an increased demand for staff and resources. The number of drainage and watershed issues have increased in the southern region of the state. As such, the Drainage Program responded by adding positions and resources.

Overall, the Drainage Program and Conservation Districts do not have the capacity to complete all approved projects in a single year. Therefore, as part of the project prioritization process, the program looks at the next fiscal year to develop priorities, estimating the funding needs in each county. Consequently, the Prioritized Project List and annual priorities for each county can change in any given year. These changes could occur for several reasons including severe weather events, a public safety problem, issues with landowners, or the opportunity to leverage RC&D funds to get additional dollars through grants or matching funds.

¹⁴ See Appendix L for a list of completed RC&D projects for FY19.

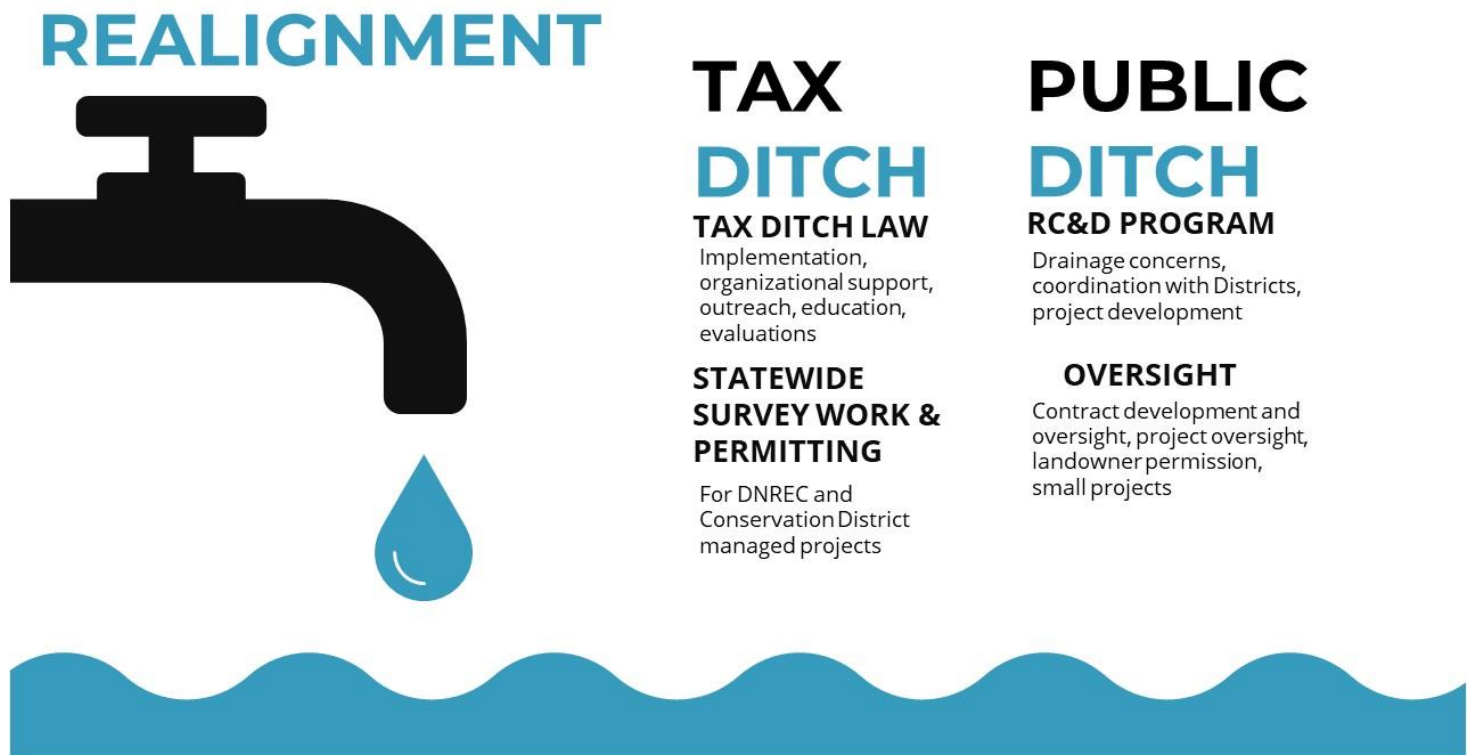
OPPORTUNITIES FOR IMPROVEMENT

Drainage Program Realignment: In addition to stable and reliable funding, a realignment of the Drainage Program's functionality could lead to increased effectiveness and project management. The Drainage Program could function as 2 separate operating units within the Conservation Programs Section of the Division of Watershed Stewardship as follows:

- The Tax Ditch Program
- The Public Ditch Program

Under this proposed realignment, an Environmental Program Manager II would lead each program unit and report directly to the Administrator of the Conservation Programs Section. The Tax Ditch Program would have an estimated 15 positions focused on tax ditch organization support and the survey and construction of related projects. The Public Ditch Program would focus on the design and planning of RC&D drainage projects and manage the small projects crew. The Public Ditch Program would also have 14 positions.

Given the nature of the responsibilities, both programs would have some overlapping responsibilities, but the intention is to assign the tasks as defined below:



With this realignment, an existing PMI position would need to be reclassified to a PMII within the Public Ditch Program. The request to do so was submitted to Department of Human Resources (“DHR”) in September 2019.¹⁵

Tax Ditch Modernization: Over 90% of the tax ditch channels were constructed before 1985. The recommended maintenance cycle is every 15-20 years. If maintained as recommended, most tax ditches should have undergone major maintenance 2 to 4 times since construction. After multiple maintenance cycles, tax ditches can experience significant issues regarding bank stability. In addition, many ditches have not been maintained on the recommended timetables, as many tax ditch managers have historically completed repair projects only after a problem occurs.

Maintenance and modernization matters have led to the following issues:

- Funding needs.
- Operational controls.
- Environmental issues and topics.
- Administrative oversight and tax ditch organizational leadership.

The Drainage Program recommends establishing a task force to investigate these issues and propose solutions that would benefit the diverse range of stakeholders.¹⁶

Redefine the Role of the Conservation Districts in Kent and Sussex Counties: With the uncertainty of funding and higher than normal vacancy rates, the Drainage Program has shifted responsibility of scalable and manageable RC&D projects to the Conservation Districts, particularly in Sussex County. For example, in 2019, DNREC entered into an agreement with the Sussex Conservation District (“SCD”), under which the SCD serves as the managing agency to 20 projects with an anticipated cost of \$400,000. The SCD is currently addressing these established drainage issues and ensuring prioritized projects are completed in a timely manner. DNREC serves in a technical and advisory capacity and provides engineering and permit advice, secures landowner agreements, and inspects for final completion.¹⁷ This cooperative arrangement is designed to expedite the project implementation process and address priority projects efficiently and effectively. If successful, DNREC intends to expand this arrangement with the Kent Conservation District.

¹⁵ See Appendix M for the Drainage Program realignment proposal.

¹⁶ See Appendix N for the tax ditch modernization document.

¹⁷ See Appendix O for the Sussex Conservation District agreement.

ADDITIONAL COMMENT FROM THE COMMITTEE ANALYST

On February 26, 2020, the following questions were submitted to the Department for clarification.

1. Clarification on the RC&D project timeline: What is the process from initial inquiry to the department to project completion?
2. How does the process of project prioritization work? Is there a mechanism that ranks the active projects that are then approved? Are they scored a specific way?
3. How would a member of the public submit a drainage concern? Is there an email address? Phone number? How does the Division typically become involved in a drainage issue?
4. Is there a list of the 234 tax ditch organizations broken out by county? A GIS map is available online but is there a comprehensive list available?
5. Are federal dollars ever applied to RC&D or tax ditch projects? If so, is it recurring or one-time? Additionally, is there a mechanism to try and attract federal dollars?

DNREC's response was received on March 6, 2020 and can be found in Appendix P.

[§ 3901](#) [§ 3902](#) [§ 3903](#) [§ 3904](#) [§ 3905](#) [§ 3906](#) [§ 3907](#) [§ 3908](#) [§ 3909](#) [§ 3910](#) [§ 3911](#) [§ 3921](#) [§ 3922](#) [§ 3923](#) [§ 3925](#)

TITLE 7

Conservation

Agricultural and Soil Conservation; Drainage and Reclamation of Lowlands

CHAPTER 39. Soil and Water Conservation Districts

Subchapter I. General Provisions

Subchapter II. State and County Appropriations to Districts

§ 3901 Declaration of policy.

It is the policy of the State to provide for the preservation of the productive power of Delaware land and the optimum development and use of certain surface water resources of the State by furthering the conservation, protection, development and utilization of land and water resources, including the impoundment, and disposal of water and by preventing and controlling floodwater and sediment damages, and thereby to preserve natural resources and promote their beneficial use, control floods, prevent impairment of dams and reservoirs, assist in maintaining the navigability of rivers and harbors, preserve wildlife, provide recreation development, protect the tax base, protect public lands and highways, and protect and promote the health, safety and general welfare of the people of this State.

[44 Del. Laws, c. 212, § 2](#); 7 Del. C. 1953, § 3901; [54 Del. Laws, c. 188, § 2](#); [55 Del. Laws, c. 456, § 1](#);

§ 3902 Definitions.

For the purpose of this chapter, unless otherwise specifically defined, or another intention clearly appears, or the context requires a different meaning:

(1) “Board of district supervisors” or “board” means the governing body of a soil and water conservation district, elected or appointed in accordance with this chapter.

(2) “Cooperator” means a landowner for whom a district provides, or has agreed to provide, in accordance with this chapter, services, material and equipment with respect to the landowner’s land within the district.

(3) “Department of Natural Resources and Environmental Control” or “Department” means the agency responsible for the administration of soil and water conservation districts in Delaware, with the powers and duties prescribed by this chapter.

(4) “Farmer” means any person holding legal title to a farm and being actively engaged in farming operations.

(5) “Landowner” or “owner of land” means and includes any person, firm or corporation who shall hold title to any land in this State.

(6) “Soil and water conservation district” or “district” means a governmental subdivision of this State, the boundaries of which coincide with county boundaries, and having the powers and duties prescribed by this chapter.

[44 Del. Laws, c. 212, § 3](#); 7 Del. C. 1953, § 3902; [54 Del. Laws, c. 188, § 2](#); [57 Del. Laws, c. 711, § 1](#); [57 Del. Laws, c. 739, § 166](#);

§ 3903 Conservation districts.

The 3 soil and water conservation districts heretofore created under this chapter shall hereafter be known as the Kent Conservation District, the New Castle Conservation District and the Sussex Conservation District, respectively, and the said districts shall continue to exercise all the powers and duties prescribed for districts by this chapter.

7 Del. C. 1953, § 3903; [54 Del. Laws, c. 188, § 2](#); [57 Del. Laws, c. 739, § 167](#); [59 Del. Laws, c. 561, § 1](#);

§ 3904 Advisor to Department.

The Department may invite the Secretary of Agriculture of the United States of America to appoint 1 person to serve with the Department in an advisory capacity.

7 Del. C. 1953, § 3904; [54 Del. Laws, c. 188, § 2](#); [57 Del. Laws, c. 739, § 168](#);

§ 3905 General powers and duties of Department.

(a) The Department shall:

(1) Formulate policies and general programs to be carried out by the Department and by soil and water conservation districts for the prevention of erosion, floodwater and sediment damages and for the conservation, protection, development and utilization of the State's soil and water resources, including the impoundment and disposal of water, and removal of sediment from waterways, lakes, ponds or other bodies of water;

(2) Exercise overall responsibility for administration and direction of the programs of the districts;

(3) Advise and assist any district in developing and carrying out its program for the prevention of erosion, floodwater and sediment damages, and the conservation, protection, development and utilization of soil and water resources, including the impoundment and disposal of water, and removal of sediment from waterways, lakes, ponds or other bodies of water;

(4) Cooperate with and give such other assistance, financial and otherwise, as the Department may judge to be useful to any district in the exercise of its powers and performance of its duties, including the entering into of such agreements as may be appropriate with such district, with landowners, and with other state, federal, or local agencies, subject to such conditions as the Department deems necessary to advance the purposes of this chapter;

(5) Receive and allocate or otherwise expend any funds appropriated by the General Assembly of this State, or received from any other source, for the use or benefit of the Department or of the districts;

(6) Be the administrative agency to represent this State in all matters arising from this chapter;

(7) Keep a full and accurate record of all its proceedings and of all its resolutions, regulations and orders issued or adopted;

(8) Make an annual audit of all its accounts of receipts and disbursements;

(9) Formulate and establish rules and procedures for conducting elections of district supervisors, and for conducting all other local referendums which may from time to time become necessary in order to give landowners an opportunity to reach majority conclusions with respect to the programs of the district;

(10) Make such other rules and regulations as it deems necessary to carry out the purposes of this chapter;

(11) Make and execute contracts and other instruments, necessary or convenient to the exercise of its powers, with any federal, state or local agency, or with any person; and

(12) Adopt rules and regulations for surface water impoundment; upon request by any landowner within the drainage area involved, make hydrological and engineering studies to determine pertinent factors, including, but not limited to, the projected supply of available water, the past use of said water and the contemplated water use, and on the basis of said factors to permit impoundment, subject to the jurisdiction and authority of the Secretary and the Department of Natural Resources and Environmental Control to disapprove said permit within 30 days of submission to them of the completed plans and permit by the Department. No action by the Department shall establish any new permanent water rights nor substantially impair any existing rights to beneficial use of water.

(b) In addition to the above powers, and any other powers granted in other sections of this chapter, the Department may:

(1) Appoint such employees as it requires, within the limits of available funds, and determine their qualifications, duties and compensation;

(2) Call upon the Attorney General of the State for such legal services as it requires;

(3) Conduct surveys, investigations and research relating to erosion, floodwater and sediment damages, and to the conservation, protection, development and utilization of land and water resources, including impoundment and disposal of water, and removal of sediment from waterways, lakes, ponds or other bodies of water, and the prevention and control measures and works of improvement needed; publish the results of such surveys, investigations and research; disseminate information concerning such preventive and control measures and works of improvement; except, that any agricultural research shall be in cooperation with the Delaware Agricultural Experiment Station;

(4) Develop comprehensive plans for, and carry out, preventive and control measures and works of improvement for the prevention of erosion, floodwater and sediment damages and for the conservation, protection, development and utilization of land and water resources, including the impoundment and disposal of water, and removal of sediment from waterways, lakes, ponds or other bodies of water;

(5) Obtain or accept the cooperation and financial, technical or material assistance of the United States or any of its agencies, and of this State or any of its agencies or subdivisions, or from any other source, for use in carrying out the functions of the Department under this chapter;

(6) Obtain options upon and acquire by purchase, exchange, lease, gift, grant, bequest, devise or otherwise any property, real or personal, or rights or interests therein; maintain, administer and improve any properties acquired; receive income from such properties and expend such income in carrying out the purposes and provisions of this chapter; and sell, lease, or otherwise dispose of any of its real or personal property or interests therein, in furtherance of the purposes and provisions of this chapter, including conveyances, with or without consideration, of lands or interests therein to soil and water conservation districts for use in carrying out their authorized purposes;

(7) Construct, improve, operate and maintain such structures as may be necessary or convenient for the performance of any of the functions authorized in this chapter, and also, with the prior approval and agreement of the State Highway Department, which under § 131 of Title 17 has responsibility for the absolute care, management and control of public roads, causeways, highways and bridges in the State, construct, improve, protect or repair public roads, causeways, highways or bridges in those cases where

other works of improvement authorized in this chapter affect such roads, causeways, highways or bridges;

(8) Cooperate, or enter into agreements with, and within the limits of available appropriations or other funds, furnish financial or other aid to any agency, governmental or otherwise, or any landowner, in the carrying out of operations authorized by this chapter, subject to such conditions as the Department may deem necessary to advance the purposes of this chapter;

(9) Appoint district supervisors in certain cases as in this chapter provided;

(10) Accept from tax ditches of the State in accordance with § 4161(10) of this title:

a. The responsibility for certain specified responsibilities for maintenance of the tax ditch;

b. All rights-of-way assigned by court order to the tax ditch for construction and maintenance operations;

c. Any and all powers possessed by the tax ditch, or the managers thereof, related to obstruction of, or damage to said tax ditch, or to the addition of territory to a tax ditch, or to the alteration of a tax ditch;

(11) Carry out specified responsibilities for maintenance of those tax ditches that choose to turn over such rights to the Department;

(12) Exercise all rights, under law, to utilize and protect the rights-of-way transferred to the Department by tax ditches for maintenance purposes, including those rights pertaining to obstruction of, or damage to, a tax ditch in § 4186 of this title, except that such rights-of-way may be used by the Department or its agents for maintenance purposes only; and

(13) Cooperate with other agencies and departments of the State, federal agencies, or any other landowners for use of the state dredge at the cost of the state agency and/or department, federal agency or the landowners requesting use of the state dredge. Cost for the use of the state dredge shall be limited to actual project costs incurred by the Department plus an amount equal to 10 percent of the actual project costs incurred for overhead expenses.

[7 Del. C. 1953, § 3906](#); [54 Del. Laws, c. 188, § 2](#); [55 Del. Laws, c. 456, §§ 2-6](#); [55 Del. Laws, c. 460](#); [57 Del. Laws, c. 739, §§ 169, 170](#); [59 Del. Laws, c. 166](#); [60 Del. Laws, c. 183, §§ 1-4](#); [67 Del. Laws, c. 306, § 1](#);

§ 3906 Boards of district supervisors; composition; term.

(a) There shall be a board of supervisors for each district, each board to consist of 4 elected supervisors, an optional supervisor who, in Kent County shall be a member of the Levy Court, in Sussex County shall be a member of County Council, and in New Castle County, shall be the County Executive or the County Executive's designated representative, and 2 optional supervisors who shall not be farmers and who may be appointed by the Secretary of the Department of Natural Resources and Environmental Control upon the request of the district involved. The vote and authority of each supervisor shall be equal. The county agricultural agent shall serve as secretary to the board but shall have no vote.

(b) The elected members of the Kent and Sussex districts shall be farmers residing in those respective counties. In New Castle County, 2 of the elected supervisors shall be farmers residing in the southern portion of the County, and the remaining 2 who shall not be farmers, shall reside in the northern portion of the County, according to a division established by the Secretary of the Department of Natural Resources and Environmental Control.

(c) The term of office of each elected supervisor shall be 4 years. The term of office of a supervisor appointed by the Secretary of the Department of Natural Resources and Environmental Control shall be 3 years. An optional supervisor appointed by the Kent County Levy Court and the Sussex County Council shall hold office during the pleasure of that body so long as that optional supervisor remains a member of the appointing body. The Secretary of the Department of Natural Resources and Environmental Control may fill the vacancy of any elected supervisor, or supervisor appointed by the Secretary of the Department of Natural Resources and Environmental Control occurring otherwise than by expiration of term, by appointment of a qualified individual to serve the remainder of the unexpired term.

[44 Del. Laws, c. 212, § 6](#); [7 Del. C. 1953, § 3907](#); [54 Del. Laws, c. 188, § 2](#); [55 Del. Laws, c. 462, § 1](#); [57 Del. Laws, c. 739, § 171](#); [65 Del. Laws, c. 362, § 1](#); [70 Del. Laws, c. 186, § 1](#); [77 Del. Laws, c. 95, §§ 1, 2](#);

§ 3907 Organization of board; quorum; expenses of district supervisors.

The board of district supervisors annually shall designate by election 1 of its members to be its chairperson, and shall designate future chairpersons by the same means. A majority of the board shall constitute a quorum, but the concurrence of a majority of the entire board on any matter within its duties shall be required for its determination, except as the board may invest any of its supervisors with power to determine specified matters or to perform routine duties. The board shall be authorized, in its discretion, to reimburse supervisors for their expenses, including travel expenses, necessarily incurred in the discharge of their duties as members of the board.

Any district supervisor may be removed from office by the Department of Natural Resources and Environmental Control, upon notice and hearing, for neglect of duty or misconduct, but for no other reason.

7 Del. C. 1953, § 3908; [54 Del. Laws, c. 188, § 2](#); [57 Del. Laws, c. 739, § 172](#); [70 Del. Laws, c. 186, § 1](#);

§ 3908 Soil and water conservation district; governmental subdivision; powers.

A soil and water conservation district organized under this chapter shall constitute a governmental subdivision of this State, and such district, and the board of supervisors thereof, shall have authority to exercise the following powers, in addition to others granted in other sections of this chapter, subject to the responsibility of the Department of Natural Resources and Environmental Control for the administration and direction of the programs of the districts:

- (1) To develop comprehensive plans for, and carry out, preventive and control measures and works of improvement for the prevention of erosion, floodwater and sediment damages, and the conservation, development and utilization of land and water resources, including the disposal of water and removal of sediment from waterways, lakes, ponds or other bodies of water, within the district;
- (2) To conduct, in cooperation with the Department of Natural Resources and Environmental Control surveys, investigations and research relating to the prevention of erosion, floodwater and sediment damages, and the conservation, protection,

development and utilization of land and water resources, including the disposal of water, and removal of sediment from waterways, lakes, ponds or other bodies of water;

(3) To cooperate or enter into agreements with, and, within the limits of appropriations or other funds duly made available to it by law, to provide aid to any agency, governmental or otherwise, or any landowner within the district, in carrying out the program of the district, subject to such conditions as the board may deem necessary to carry out the purposes of this chapter;

(4) (a) To make available, on such terms as the board shall prescribe, to any landowners within the district, through existing agencies if agreements with them seem feasible, or by such other means as the board shall prescribe, such services, materials and equipment as will assist such landowners to carry on operations for any of the purposes of this chapter;

(b) To make available on request, and on such terms as the Board shall prescribe, to any cooperator who is a resident of the State and who owns land in a neighboring state, services, materials and equipment for the benefit of such cooperator's land in the neighboring state;

(5) To construct, improve, operate and maintain such structures as may be necessary or convenient for the performance of any of the operations authorized in this chapter;

(6) To obtain options upon and acquire by purchase, exchange, lease, gift, grant, bequest, devise or otherwise, any property, real or personal, or rights or interests therein; to maintain, administer and improve any properties acquired; to receive income from such properties and expend such income in carrying out the purposes and provisions of this chapter; and to sell, lease or otherwise dispose of any of its real or personal property or interests therein, in furtherance of the purposes of the district;

(7) To accept the cooperation of, and financial, technical and material assistance from, the United States or any of its agencies, or from this State or any of its agencies or subdivisions, or from any other source, for use in carrying out the purposes of the district;

(8) To sue and be sued in the name of the district; to make and execute contracts and other legal instruments, necessary or convenient to the exercise of its powers, with any federal, state or local agency, or with any person; and to receive and expend funds; and

(9) To promote the conservation, protection, development and utilization of land and water resources through various informational and educational activities as the Board may deem necessary in the furtherance of its duties under this chapter.

7 Del. C. 1953, § 3909; [54 Del. Laws, c. 188, § 1](#); [57 Del. Laws, c. 711, § 2](#); [57 Del. Laws, c. 739, § 173](#); [60 Del. Laws, c. 183, §§ 5, 6](#); [61 Del. Laws, c. 18, § 1](#);

§ 3909 Cooperation.

Any 2 or more soil and water conservation districts organized under this chapter may cooperate with one another or with the State or any agency or subdivision thereof in the exercise of all powers conferred upon such districts or any or all duties prescribed for such districts by this chapter.

[44 Del. Laws, c. 212, § 9](#); 7 Del. C. 1953, § 3910; [54 Del. Laws, c. 188, § 1](#);

§ 3910 Primary jurisdiction of Secretary and the Department of Natural Resources and Environmental Control.

The Secretary and the Department of Natural Resources and Environmental Control shall have paramount jurisdiction over water use in this State. In case of any conflict between this chapter and Part VII of this title, relating to water and air resources, Part VII shall prevail.

7 Del. C. 1953, § 3911; [55 Del. Laws, c. 442, § 8](#); [57 Del. Laws, c. 739, § 174](#);

§ 3911 Appeals.

Any owner of land within the drainage area of the watershed or tax ditch involved, aggrieved by the Department's action, may appeal to the Superior Court within 30 days after the date of the hearing. The sole grounds for reversal by the Court, sitting without a jury, shall be:

- (1) Abuse of the Department's discretion;
- (2) Infringement of constitutional rights; or

(3) The impairment of vested rights of the complainant.

In the event of such appeal, the Department shall be represented by the Attorney General of the State.

7 Del. C. 1953, § 3912; [55 Del. Laws, c. 456, § 7](#); [57 Del. Laws, c. 739, § 175](#);

§ 3921 Annual appropriations to Division of Watershed Stewardship of Department of Natural Resources and Environmental Control.

The General Assembly shall annually appropriate:

- (1) To the Division of Watershed Stewardship for use in New Castle County, a sum not in excess of \$75,000;
- (2) To the Division of Watershed Stewardship for use in Kent County, a sum not in excess of \$75,000;
- (3) To the Division of Watershed Stewardship for use in Sussex County, a sum not in excess of \$75,000.

7 Del. C. 1953, § 3921; [55 Del. Laws, c. 414, § 2](#); [57 Del. Laws, c. 739, § 176](#); [57 Del. Laws, c. 749](#); [60 Del. Laws, c. 326, § 1](#); [62 Del. Laws, c. 68, § 101](#); [63 Del. Laws, c. 322, § 106](#); [69 Del. Laws, c. 291, § 239](#); [77 Del. Laws, c. 430, §§ 2, 3](#);

§ 3922 Appropriations by the several county governments.

The government of each county shall annually appropriate to the Division of Watershed Stewardship a sum equal to the annual appropriation to the Division by the General Assembly, for use in the respective counties, pursuant to § 3921 of this title.

7 Del. C. 1953, § 3922; [55 Del. Laws, c. 414, § 2](#); [57 Del. Laws, c. 739, § 177](#); [57 Del. Laws, c. 749](#); [77 Del. Laws, c. 430, § 4](#);

§ 3923 Use of appropriated money in Sussex, Kent and New Castle Counties.

The money appropriated pursuant to § 3921 of this title shall be used by the Division of Watershed Stewardship to pay or assist in paying all costs including personnel required for

planning, construction, installation and maintenance of tax ditches, public group ditches, highway ditches and resource conservation projects in Sussex, Kent and New Castle Counties, which tax ditches shall be organized under Chapter 41 of this title; Article 2, Chapter 65, and Article 1, Chapter 105 of the 1935 Revised Code of Delaware; and which public group ditches shall be ditches providing water management and drainage for groups of landowners and for landowners and portions of state highways and for which necessary construction permits, easements or rights-of-way for construction and maintenance operations shall have been acquired by this State or by Sussex, Kent or New Castle County, and which highway ditches shall be ditches maintained by the public on state or county-owned easements or rights-of-way adjacent to the roads of Sussex, Kent or New Castle County, and which resource conservation projects shall be defined in applications or project plans submitted to the Secretary of the United States Department of Agriculture for Watershed Planning or Resource Conservation and Development assistance. The money appropriated shall be paid from time to time by the State Treasurer and the governments of Sussex, Kent and New Castle Counties to the Division of Watershed Stewardship, or to the Sussex Conservation District, the Kent Conservation District, or the New Castle Conservation District, or directly to the contractors and suppliers furnishing work, labor, services and materials for such projects or to landowners for rights-of-way or easements, or shall be paid or otherwise made available to other state agencies for work, labor, services and materials for certain portions of such projects as shall be determined by the Division and upon certification by the Division that such payments are proper and for the purposes authorized by this section.

7 Del. C. 1953, § 3923; [55 Del. Laws, c. 414, § 2](#); [56 Del. Laws, c. 92](#); [57 Del. Laws, c. 739, § 178](#); [57 Del. Laws, c. 749](#); [59 Del. Laws, c. 561, § 2](#); [59 Del. Laws, c. 562, § 1](#); [64 Del. Laws, c. 382, § 1](#); [77 Del. Laws, c. 430, § 5](#);

§ 3925 Transfer of funds prohibited.

Funds appropriated for use by a particular district in a particular county shall only be used by that district in that county.

7 Del. C. 1953, § 3925; [55 Del. Laws, c. 414, § 2](#); [57 Del. Laws, c. 749](#);

[§ 4101](#) [§ 4102](#) [§ 4103](#) [§ 4104](#) [§ 4105](#) [§ 4106](#) [§ 4107](#) [§ 4108](#) [§ 4109](#) [§ 4110](#) [§ 4111](#) [§ 4116](#) [§ 4117](#) [§ 4118](#) [§ 4119](#) [§ 4120](#) [§ 4121](#) [§ 4122](#) [§ 4123](#) [§ 4124](#) [§ 4125](#) [§ 4126](#) [§ 4127](#) [§ 4128](#) [§ 4129](#) [§ 4130](#) [§ 4131](#) [§ 4132](#) [§ 4133](#) [§ 4134](#) [§ 4135](#) [§ 4136](#) [§ 4137](#) [§ 4138](#) [§ 4139](#) [§ 4140](#) [§ 4141](#) [§ 4142](#) [§ 4143](#) [§ 4151](#) [§ 4152](#) [§ 4153](#) [§ 4154](#) [§ 4155](#) [§ 4156](#) [§ 4157](#) [§ 4158](#) [§ 4159](#) [§ 4160](#) [§ 4161](#) [§ 4162](#) [§ 4163](#) [§ 4164](#) [§ 4165](#) [§ 4166](#) [§ 4167](#) [§ 4168](#) [§ 4171](#) [§ 4172](#) [§ 4173](#) [§ 4174](#) [§ 4175](#) [§ 4176](#) [§ 4177](#) [§ 4178](#) [§ 4179](#) [§ 4180](#) [§ 4181](#) [§ 4182](#) [§ 4185](#) [§ 4186](#) [§ 4187](#) [§ 4188](#) [§ 4189](#) [§ 4190](#) [§ 4191](#) [§ 4192](#) [§ 4193](#) [§ 4194](#) [§ 4195](#)

TITLE 7

Conservation

Agricultural and Soil Conservation; Drainage and Reclamation of Lowlands

CHAPTER 41. Drainage of Lands and Management of Waters; Tax Ditches

Subchapter I. General Provisions

§ 4101 Declaration of policy.

It is declared that the drainage and the prevention of flooding of lands and the management of water for resource conservation shall be considered a public benefit and conducive to the public health, safety and welfare.

[48 Del. Laws, c. 151, § 1](#); [7 Del. C. 1953, § 4101](#); [50 Del. Laws, c. 276, § 1](#); [70 Del. Laws, c. 246, §§ 2, 3](#);

§ 4102 Purpose.

It is the purpose of this chapter in carrying out the policy declared in § 4101 of this title to provide a basis for a uniform system for establishing, financing, administering, maintaining and dissolving tax ditch organizations in the State under the supervision of the Department of

Natural Resources and Environmental Control to the end that the conservation and management of the soil, water, wildlife, forest and other resources of the State may be accomplished in a workable and practicable manner.

[48 Del. Laws, c. 151, § 2](#); 7 Del. C. 1953, § 4102; [57 Del. Laws, c. 739, § 180](#); [70 Del. Laws, c. 246, §§ 4, 5](#);

§ 4103 Definitions.

For the purposes of this chapter, unless otherwise specifically defined, or another intention clearly appears, or the context requires a different meaning:

- (1) “Benefits” include, but shall not be limited to, the privilege of participating in a cooperative system for the management of water from one’s lands by a tax ditch formed under this chapter.
- (2) “Drainage” means water management, by drainage areas or watersheds, to safely remove or control both excess, surface flood waters and damaging, excess subsurface waters.
- (3) “Landowner” or “owner” means that person or group of persons in whom the entire title to a certain tract of land is vested.
- (4) “Taxable” means any person entitled to vote under this chapter.
- (5) “Flooding” means the occurrence of damaging, excess surface water. The occurrence of surface water for beneficial uses is a component of water management, not flooding.
- (6) “Water management” means the removal, storage, or application of water by intentional means, including but not limited to management methods using drains, channels, culverts, structures for water level control and dams.

[48 Del. Laws, c. 151, § 3](#); 7 Del. C. 1953, § 4103; [50 Del. Laws, c. 276, § 2](#); [70 Del. Laws, c. 246, §§ 6, 7](#);

§ 4104 Application; effect on previously established drainage organizations and on earlier drainage laws.

(a) Any landowner or owners in an area served by a drainage organization established prior to June 1, 1951, under any other law of this State, or any landowner or owners who desire their lands to be drained or protected from flooding may, at any time, petition for the establishment of a tax ditch under this chapter.

(b) In those cases, when an existing drainage organization becomes a tax ditch under this chapter, the present assets or liabilities of said existing drainage organization may be transferred to the tax ditch provided that such assets or liabilities are declared by the tax ditch commissioners in their report, and that the transfer of such assets or liabilities is approved by the affected taxables either by a referendum held by board of ditch commissioners pursuant to § 4132 of this title or by a signed statement pursuant to § 4135 of this title.

(c) Article 2, Chapter 65, and Article 1, Chapter 105, of the 1935 Revised Code of Delaware shall remain in effect and shall apply to drainage organizations established thereunder prior to June 1, 1951, unless such drainage organizations reform or reorganize under this chapter.

[48 Del. Laws, c. 151, §§ 7, 69, 75](#); 7 Del. C. 1953, § 4104; [50 Del. Laws, c. 276, § 3](#); [56 Del. Laws, c. 312, § 1](#);

§ 4105 Limitation of easement or right-of-way.

(a) Once a tax ditch has been constructed, any right-of-way for the construction and major maintenance of the tax ditch — provided such has been created pursuant to this chapter — and including tax ditches where rights-of-way were previously defined as “adequate” or “sufficient” — unless previously modified by a change to the court order, shall have the maximum extent defined as follows:

(1) Tax ditches with a designed 0'-4' bottom width — 80' from top of bank and to include the cross-section of the ditch; or the existing construction right-of-way, whichever is less.

(2) Tax ditches with a designed 4'-10' bottom width — 120' from top of bank and to include the cross-section of the ditch; or the existing construction right-of-way whichever is less.

(3) Tax ditches with a designed bottom width greater than 10' — existing construction and major maintenance right-of-way as filed in the original court order.

(b) No change to the minor maintenance right-of-way is necessary provided such has been otherwise created pursuant to this chapter.

(c) The reference point for all tax ditch rights-of-way that are established or modified as a result of 76 Del. Laws, c. 389 or future actions is the nearest top of ditch bank. The “top of ditch bank” is the point where the side slope of the ditch intersects the existing grade of the adjacent land. For ditch sections that have been piped, the point of references shall be the centerline of the pipe.

(d) An additional deferment of the timeline for the recordation process for certifying rights-of-way as set forth in amendments contained in § 4195(b) of this title and as extended by SCR No. 27 of the 144th General Assembly shall be granted until January 13, 2009.

(e) For purposes of this chapter:

(1) “Construction and major maintenance right-of-way” means the right-of-way created by this chapter for the purpose of construction/reconstruction of the tax ditch, to allow for the piling of debris and to allow spoil to be leveled as part of the construction operations and major maintenance activities including “dipping out” and/or disposal of spoils.

(2) “Minor maintenance right-of-way” means the right-of-way created under this chapter for the purpose of maintenance activities that include but are not limited to inspection, mowing, use of specialized equipment for vegetative management (i.e. herbicide applications), removal of debris and obstructions, pipe repairs and installation of crossings for access.

[76 Del. Laws, c. 389, § 1.](#);

Subchapter II. Boards of Ditch Commissioners

§ 4106 Ditch commissioners; membership; qualifications; term; vacancies; secretary.

(a) A board of ditch commissioners, consisting of 3 ditch commissioners and 3 alternate ditch commissioners, is continued for each county within the State. Upon the expiration of the terms of office of the present and all future commissioners, the resident judge for each county shall appoint ditch commissioners and alternate ditch commissioners, who may be selected from lists of 10 or more names submitted by the supervisors of the soil conservation district within the county. Each ditch commissioner and alternate ditch commissioner shall be a resident landowner of the county from which the commissioner is appointed, shall have some knowledge of water management including flood and drainage problems and their impacts to natural resources and shall be familiar with farming and with land values within such county.

(b) The term of office for each ditch commissioner shall be 3 years. The term of office for the alternate ditch commissioners shall be 1 year each. A ditch commissioner or alternate ditch commissioner may be reappointed to succeed himself or herself. All appointments shall be effective as of August 1 of each year.

(c) In the case of the death, resignation or removal from office of a ditch commissioner, the vacancy shall be filled by the appointment of 1 of the alternate ditch commissioners to serve for the remainder of the term of the vacating ditch commissioner.

(d) Except in the case of death or removal from office, a ditch commissioner shall hold office until his or her successor has been appointed.

(e) The Division of Watershed Stewardship shall serve as secretary, without voting authority, for each of the county boards of ditch commissioners.

48 Del. Laws, c. 151, § 4; 7 Del. C. 1953, § 4106; 50 Del. Laws, c. 276, § 4; 59 Del. Laws, c. 560, § 2; 70 Del. Laws, c. 186, § 1; 70 Del. Laws, c. 246, § 8; 76 Del. Laws, c. 213, § 1; 77 Del. Laws, c. 430, § 6;

§ 4107 Disqualification of members.

In those cases where any member of the board of ditch commissioners owns lands within the boundary of a proposed tax ditch, such member shall not serve as a member of said board on that particular tax ditch and an alternate ditch commissioner shall serve in the member's stead.

[48 Del. Laws, c. 151, § 4](#); 7 Del. C. 1953, § 4107; [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, § 9](#);

§ 4108 Chairperson; quorum; voting.

A chairperson of each board of ditch commissioners shall be designated by the members thereof and such designation may be changed from time to time. A majority of the ditch commissioners of each board shall constitute a quorum and the concurrence of a majority in any matter within their duties shall be required for its determination.

[48 Del. Laws, c. 151, § 4](#); 7 Del. C. 1953, § 4108; [70 Del. Laws, c. 186, § 1](#);

§ 4109 Compensation; expenses and reimbursement.

(a) The ditch commissioners shall be entitled to receive reimbursement for their expenses necessarily incurred in the discharge of their duty at a per diem rate set by the Secretary of the Department of Natural Resources and Environmental Control, not to exceed \$50, plus mileage reimbursement at the rate established in § 7102 of Title 29, as amended. The ditch commissioners shall be reimbursed for said expenses by the landowners petitioning to have a tax ditch formed. Such reimbursement shall be made from funds deposited in advance by the petitioners at the time the petition is filed or from the first moneys collected by the tax ditch after it is organized, the manner to be decided by the county soil conservation district pursuant to § 4120 of this title.

(b) Ditch commissioners will be reimbursed for their expenses incurred in the discharge of their duties in connection with the formation of a tax ditch after the ditch order has become effective, or at such time as the Superior Court issues an order denying the petition for the formation of the tax ditch.

[48 Del. Laws, c. 151, §§ 4, 5](#); 7 Del. C. 1953, § 4109; [50 Del. Laws, c. 276, § 5](#); [57 Del. Laws, c. 739, § 181](#); [64 Del. Laws, c. 136, § 1](#);

§ 4110 Employment of qualified personnel.

The Department of Natural Resources and Environmental Control shall employ personnel, including a Registered Professional Engineer, authorized to practice engineering in this State under Chapter 28 of Title 24, who is qualified by experience in hydraulic engineering, drainage and soil work, to assist it in carrying out its functions under this chapter and to perform related duties within the Division of Watershed Stewardship.

[48 Del. Laws, c. 151, § 6](#); 7 Del. C. 1953, § 4110; [58 Del. Laws, c. 312, § 2](#); [57 Del. Laws, c. 739, § 182](#); [59 Del. Laws, c. 560, § 1](#); [77 Del. Laws, c. 430, § 7](#);

§ 4111 Employment of personnel; purchase of supplies and equipment.

The Department may employ such personnel and obtain by purchase or otherwise such supplies and equipment as are necessary to carry out this chapter.

[48 Del. Laws, c. 151, § 6](#); 7 Del. C. 1953, § 4111.;

Subchapter III. Formation of Tax Ditch; Procedure

§ 4116 Nature of a tax ditch.

A tax ditch organized under this chapter shall constitute a governmental subdivision of this State and a public body, corporate and politic, exercising public powers.

[48 Del. Laws, c. 151, § 43](#); 7 Del. C. 1953, § 4116.;

§ 4117 Petition for formation of a tax ditch; assistance of Division of Watershed Stewardship.

(a) Whenever 1 or more of the owners of any lands desire their lands to be drained or protected from flooding, or the waters of their lands to be managed they may present a petition for the formation of a tax ditch to the Superior Court of the county in which all or the major portion of the area involved is located, through the board of supervisors of the soil conservation district of the county.

(b) The services of the Division of Watershed Stewardship shall be available to assist the landowners in the preparation of such petitions.

48 Del. Laws, c. 151, § 7; 7 Del. C. 1953, § 4117; 50 Del. Laws, c. 276, § 8; 59 Del. Laws, c. 560, § 2; 70 Del. Laws, c. 246, §§ 10, 11; 77 Del. Laws, c. 430, §§ 8, 9;

§ 4118 Form of petition.

A petition for the formation of a tax ditch shall be in the following form:

PETITION

To the Superior Court of _____ County through the Board of Supervisors of the Soil Conservation District of _____ County:

Whereas the undersigned (is) (are) the owner(s) of certain lands subject to overflow or in need of water management situated in _____ Hundred(s) _____ County (Counties), and the State of Delaware, said lands being more particularly described as follows

; and

Whereas the draining and the prevention of flooding of said lands, and/or the management of water for resource conservation on said lands would be a public benefit and conducive to the public health, safety and welfare; and

Whereas the undersigned desire that a Tax Ditch be formed under the provisions of Chapter 41, Title 7 of the Delaware Code, said Tax Ditch to be known as _____ Tax Ditch;

The undersigned therefore request the Soil Conservation District of _____ County to make the investigation required under the above cited chapter and, if the findings thereon be favorable, to file this petition in the office of the Prothonotary of _____ County so that the Superior Court of said County may take the necessary steps required by law to issue an order establishing _____ Ditch.

Dated this ____ date day of _____ month , ____ year at _____,
Delaware.

(Space for Signatures)

[48 Del. Laws, c. 151, § 8](#); 7 Del. C. 1953, § 4118; [70 Del. Laws, c. 246, §§ 12, 13](#);

§ 4119 Name of tax ditch.

The name of any tax ditch established under this chapter shall not be the same as the name of any existing drainage organization within the same county.

[48 Del. Laws, c. 151, § 71](#); 7 Del. C. 1953, § 4119.;

§ 4120 Deposit upon filing of petitions for tax ditch.

(a) The county soil conservation district shall require that a specified sum be deposited with it by the petitioners before the petition is filed in the office of the prothonotary to cover filing fees, mailing and other necessary expenses. The amount of the deposit shall be determined by the county soil conservation district and may vary according to the size of the area involved, the complexity of the problem, and other pertinent factors. If the original deposit is not sufficient, the district shall require an additional deposit as soon as the need for such becomes evident.

(b) The district shall keep an account of such deposits and shall return any unused portion thereof to the petitioners upon completion of final action by the Superior Court. When such action is favorable, the petitioners shall be repaid, out of the first moneys collected by the tax ditch, all expenses of formation charged to them by the county soil conservation district.

(c) From the funds deposited with it pursuant to this section, the county soil conservation district shall pay filing fees, mailing and other necessary expenses incurred in the investigation and formation of a tax ditch.

[48 Del. Laws, c. 151, §§ 14, 15](#); 7 Del. C. 1953, § 4120.;

§ 4121 Duties of county soil conservation district upon receipt of petition.

The board of supervisors of the county soil conservation district shall, upon receipt of a petition for the formation of a tax ditch, determine whether the petition is in the form set forth in § 4118 of this title and has been properly executed. If the petition is in the prescribed form and has been properly executed, the board shall immediately notify the Division of Watershed Stewardship, and by virtue of such action shall have made available to it the services of the Department of Natural Resources and Environmental Control to assist it with the investigation concerning the possible formation of the tax ditch.

[48 Del. Laws, c. 151, § 9](#); 7 Del. C. 1953, § 4121; [57 Del. Laws, c. 739, § 183](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, § 14](#); [77 Del. Laws, c. 430, § 10](#);

§ 4122 Investigation; hearing.

The county soil conservation district shall cause an investigation to be made by the Division of Watershed Stewardship in order to ascertain the general location and approximate watershed boundaries of the proposed tax ditch, and to obtain other information to assist the district to determine whether the formation of the tax ditch is practicable and feasible and is in the interest of the public health, safety and welfare. The district may hold such hearings as it deems necessary in order to assist it in making such determination.

[48 Del. Laws, c. 151, § 10](#); 7 Del. C. 1953, § 4122; [50 Del. Laws, c. 276, § 7](#); [59 Del. Laws, c. 560, § 2](#); [77 Del. Laws, c. 430, § 11](#);

§ 4123 Report of investigation by Division of Watershed Stewardship.

The Division of Watershed Stewardship shall make a formal report of its investigation to the county soil conservation district together with its recommendations.

[48 Del. Laws, c. 151, § 11](#); 7 Del. C. 1953, § 4123; [57 Del. Laws, c. 739, § 184](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, § 15](#); [77 Del. Laws, c. 430, § 12](#);

§ 4124 Determination by county soil conservation district.

The county soil conservation district shall, upon the basis of the information obtained under this chapter, determine whether the formation of the proposed tax ditch is practicable and feasible and is in the interest of the public health, safety and welfare.

[48 Del. Laws, c. 151, § 12](#); 7 Del. C. 1953, § 4124.;

§ 4125 Filing of petition and report; action by district when formation is found to be not practicable and feasible.

(a) If the county soil conservation district determines that the formation of the proposed tax ditch is practicable, feasible and in the interest of the public health, safety and welfare, it shall file the petition in the office of the prothonotary of the county in which all or the major portion of the land involved is located, together with the report of the Division of Watershed Stewardship and such other relevant information as the district deems appropriate.

(b) Where the county soil conservation district determines that the formation of the proposed tax ditch is not practicable and feasible or is not in the interest of the public health, safety and welfare, it shall so notify all of the petitioners involved, and a new petition for the formation of that tax ditch may not be refiled for a period of 1 year from the date of said notice.

[48 Del. Laws, c. 151, § 13](#); 7 Del. C. 1953, § 4125; [50 Del. Laws, c. 276, § 8](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, § 16](#); [77 Del. Laws, c. 430, § 13](#).;

§ 4126 Determinations to be made by board of ditch commissioners.

(a) Upon the filing of a petition for the formation of a tax ditch in the office of the prothonotary of a county, the board of ditch commissioners of such county, acting as officers of the Court, shall, at the direction of the resident judge thereof, go upon the lands that may be included in the tax ditch and determine the approximate sizes, grades and locations of the required drainage ditches; the approximate sizes, locations and specifications for required dikes, levees, structures and other necessary works of improvement; the location of public roads and railroads, and public utility installations within the proposed tax ditch; the exterior boundaries of the tax ditch; the approximate boundaries of each farm, parcel or piece of land within the tax ditch; the location and extent of needed permanent rights-of-way; the estimated total cost of all required tax ditch works of improvement; the damages to lands, if any, which will result from the construction of the tax ditch; and an equitable basis, considering relative benefits to each landowner, for the distribution of costs. The board of ditch commissioners shall obtain from the county soil conservation district such assistance and information as is needed in making the required determinations.

(b) When all of the landowners involved, with the approval of the board of ditch commissioners and with the cooperation of the county soil conservation district and the Division of Watershed Stewardship:

- (1) Jointly make the determinations regularly assigned to the board of ditch commissioners in subsection (a) of this section and in § 4127 of this title, and
- (2) Prepare the assessment list required by § 4129 of this title, and
- (3) Supply any additional data necessary to complete the report of the board of ditch commissioners required by § 4130 of this title, and
- (4) Personally sign a statement to the effect that they approve the formation of the tax ditch,

the board of ditch commissioners shall prepare their report from said determinations and such data without going upon the lands involved.

[48 Del. Laws, c. 151, § 16](#); 7 Del. C. 1953, § 4126; [50 Del. Laws, c. 276, § 9](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, §§ 17-22](#); [77 Del. Laws, c. 430, § 14](#);

§ 4127 Existing works of improvement; compensation for work done thereon.

The board of ditch commissioners may deem adequate any works of improvement already constructed, including but not limited to ditches and structures and may incorporate these in the tax ditch, and may allow a fair compensation to landowners for work previously done by them on such works of improvement.

[48 Del. Laws, c. 151, § 17](#); 7 Del. C. 1953, § 4127; [50 Del. Laws, c. 276, § 10](#);

§ 4128 Factors in determination of cost.

(a) In determining the total cost of the proposed tax ditch works of improvement, the board of ditch commissioners shall include, among other things, the estimated costs of construction, the estimated cost of forming the tax ditch, the amount of damages, if any, awarded to landowners and the amount of compensation, if any, to be paid to landowners for works of improvement previously constructed and deemed adequate under § 4127 of this title.

(b) The estimated cost of interest which will develop if the tax ditch borrows money to finance construction and the estimated cost of annual maintenance shall not be included in the total cost of the proposed tax ditch works of improvement.

[48 Del. Laws, c. 151, § 18](#); 7 Del. C. 1953, § 4128; [50 Del. Laws, c. 276, § 11](#);

§ 4129 Assessment list.

After determining the basis for distribution of costs among the landowners, the board of ditch commissioners shall prepare an assessment list which shall show the names of all owners of property, wholly or partly within the watershed of the proposed tax ditch, together with addresses and descriptions of those properties as currently recorded by the board of assessment of the county. The list shall also show, for each property, that portion, expressed in acres, which is within the watershed or drainage area. The cost-sharing or assessment base, expressed in dollars, for each of said properties shall also be shown. The sum of the individual property assessment bases shall be termed the total assessment base which in all cases shall be equal to or greater than the total cost of the proposed tax ditch works of improvement. The assessment list, as modified by the ditch order, described in § 4137 of this title, shall be the basis for all taxes levied under this chapter.

[48 Del. Laws, c. 151, § 19](#); 7 Del. C. 1953, § 4129; [50 Del. Laws, c. 276, § 12](#);

§ 4130 Proposed report of board of ditch commissioners.

The board of ditch commissioners, with the assistance of the Division of Watershed Stewardship, shall prepare a proposed report containing the following determinations and information:

- (1) The name of the proposed tax ditch;
- (2) The hundred and the county in which the proposed tax ditch is situated;
- (3) A map, drawing or aerial photograph, to a suitable scale, on which the following is shown:
 - a. The main ditch, all prongs, all subprongs and other divisions of the proposed tax ditch;

- b. All dikes, levees, structures and other works of improvement of the proposed tax ditch;
 - c. All railroads, public highways and all public utility installations near the points where such reach, cross or pass close to any part of the proposed tax ditch;
 - d. The exterior boundaries of the tax ditch;
 - e. The approximate boundaries of each farm, parcel or piece of land within the proposed tax ditch, together with the identification of each farm, parcel or piece of land by name or code number;
 - f. The location and extent of rights-of-way, including overhead and underground clearances where necessary, assigned to the tax ditch for construction and maintenance operations;
- (4) The estimated total cost of the proposed tax ditch works of improvement;
- (5) The assessment list required under § 4129 of this title;
- (6) Factors which influenced the determination of relative benefits and the basis for distribution of costs among the landowners, and other pertinent information;
- (7) The names of all landowners awarded damages or to be paid compensation for works of improvement previously constructed and deemed adequate under § 4127 of this title; and the amount of damages or compensation to which each such landowner is entitled; and factors which influenced the determination of the damages awarded and compensation to be paid;
- (8) The number of ditch managers, not less than 2 nor more than 5, required to conduct the business affairs of the proposed tax ditch;
- (9) In the case of a previously existent drainage organization, the amount of present assets to be turned over to, or liabilities to be assumed by the proposed tax ditch.

[48 Del. Laws, c. 151, § 20](#); 7 Del. C. 1953, § 4130; [50 Del. Laws, c. 276, § 13](#); [56 Del. Laws, c. 312, § 3](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, §§ 23, 24](#); [77 Del. Laws, c. 430, § 15](#);

§ 4131 Notice of hearing on establishment of tax ditch.

Upon completion of the proposed report required by § 4130 of this title, the board of ditch commissioners shall notify all owners of property, wholly or partly within the watershed of the proposed tax ditch, of a hearing concerning the establishment of said tax ditch to be held in the county in which all or the major portion of the lands involved is located. The notice shall be mailed by 1st-class mail at least 20 days prior to the hearing and shall designate the time and place thereof. It shall also state that the purpose of the hearing is to consider the formation of a tax ditch which may affect the lands of the person notified and to hold a referendum among the affected landowners concerning the establishment of a tax ditch. In addition, the notice shall state the place where a copy of the above proposed report of the board of ditch commissioners will be open to inspection for at least 5 days, excepting Saturday and Sunday, prior to the hearing date.

[48 Del. Laws, c. 151, § 21](#); 7 Del. C. 1953, § 4131; [50 Del. Laws, c. 276, § 14](#); [70 Del. Laws, c. 246, §§ 25-27](#);

§ 4132 Hearing; adoption of proposed report; right to adjourn hearing; referendum.

At the time and place designated in the notice, the board of ditch commissioners, with the assistance of the Division of Watershed Stewardship, shall hold a hearing at which all persons interested shall have an opportunity to express their opinions on and objections to the proposed report required by § 4130 of this title. The board of ditch commissioners shall make such changes in the proposed report as it deems warranted from evidence presented at the hearing, and shall then adopt the report and declare it final. If, however, as a result of the hearing, the board of ditch commissioners deems it advisable, it may adjourn the hearing in order to enable it to reexamine and modify its report in the light of the opinions and objections expressed at the hearing. The hearing may be adjourned to a fixed future date with no additional notification required or adjourned to an unspecified future date for which the notification and display procedures of § 4131 of this title will again apply. At the conclusion of the hearing, a referendum shall be held under the supervision of the board of

ditch commissioners and the Division of Watershed Stewardship. The referendum shall afford each landowner the opportunity to cast a ballot for or against the formation of the proposed tax ditch in accordance with the final report of the board of ditch commissioners. Each landowner shall be entitled to the same number of votes as the number of dollars shown as the assessment base for the lands by the board of ditch commissioners.

[48 Del. Laws, c. 151, § 22](#); 7 Del. C. 1953, § 4132; [50 Del. Laws, c. 276, § 15](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, §§ 28, 29](#); [77 Del. Laws, c. 430, § 16](#);

§ 4133 Contents of report; filing.

After holding the hearing and supervising the referendum provided for in § 4132 of this title, the board of ditch commissioners shall file the original and 2 copies of its final report in the office of the prothonotary of the county in which all or the major portion of the lands involved is located, and shall attach to the report a certificate stating the results of the referendum and the place where and the time when it was held. The board of ditch commissioners shall also prepare and attach to the report a statement showing:

- (1) Whether the board of ditch commissioners has fully discharged the duties assigned to it as prescribed by law;
- (2) Whether the proposed tax ditch is practicable and feasible and in the interest of the public health, safety and welfare;
- (3) Whether in laying out the tax ditch, the lands of every landowner assessed are directly or indirectly affected by some part of the proposed tax ditch;
- (4) Any objections made to the report of the board of ditch commissioners which did not warrant further changes in the report and the reasons therefor;
- (5) Whether, in the opinion of the board of ditch commissioners, the benefits that will result from the construction of the proposed tax ditch will exceed the total cost;
- (6) Any other recommendations or information which the board of ditch commissioners deems pertinent.

[48 Del. Laws, c. 151, § 23](#); 7 Del. C. 1953, § 4133; [50 Del. Laws, c. 276, § 16](#); [70 Del. Laws, c. 246, §§ 30, 31](#);

§ 4134 Signing of commissioners' report; dissent.

The report of the board of ditch commissioners, including the statement required by § 4133 of this title, shall be signed by all of the commissioners concurring therein. Any ditch commissioner who dissents therefrom shall attach to the report the reasons for his or her dissent.

[48 Del. Laws, c. 151, § 24](#); 7 Del. C. 1953, § 4134; [70 Del. Laws, c. 186, § 1](#);

§ 4135 Waiving of commissioners' hearing and referendum.

In those cases, when all of the landowners involved, indicate by signed statement that they are familiar with the report of the board of ditch commissioners and that they favor the formation of the tax ditch, the board of ditch commissioners shall not hold a hearing and referendum, pursuant to § 4132 of this title, nor shall they give notice thereof as pursuant to § 4131 of this title, but they shall prepare the statement required and file their report, pursuant to § 4133 of this title, without a certificate of referendum.

[48 Del. Laws, c. 151, § 25](#); 7 Del. C. 1953, § 4135; [50 Del. Laws, c. 276, § 17](#);

§ 4136 Action by Superior Court; notice of final hearing.

(a) After the report and statement of the board of ditch commissioners have been filed in the office of the prothonotary of the appropriate county, they shall be carefully reviewed by the Superior Court of the county.

(b) If the report of a majority of the board of ditch commissioners is opposed to the formation of the proposed tax ditch, or if the certificate stating the results of the referendum shows that a majority of all votes cast were opposed to the formation of the tax ditch, or if such report shows that the total cost of the construction of the tax ditch will exceed the benefits that will result therefrom, then the Superior Court shall issue an order denying the petition for the formation of the tax ditch.

(c) If the report of a majority of the board of ditch commissioners is in favor of the formation of the proposed tax ditch, and if the statement attached to said report indicates that the total benefits that will result from the tax ditch will exceed the total cost of the proposed tax ditch works of improvement, and if the certificate stating the results of the referendum shows that a majority of all votes cast were in favor of the formation of the tax ditch, then the Superior Court shall set a date for the final hearing on the petition and shall direct the prothonotary to give notice of the hearing by publication in a newspaper of general circulation in each county in which any of the lands involved are located and by posting a written or printed notice on the door of the courthouse of each such county, such publication and posting to be made not less than 15 days before the time of the final hearing. Notice of the final hearing shall also be given to landowners involved by first-class mail. This notice shall be mailed not less than 15 days before the time of the hearing. From the time the report of the board of ditch commissioners is filed in the office of the prothonotary of the appropriate county it shall be open to inspection by any interested person.

(d) In those cases, when all of the landowners involved have indicated by signed statement that they are familiar with the report of the board of ditch commissioners and that they favor the formation of the tax ditch, and if the report of a majority of the board of ditch commissioners is in favor of the formation of the proposed tax ditch, and if the statement attached to the report indicates that the total benefits that will result from the tax ditch will exceed the total cost of the proposed tax ditch works of improvement, then the Superior Court shall not hold a final hearing, nor give notice thereof, but shall confirm the report and issue an order granting the petition for the formation of the proposed tax ditch, the order to become effective immediately, and to be known as the ditch order. The confirmed report shall be considered a part of the ditch order.

[48 Del. Laws, c. 151, § 26](#); 7 Del. C. 1953, § 4136; [50 Del. Laws, c. 276, § 18](#); [67 Del. Laws, c. 188, § 1](#); [70 Del. Laws, c. 246, §§ 32, 33](#);

§ 4137 Final hearing; ditch order.

At least 10 days prior to the date set for the final hearing before the Superior Court, any interested person may file an objection in writing to the report of the board of ditch commissioners. The Superior Court shall review the report of the board of ditch commissioners and any objections filed thereto, and make, in consultation with the ditch

commissioners, such changes as are necessary to render substantial and equal justice to all interested persons. Damages to any 1 landowner shall not be grounds for denying the petition, but may be used to adjust the assessment base of that property or the damages to be paid to that landowner and shall be considered as part of the total cost of the proposed tax ditch. If the conditions set forth in § 4136(c) of this title, still exist after the objections have been considered and the necessary changes have been made in the report of the board of ditch commissioners, the Superior Court shall confirm the report and issue an order granting the petition for the formation of the proposed tax ditch, said order to be known as the ditch order. The confirmed report shall be considered a part of said ditch order. If no objections are presented at the final hearing before the Superior Court the ditch order shall become effective when issued.

[48 Del. Laws, c. 151, § 27](#); 7 Del. C. 1953, § 4137; [50 Del. Laws, c. 276, § 19](#); [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, §§ 34-36](#);

§ 4138 Right to jury trial; procedure.

When objections to the report of the board of ditch commissioners are filed in writing with the Superior Court and when the party filing feels aggrieved by the report of the board of ditch commissioners, such party may apply to the Superior Court, within 30 days after the issuance of the ditch order, for an order in the nature of a writ of inquiry to ascertain by the verdict of a jury at the bar of the Court, the full and true value of the relative benefits, damages, injury or loss which will result to the lands of such person from the construction of the proposed tax ditch.

[48 Del. Laws, c. 151, § 28](#); 7 Del. C. 1953, § 4138; [50 Del. Laws, c. 276, § 20](#);

§ 4139 Defense of contested ditch orders; Attorney General.

If the ditch order is contested, the board of ditch commissioners shall defend the order, and in conducting its defense, the board shall be represented by the Attorney General of the State.

[48 Del. Laws, c. 151, § 29](#); 7 Del. C. 1953, § 4139.;

§ 4140 Notice of final action on ditch order.

When the ditch order has become effective because no objection has been filed, or because the right to appeal therefrom has expired, the prothonotary shall notify the Division of Watershed Stewardship and the appropriate county soil conservation district accordingly, and shall forward 2 certified copies of the ditch order to the Division of Watershed Stewardship.

[48 Del. Laws, c. 151, § 30](#); 7 Del. C. 1953, § 4140; [50 Del. Laws, c. 276, § 21](#); [59 Del. Laws, c. 560, § 2](#); [77 Del. Laws, c. 430, § 17](#);

§ 4141 Permanent court record.

The ditch order, together with any amendment thereto, shall be a permanent court record and shall be kept in the office of the prothonotary of the county wherein it was issued and copies of the ditch order shall be recorded in a Tax Ditch Volume in the office of the recorder of deeds in the county where the tax ditch is located. A filing fee for all new tax ditch orders shall be charged by the office of the recorder of deeds after the effective date of this legislation. It shall not be removed from that office except in cases where an emergency so requires. The prothonotary shall make such docket entries of proceedings as directed by rule of court.

[48 Del. Laws, c. 151, § 31](#); 7 Del. C. 1953, § 4141; [50 Del. Laws, c. 276, § 22](#); [74 Del. Laws, c. 386, § 1](#);

§ 4142 Employment of private engineer by landowners.

If the board of supervisors of the county soil conservation district in which all or the major portion of the area involved is located determines that the formation of a tax ditch is practicable and feasible and is in the interest of the public health, safety and welfare, the interested landowner or owners may at any time thereafter employ at their expense engineering personnel of their selection to assist the Division of Watershed Stewardship.

[48 Del. Laws, c. 151, § 32](#); 7 Del. C. 1953, § 4142; [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, § 37](#); [77 Del. Laws, c. 430, § 18](#);

§ 4143 Exclusive procedure for determination of damages.

The determination, assessment or award of damages or other compensation to be paid to any landowner in connection with the formation of a tax ditch shall be made under and in accordance with this chapter. Chapter 61 of Title 10 shall not be applicable to proceedings to organize a tax ditch under this chapter.

7 Del. C. 1953, § 4143.;

Subchapter IV. Powers of Tax Ditch

§ 4151 Meeting to organize tax ditch; notice.

(a) The Division of Watershed Stewardship, at its earliest convenience after the ditch order becomes final, shall call a meeting of the taxables for the purpose of organizing the proposed tax ditch, including the election of ditch managers, as called for in the ditch order, and a secretary-treasurer; the formulation of a plan for constructing, financing, administering and maintaining the proposed tax ditch; and for levying taxes to cover the costs of construction and maintenance.

(b) The Division of Watershed Stewardship shall send a notice to every taxable, by first-class mail to that landowner's address as currently recorded by the board of assessment of the county, at least 10 days prior to that meeting, stating the time, place and object of the meeting.

(c) A notice of the meeting shall be sent to the chairperson of the board of supervisors of the county soil conservation district.

[48 Del. Laws, c. 151, § 33](#); 7 Del. C. 1953, § 4151; [50 Del. Laws, c. 276, § 23](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 186, § 1](#); [77 Del. Laws, c. 430, § 19](#).;

§ 4152 Distribution of ditch order and this chapter; filing of assessment list.

(a) At the organization meeting of the tax ditch, the Division of Watershed Stewardship shall deliver to the managers, when elected, a certified copy of the ditch order and a copy of this chapter, together with all effective amendments thereto.

(b) The Division of Watershed Stewardship shall deliver a copy of the assessment list prepared under § 4129 of this title, as modified by the ditch order, to the board of assessment of the county, making such changes in the names of the owners thereon as are warranted by transfers, to new owners, of lands assessed.

[48 Del. Laws, c. 151, § 34](#); 7 Del. C. 1953, § 4152; [50 Del. Laws, c. 276, § 24](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, § 38](#); [77 Del. Laws, c. 430, § 20](#);

§ 4153 Representation at meeting.

In addition to the Division of Watershed Stewardship, the county soil conservation district may be represented at the organization meeting by 1 member of the board of district supervisors.

[48 Del. Laws, c. 151, § 35](#); 7 Del. C. 1953, § 4153; [59 Del. Laws, c. 560, § 2](#); [77 Del. Laws, c. 430, § 21](#);

§ 4154 Voting rights.

At all meetings, each landowner shall be entitled to the same number of votes as the number of dollars assessed against the land of such owner in the ditch order. In the event that any lands are held by tenants in common or joint tenants, each such tenant in common or joint tenant shall be entitled to the same number of votes as his or her fractional share of the total number of dollars assessed against said lands. In the case of lands held by a husband and wife as tenants by the entirety, either the husband or wife may vote all the dollars assessed against their lands.

[48 Del. Laws, c. 151, § 36](#); 7 Del. C. 1953, § 4154; [70 Del. Laws, c. 186, § 1](#);

§ 4155 Voting by proxy.

Any person entitled to vote pursuant to § 4154 of this title may authorize another landowner within the tax ditch to cast his or her votes in that person's stead by executing a proxy. The proxy shall be signed, dated and notarized.

[48 Del. Laws, c. 151, § 37](#); 7 Del. C. 1953, § 4155; [70 Del. Laws, c. 186, § 1](#);

§ 4156 Election of ditch managers and a secretary-treasurer; terms of office; vacancies.

(a) At the first meeting the taxables shall elect from their group the number of ditch managers specified in the ditch order, and a secretary-treasurer.

(b) The term of office of each ditch manager and of the secretary-treasurer shall be 1 year. If the ditch managers and secretary-treasurer first elected are elected prior to July 1 of any year, the time elapsing between said election and the first annual January meeting provided for in § 4159 of this title shall be deemed to constitute the first year of their terms of office. However, if the ditch managers and secretary-treasurer first elected are elected on or after July 1 of any year, their terms of office shall not be deemed to begin until the said first annual January meeting, although they shall assume the duties and responsibilities of their respective offices immediately upon election.

(c) In the event that any tax ditch officer dies, resigns, ceases to be 1 of the taxables, or is removed from office, the remaining ditch officers shall within 60 days, appoint a taxable to serve the remainder of the term of such officer. However, except in the case of death or removal from office, each tax ditch officer shall continue to serve until a successor has been appointed.

[48 Del. Laws, c. 151, § 38](#); 7 Del. C. 1953, § 4156; [50 Del. Laws, c. 276, § 25](#); [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, § 39](#);

§ 4157 Chairperson of ditch managers; duties.

Immediately after they are elected, the ditch managers shall designate 1 of their number to serve as chairperson. The chairperson shall call meetings of the ditch managers and taxables and shall preside thereat.

[48 Del. Laws, c. 151, § 39](#); 7 Del. C. 1953, § 4157; [70 Del. Laws, c. 186, § 1](#);

§ 4158 Compensation of ditch managers and secretary-treasurer.

Tax ditch managers and the secretary-treasurer may be entitled to receive compensation at a rate to be determined by a majority of the eligible votes of those taxables present at the first meeting provided for in § 4159 of this title. The rate of compensation for the tax ditch managers and secretary-treasurer may be revised only at a regular annual meeting of the taxables.

[48 Del. Laws, c. 151, § 40](#); 7 Del. C. 1953, § 4158.;

§ 4159 Annual and other meetings of taxables; notice of meetings.

At the first meeting the taxables shall set a date for the regular annual meeting. This date may not be changed except by action of a majority of the taxables present at a regular annual meeting. The chairperson of the ditch managers may call special meetings at such times as the circumstances warrant. At least 10 days' notice of all meetings shall be given by the ditch managers using either of the following methods:

(1) By publishing in a newspaper of general circulation in the area of a tax ditch, and by posting at 5 conspicuous places in or near the area of said tax ditch, a notice stating the time, place and object of the meeting; or

(2) By mailing to each affected taxable at the address currently shown on the records of the board of assessment of the county, a notice stating the time, place and object of the meeting.

[48 Del. Laws, c. 151, § 41](#); 7 Del. C. 1953, § 4159; [50 Del. Laws, c. 276, § 26](#); [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, § 40](#).;

§ 4160 Meetings of ditch managers; quorum.

The ditch managers shall meet as often as necessary to properly conduct the business of the tax ditch. At such meetings a majority of the ditch managers shall constitute a quorum and the concurrence of a majority in any matter within their duties shall be required for its determination.

[48 Del. Laws, c. 151, § 42](#); 7 Del. C. 1953, § 4160.;

§ 4161 Powers of a tax ditch.

A tax ditch organized under this chapter, being a governmental subdivision of this State and a public body, corporate and politic may exercise public powers and, in addition to such other powers as usually pertain to corporations, may:

- (1) Levy taxes;
- (2) Sue and be sued in the name of the tax ditch, and suits against the tax ditch shall be governed by subchapter I of Chapter 40 of Title 10;
- (3) Make and execute contracts and other instruments necessary or convenient to the exercise of its powers;
- (4) Borrow money for the purpose of constructing, maintaining and administering the tax ditch;
- (5) Acquire, by purchase, exchange, lease, gift, grant, bequest, devise or otherwise, any property, real or personal, or any rights or interests therein;
- (6) Cooperate, or enter into agreements with the state or federal governments or any agency or subdivision thereof;
- (7) Exercise the power of eminent domain, in accordance with the condemnation procedure prescribed in Chapter 61 of Title 10, with respect to lands outside the boundaries of the tax ditch which are needed for right-of-way or outlet purposes;
- (8) Accept contributions from landowners assessed in the tax ditch, and disburse such funds for the purposes of performing certain operations, such as, but not limited to, additional clearing or the installation of structures, which operations are authorized in the tax ditch order, but which are not included in the original estimated construction requirements and costs;
- (9) Call upon the Division of Watershed Stewardship for assistance with administrative and operations problems of the tax ditch;

(10) After initial construction has been completed, and with the prior approval of the Department of Natural Resources and Environmental Control, and with written consent of more than one half of the landowners involved, owning more than 1/2 of the drainage area assessed:

a. Transfer to the Department of Natural Resources and Environmental Control:

1. The responsibility for certain specified responsibilities for maintenance of the tax ditch;
2. All rights-of-way assigned by court order to the tax ditch for construction and maintenance operations;
3. Any and all powers possessed by the tax ditch, or the managers thereof, related to obstruction of, or damage to said tax ditch, or to the addition of territory to a tax ditch, or to the alteration of a tax ditch.

b. Discontinue annual and other meetings of taxables and of tax ditch managers, except that when maintenance has been transferred to the Department of Natural Resources and Environmental Control, that body shall call a meeting of the taxables upon a written request from at least 3 of such taxables.

c. Discontinue tax ditch managers and secretary-treasurer as long as no meetings are being held.

[48 Del. Laws, c. 151, § 43](#); 7 Del. C. 1953, § 4161; [50 Del. Laws, c. 276, § 27](#); [55 Del. Laws, c. 461](#); [57 Del. Laws, c. 739, §§ 185-187](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, § 41](#); [77 Del. Laws, c. 430, § 22](#);

§ 4162 Duties of ditch managers.

In addition to the duties specified in other sections of this chapter, the ditch managers shall:

- (1) Determine from the taxables the desired program of operations;
- (2) Determine the amount of taxes to be levied to carry out such desired program;

- (3) Secure specific authority for borrowing money, in the name of the tax ditch, by a majority vote of the taxables present at a duly called meeting of the tax ditch;
- (4) At the first meeting, or within 30 days thereafter, prepare, with the assistance of the Division of Watershed Stewardship, a comprehensive plan for carrying out the desired program, which plan shall include provisions for levying taxes and for financing the program;
- (5) Execute warrants, with the assistance of the Division of Watershed Stewardship, to the receiver of taxes and county treasurer authorizing and requesting the collection of all tax ditch taxes other than maintenance taxes;
- (6) Execute a warrant, with the assistance of the Division of Watershed Stewardship, to the receiver of taxes and county treasurer authorizing and requesting the annual collection of a tax in the amount of 2 percent of the total assessment base, or in the amount of 2 percent of the total benefits for tax ditches previously formed under the original provisions of this chapter, said warrant to be marked plainly as being for annual maintenance taxes, and to be issued simultaneously with the issuance of the first warrant for the collection of taxes for construction purposes;
- (7) Make a report, at the annual meeting, of their activities during the year preceding such annual meeting;
- (8) Provide for construction work on the tax ditch;
- (9) Provide for adequate maintenance of the tax ditch.

[48 Del. Laws, c. 151, § 47](#); 7 Del. C. 1953, § 4162; [50 Del. Laws, c. 276, § 28](#); [59 Del. Laws, c. 560, § 2](#); [77 Del. Laws, c. 430, § 23](#);

§ 4163 Duties of secretary-treasurer of tax ditch.

In addition to any powers and duties set forth elsewhere in this chapter, the secretary-treasurer of the tax ditch shall:

- (1) Keep accurate minutes of all meetings of the ditch managers and taxables, and such minutes shall be a part of the permanent records of the tax ditch;

(2) Prepare a complete financial statement at the end of each calendar year, including therein an itemized report of all funds received, all funds expended, all funds due from taxes not yet collected and all sums due and owing by the tax ditch, and this statement and the records of the secretary-treasurer shall be audited annually by 2 qualified persons and shall become part of the permanent records of the tax ditch;

(3) Provide for the safekeeping of any funds of the tax ditch which are placed in his or her custody;

(4) Attend all meetings of the ditch managers and taxables.

[48 Del. Laws, c. 151, § 52](#); 7 Del. C. 1953, § 4163; [70 Del. Laws, c. 186, § 1](#);

§ 4164 Bond of secretary-treasurer.

The secretary-treasurer shall, before assuming the duties of his or her office and within 15 days after his or her election, furnish a bond in favor of the tax ditch, in an amount satisfactory to the ditch managers and with a surety to be approved by the ditch managers, conditioned for the faithful performance of his or her duties and for the payment to his or her successor of all tax ditch funds. If any person elected secretary-treasurer neglects or refuses to give bond as aforesaid within the time specified, his or her right to hold such office shall be terminated, and the ditch managers shall call a special meeting of the taxables to elect a new secretary-treasurer who shall give bond and security as provided in this section.

[48 Del. Laws, c. 151, § 53](#); 7 Del. C. 1953, § 4164; [58 Del. Laws, c. 240, § 4](#); [70 Del. Laws, c. 186, § 1](#);

§ 4165 Failure of ditch officer to perform duties; remedy; removal.

If any officer of a tax ditch fails to perform the duties imposed on him or her by this chapter, any taxable may petition the Superior Court from which the ditch order was issued and request an order directing said officer to carry out his or her duties, and upon his or her failure to comply with the order within the time stated therein, the taxable may further petition the Superior Court for the removal of the officer.

[48 Del. Laws, c. 151, § 63](#); 7 Del. C. 1953, § 4165; [70 Del. Laws, c. 186, § 1](#);

§ 4166 Signatures on instruments issued by tax ditch.

Any note, bond, warrant or other instrument issued by a tax ditch pursuant to this chapter shall be signed by the chairperson of the ditch managers and the chairperson's signature shall be attested by the secretary-treasurer of the tax ditch.

[48 Del. Laws, c. 151, § 44](#); 7 Del. C. 1953, § 4166; [70 Del. Laws, c. 186, § 1](#);

§ 4167 Liability of tax ditch officers.

No ditch manager or other officer of a tax ditch shall be held personally liable for the obligations of the tax ditch. The tax ditch shall indemnify the ditch managers or other officers in accordance with § 4003 of Title 10 for all tort claims.

[48 Del. Laws, c. 151, § 45](#); 7 Del. C. 1953, § 4167; [70 Del. Laws, c. 246, § 42](#);

§ 4168 Limitation on borrowing power of tax ditch.

A tax ditch may borrow money pursuant to this chapter with the consent of a majority of the votes cast at a meeting duly called under § 4159 of this title. No tax ditch shall borrow money in excess of 90 percent of the total assessment base established by the ditch order.

[48 Del. Laws, c. 151, § 46](#); 7 Del. C. 1953, § 4168; [50 Del. Laws, c. 276, § 29](#);

Subchapter V. Taxation

§ 4171 Duties of board of assessment; assessment book; assistance by Division of Watershed Stewardship.

(a) For tax ditches formed under this chapter, the board of assessment of the county shall transcribe the information shown on the assessment list delivered to it pursuant to § 4162(4) of this title into a special assessment book and it shall keep the same as part of the permanent records of its office. It shall also change the name of the owner shown therein from time to time as such changes are warranted by transfers of the lands assessed, to new owners.

(b) The Division of Watershed Stewardship shall assist the various boards of assessment of all 3 counties, upon request, to make such changes in their special ditch assessment books as are warranted by transfers of properties listed therein.

[48 Del. Laws, c. 151, § 48](#); 7 Del. C. 1953, § 4171; [49 Del. Laws, c. 220, § 2](#); [50 Del. Laws, c. 276, § 30](#); [59 Del. Laws, c. 560, § 2](#); [77 Del. Laws, c. 430, §§ 24, 25](#);

§ 4172 Method of determining tax.

In determining the amount of any taxes to be levied against each owner's lands under this chapter, the ditch managers shall determine the same in accordance with the ratio which exists between the assessment base for each property and the total assessment base for the tax ditch.

[48 Del. Laws, c. 151, § 49](#); 7 Del. C. 1953, § 4172; [50 Del. Laws, c. 276, § 31](#);

§ 4173 Warrants by ditch companies for collection of taxes.

Each ditch company organized under the laws in effect prior to June 1, 1951, in each year after its assessment has been made and its tax rate fixed, shall execute its warrant with a duplicate of the assessment list to the receiver of taxes and county treasurer, which warrant shall be delivered not later than May 1 in each year.

[43 Del. Laws, c. 219, § 1](#); 7 Del. C. 1953, § 4173;

§ 4174 Warrants by tax ditches for collection of taxes.

(a) For tax ditches formed under this chapter, warrants authorizing and requesting the collection of ditch taxes executed to the receiver of taxes and county treasurer shall be signed by the chairpersons of the ditch managers and the secretary-treasurer or the tax ditch and shall contain the following information:

- (1) The name of tax ditch;
- (2) The location by county and hundred;
- (3) The date said warrant is delivered to the receiver of taxes and county treasurer;

- (4) The date that tax ditch assessment list was filed with county assessor;
- (5) Total of that assessment list;
- (6) Tax rate based on that assessment list;
- (7) Total tax to be collected;
- (8) Method of payment, if by installments;
- (9) Statement as to whether the warrant is for construction, special or maintenance taxes;
- (10) Amount and terms of loans, if any, secured by said tax warrant;
- (11) Person to be paid directly by receiver of taxes and county treasurer and amounts to be paid to him or her.

(b) When a tax ditch includes 2 or more counties, separate tax warrants shall be executed by the ditch managers to each receiver of taxes and county treasurer thereof.

[48 Del. Laws, c. 151, § 50](#); 7 Del. C. 1953, § 4174; [70 Del. Laws, c. 186, § 1](#);

§ 4175 Collection and disposition of taxes levied by ditch company.

All taxes levied by ditch companies organized under the laws in effect prior to June 1, 1951, shall be collected by the receiver of taxes and county treasurer in the county wherein the district of such ditch company is situated, within a period of 90 days from the date of the warrant referred to in § 4173 of this title, in the same manner as provided by law for the collection of taxes for other purposes. The money collected, with respect to each ditch company, shall be deposited by the receiver of taxes and county treasurer in a bank in 1 or more accounts as the receiver of taxes and county treasurer shall determine. But records shall be kept by the receiver of taxes and county treasurer shall keep records which list separately each ditch company and each deposit made by each ditch company. The moneys so collected and deposited shall be withdrawn from the accounts only upon warrants drawn by the proper officer of the respective ditch companies.

[43 Del. Laws, c. 219, § 1](#); 7 Del. C. 1953, § 4175; [50 Del. Laws, c. 78, § 1](#); [59 Del. Laws, c. 39, §§ 1, 2](#); [70 Del. Laws, c. 186, § 1](#);

§ 4176 Duties of receiver of taxes and county treasurer.

All taxes levied by any tax ditch organized under this chapter shall be collected by the receiver of taxes and county treasurer in the county or counties wherein the lands taxed are located. The receiver of taxes and county treasurer shall accept tax warrants in proper form from such tax ditches, shall refer to tax ditch assessment lists on file with the board of assessment of the county and shall collect such taxes warranted annually, pursuant to the terms of the warrants in the same manner as provided by law for the collection of county taxes, and money so collected shall be paid during the months of November, January and July to the receiver designated in the tax warrants. Warrants received not later than May 1 of each year, by the receiver of taxes and county treasurer, shall be processed to be collected during that same year. Tax warrants marked plainly as being for annual maintenance taxes shall be filed by the receiver of taxes and county treasurer in a special binder and the same shall be maintained as part of the permanent records of that office. Such annual maintenance taxes shall be deemed to have been levied by the tax ditch as of April 30 of each year, except the year in which the original or a revised maintenance tax warrant is delivered to the receiver of taxes and county treasurer, in which case the levy shall be effective from and after the date of the delivery of such warrant. Annual maintenance taxes, once warranted, shall be collected yearly by the receiver of taxes and county treasurer, except that an annual maintenance tax shall not be collected during any tax year when another warrant, whether for construction taxes or special taxes, for an identical portion of the tax ditch is in effect and is being collected. The receiver of taxes and county treasurer shall accept original tax warrants for annual maintenance taxes signed by the chairperson of the ditch managers and attested by the secretary-treasurer of the tax ditch. Such warrants may not be withdrawn and may not be revised except with the consent of the county soil conservation district, pursuant to § 4181 of this title.

[48 Del. Laws, c. 151, § 51](#); 7 Del. C. 1953, § 4176; [50 Del. Laws, c. 276, § 32](#); [65 Del. Laws, c. 307, § 1](#); [70 Del. Laws, c. 186, § 1](#);

§ 4177 Installment payment of taxes for construction; lien; amount of first installment.

(a) The ditch managers may order the tax levied for the cost of construction to be paid in annual installments and shall designate the method of payment on the tax warrant when it is forwarded to the appropriate receiver of taxes and county treasurer.

(b) In the event that the ditch managers order the tax levied for the cost of construction to be paid in annual installments, the entire tax shall, nevertheless, constitute a present lien on the lands against which it is levied, and the amount of the first installment shall not be less than the sum of all payments for damages and compensation as set forth in the ditch order, plus the costs and expenses incurred in the formation of a tax ditch.

[48 Del. Laws, c. 151, § 54](#); 7 Del. C. 1953, § 4177.;

§ 4178 Taxes as security for loans; notation on tax warrant.

A tax ditch may secure the payment of any loan made to it by entering on the tax warrant provided for in § 4162(5) of this title, a statement setting forth the fact that the taxes shown on the tax warrants have been pledged to secure the payment of a certain designated loan and, if a loan is so secured, by reciting the amount and terms of the loan and from whom it is being obtained, and by directing the receiver of taxes and county treasurer to pay any such taxes collected by him or her directly to the creditor until the loan is repaid. Such warrant may not be withdrawn and may not be altered or cancelled without the written consent of the creditor until the loan is repaid.

[48 Del. Laws, c. 151, § 55](#); 7 Del. C. 1953, § 4178; [70 Del. Laws, c. 186, § 1](#).;

§ 4179 Special tax.

A special tax to raise the funds necessary to carry into effect any of the provisions of this chapter and not otherwise provided for herein, may be levied by the ditch managers in the same manner as provided in this chapter for levying taxes for original construction.

[48 Del. Laws, c. 151, § 56](#); 7 Del. C. 1953, § 4179.;

§ 4180 Lien of taxes; enforcement.

All taxes levied under this chapter shall constitute a first and paramount lien against the lands to which they apply from and after the date of such levy, subject only to the lien for state and county taxes, which lien may be enforced by sale or otherwise in the same manner as the lien for the county taxes. All such taxes shall be collected by the appropriate receiver of taxes and county treasurer as provided in § 4176 of this title. Penalties for failure to make payment by the due date shall apply to taxes levied under this chapter in the same manner

and amount as in the case of county taxes, and funds so received shall be credited to the tax ditch.

[48 Del. Laws, c. 151, § 57](#); 7 Del. C. 1953, § 4180.;

§ 4181 Adjustment of maintenance tax.

When in the opinion of the ditch managers the amount of the tax levied to defray the cost of annual maintenance is either insufficient or excessive, they may raise or lower the same for the current and succeeding years with the consent of the county soil conservation district, acting upon the advice of the Division of Watershed Stewardship. If the annual maintenance tax is so raised or lowered, it shall be apportioned to each landowner in accordance with § 4172 of this title and a new maintenance tax warrant shall be delivered to the appropriate receiver of taxes and county treasurer.

[48 Del. Laws, c. 151, § 58](#); 7 Del. C. 1953, § 4181; [59 Del. Laws, c. 560, § 2](#); [77 Del. Laws, c. 430, § 26](#).;

§ 4182 Limitation on liability of landowner for taxes.

No landowner shall be liable in any manner for any taxes levied by the tax ditch against the lands of another owner.

[48 Del. Laws, c. 151, § 59](#); 7 Del. C. 1953, § 4182.;

Subchapter VI. General Provisions

§ 4185 Payment of damages and compensation.

The damages and compensation awarded by the terms of the ditch order shall be paid to the person entitled thereto out of the first funds available to the tax ditch under this chapter, and no construction shall commence until said damages and compensation have been paid.

[48 Del. Laws, c. 151, § 60](#); 7 Del. C. 1953, § 4185.;

§ 4186 Obstruction of or damage to tax ditch; civil and criminal liability.

(a) If any person wilfully or negligently obstructs or damages any part of a tax ditch, and upon request of the ditch managers fails to remove the obstruction or to repair the damage at the person's own expense, the ditch managers shall see that the obstruction is removed and that the damage is repaired.

(b) The person so obstructing or damaging the tax ditch shall be liable for all loss or injury caused thereby and the expenses or charges for remedying the same, and said loss or injury, expenses or charges may be sued for and recovered by the ditch managers in the name of the tax ditch before any justice of the peace in the county where the obstruction or damage occurred.

(c) Whoever wilfully obstructs or damages any part of a tax ditch, as specified in subsection (a) of this section, or wilfully interferes in any way with tax ditch operations as provided for in this chapter or in a ditch order made pursuant to this chapter, shall be fined not more than \$100.

(d) As of July 17, 2008, if a permanent structure, whether existing or approved for construction, including but not limited to any residential, agricultural, or commercial structure, or any associated permanent accessory structure or septic system, driveway or parking area associated therewith still are found to be within a tax ditch right-of-way; that structure is exempt from the provisions of this chapter as a "legal nonconforming use".

[48 Del. Laws, c. 151, § 61](#); 17 Del. C. 1953, § 4186; [50 Del. Laws, c. 276, § 33](#); [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, § 43](#); [76 Del. Laws, c. 389, § 2](#);

§ 4187 Right of entry upon lands.

The Division of Watershed Stewardship, engineering personnel hired under § 4142 of this title, the soil conservation district supervisors, the Department of Natural Resources and Environmental Control, the ditch commissioners, the ditch managers, or any of their employees or agents, may enter upon any lands within the tax ditch at all reasonable times in order to carry out the purpose of this chapter.

[48 Del. Laws, c. 151, § 62](#); 7 Del. C. 1953, § 4187; [57 Del. Laws, c. 739, § 188](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 246, § 44](#); [77 Del. Laws, c. 430, § 27](#);

§ 4188 Addition of territory to a tax ditch.

(a) Any landowner who desires his or her lands to be included within a tax ditch formed under this chapter, may present a petition for an amendment to the existing ditch order to include such lands, to the Superior Court of the county which issued said ditch order through the board of supervisors of the soil conservation district of the same county, and the procedure shall be substantially the same as method in § 4189(3) of this title, for amending a ditch order, except that, in addition to establishing an assessment base which will be the basis for all future ditch taxes, for each parcel of land being included within the tax ditch, a special assessment, based generally on the approximate total amount of taxes that would have been levied against such parcels of land since the tax ditch was formed, had such lands been within the original boundaries of said tax ditch and other considerations, shall be determined by the board of ditch commissioners and payment thereof prescribed in their report to the Superior Court.

(b) In those cases when any landowner, directly or indirectly, alters lands to utilize any part of a tax ditch to benefit land which is not within the original boundary of the tax ditch as established in the ditch order and which was not assessed as part of the tax ditch, or which was not assessed to the prong or part of the tax ditch utilized by the alteration, and when the landowner or owners have not secured an amendment to the ditch order in accordance with the procedure set forth in subsection (a) of this section, it shall be assumed that such landowner accepts the liability for payment of a special assessment and costs incurred in processing an amendment to the ditch order, in addition to all future ditch taxes, and it shall be the duty of the ditch managers in the name of the tax ditch to present a petition for an amendment to the existing ditch order to include such lands, in the same manner as set forth in subsection (a) of this section and the procedure shall be the same as outlined in that subsection, except that estimated costs of processing the amendment shall be added to the special assessment which will be established by the board of ditch commissioners.

(c) In those cases when any landowner desires his or her lands to be included within a tax ditch and when agreement can be reached on the part of the landowner and the tax ditch managers as to the special assessment to be paid and the assessment base to be established as the basis for all future ditch taxes, then method (1) or method (2) of § 4189 of this title may be used to add the additional territory to the tax ditch.

[48 Del. Laws, c. 151, § 64](#); 7 Del. C. 1953, § 4188; [50 Del. Laws, c. 276, § 34](#); [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, § 45](#);

§ 4189 Alteration of tax ditches; amendments to ditch orders.

If it becomes necessary to change any part of a tax ditch, such changes may be made in one of the following ways:

(1) The desired or required changes, justified in writing and including any necessary maps or drawings, shall be presented by the tax ditch managers to the taxables at a regularly called tax ditch meeting. If a majority vote of the taxables present favors the changes, and providing that such changes do not include any relocations of works of improvement, or of the construction area, or of the maintenance right-of-way on the lands of any owner without the owner's consent, the tax ditch managers shall present 3 copies of their request for the changes, including the written justification and any necessary maps or drawings, and also including the results of the referendum, to the Division of Watershed Stewardship for its approval. Should that approval be given, the change shall be effective at once, and the Division of Watershed Stewardship shall file the original request with supporting papers in the office of the prothonotary of the proper county, and return 1 copy to the tax ditch. Whenever changes are made which affect the tax ditch assessment list, the Division of Watershed Stewardship shall notify the board of assessment of the proper county of such changes.

(2) a. When all landowners affected consent to changes of any part of a tax ditch, including the assessment list, they shall enter into a written agreement to make such changes and present 3 copies of such agreement, together with any necessary maps or drawings, to the Division of Watershed Stewardship for its approval. Should that approval be given, the change shall be effective at once, and the Division of Watershed Stewardship shall file the original request with supporting papers in the office of the prothonotary of the proper county, and return 1 copy to the tax ditch. Whenever changes are made which affect the tax ditch assessment list, the Division of Watershed Stewardship shall notify the board of assessment of the proper county of such changes.

b. The Division of Watershed Stewardship shall be responsible for assuring that any change to a court order to a tax ditch or right-of-way pursuant to this chapter shall be

recorded in the prothonotary's office. The landowner of any property upon which a change to a court order has been made to any tax ditch or right-of-way pursuant to this chapter shall be responsible for assuring that such change is filed with the recorder of deeds in the county or counties where the parcel subject to the right-of-way is located.

(3) Any landowner within the boundaries of a tax ditch, or the tax ditch managers in the name of said tax ditch, may, at any time, petition for the amendments of the ditch order that created the tax ditch. Such petition shall list the changes that are desired and shall be presented to the Superior Court that issued the tax ditch order through the board of supervisors of the soil conservation district of the same county. That board of supervisors shall require and handle a deposit from the petitioners in accordance with § 4120 of this title, so far as that section is applicable. As soon as the deposit is received, the board of supervisors shall file the petition in the office of the prothonotary of the proper county without further investigation. Upon the filing of a petition for amendments to a ditch order in the office of the prothonotary of a county, the board of ditch commissioners of such county, shall, at the direction of the resident judge thereof, go upon the lands of the tax ditch watershed, if necessary, review the existing ditch order, consider the changes requested and make determinations regarding these. The board of ditch commissioners shall obtain from the county soil conservation district such assistance and information as may be required. The board of ditch commissioners, with the assistance of the Division of Watershed Stewardship, shall prepare a special proposed report in the nature of 1 or more proposed amendments to the existing ditch order, together with any maps or drawings deemed necessary. Upon completion of that report, they shall give notice, and hold a hearing and referendum in accordance with §§ 4131 and 4132 of this title so far as these are applicable. After holding the hearing and supervising the referendum, the board of ditch commissioners shall file the original and 2 copies of its report in the office of the prothonotary of the county in which all the major portion of the tax ditch is located and shall attach to the report a certificate showing the results of the referendum and the place where, and the time when, it was held. The board of ditch commissioners shall also prepare and attach to the report a statement showing:

- a. The board of ditch commissioners has fully discharged the duties assigned to it as prescribed by law.

b. Any objections made to the report of the board of ditch commissioners which did not warrant further changes in the report and the reasons therefor.

c. Any other recommendations or information which the board of ditch commissioners deems advisable including their determination as to whether the petitioners or the tax ditch are liable for the costs of this action.

Action by the Superior Court shall follow §§ 4136, 4137, 4138, 4139, 4140, 4141 of this title so far as these sections are applicable.

[48 Del. Laws, c. 151, § 65](#); 7 Del. C. 1953, § 4189; [50 Del. Laws, c. 276, § 35](#); [57 Del. Laws, c. 739, § 189](#); [59 Del. Laws, c. 560, § 2](#); [70 Del. Laws, c. 186, § 1](#); [70 Del. Laws, c. 246, §§ 46-50](#); [76 Del. Laws, c. 389, § 3](#); [77 Del. Laws, c. 430, § 28](#);

§ 4190 Bridges and culverts.

If any public road crossed by any part of a tax ditch will be benefited so that the public should construct and maintain a bridge or culvert at such crossing, the board of ditch commissioners shall so state in their report and upon establishment of the tax ditch such bridges or culverts shall be constructed and maintained at the public charge from funds provided for that purpose.

[48 Del. Laws, c. 151, § 66](#); 7 Del. C. 1953, § 4190.;

§ 4191 Ditches near highways.

The Department of Transportation shall maintain the highway drainage system insofar as is possible in such manner as to prevent silt from such system from obstructing any part of a tax ditch. If silt enters from the highway system and obstructs a tax ditch the Department of Transportation shall remove the same within a reasonable time after being given notice of such obstruction by the ditch managers.

[48 Del. Laws, c. 151, § 67](#); 7 Del. C. 1953, § 4191; [60 Del. Laws, c. 503, § 21](#).;

§ 4192 Dissolution of tax ditch.

After a duly called meeting of the taxables at which a majority of all eligible votes have been cast in favor of dissolving a tax ditch, created under this chapter, the ditch managers shall prepare a petition requesting such dissolution to the Superior Court through the appropriate county soil conservation district. If the tax ditch has operated for at least 10 years, and if said district is of the opinion that the dissolution of such tax ditch is in the public interest, it shall file the petition therefor, together with the recommendations of said district in the office of the prothonotary of the county in which the original ditch order was issued. After a petition for dissolution has been so filed, the Superior Court shall issue an order dissolving the tax ditch. No such order of dissolution shall be issued unless and until all obligations of the tax ditch have been paid in full and all commitments of the tax ditch have been fulfilled.

[48 Del. Laws, c. 151, § 68](#); 7 Del. C. 1953, § 4192.;

§ 4193 Ditches in Kent County; transfer by Department of Transportation to tax ditch.

If any landowners in Kent County establish a tax ditch under this chapter, the Department of Transportation shall transfer to the tax ditch all its right, title and interest in and to any existing ditch or ditches, within the boundaries of the new tax ditch, which have previously been transferred to the Department under § 28 of Chapter 105 of the 1935 Revised Code of Delaware, and the Department shall delegate to the new tax ditch all its powers and duties in connection with the existing ditch or ditches.

[48 Del. Laws, c. 151, § 70](#); 7 Del. C. 1953, § 4193; [60 Del. Laws, c. 503, § 21.](#);

§ 4194 Appropriations to Department of Natural Resources and Environmental Control.

An appropriation to the Department of Natural Resources and Environmental Control for purposes of planning, designing and constructing tax ditches/public group ditches shall be included in the annual appropriation bill (budget bill) of the General Assembly.

[48 Del. Laws, c. 151, § 74](#); 7 Del. C. 1953, § 4194; [57 Del. Laws, c. 739, § 190](#); [67 Del. Laws, c. 359, § 1.](#);

§ 4195 Notice of right-of-way, or assessment.

(a) The Department of Natural Resources and Environmental Control shall certify and file with the prothonotary of each county a list of all parcels by county tax parcel numbers and all

owners of said parcels of real property located in that county which are subject to any portion of a right-of-way or assessment as part of a tax ditch created by this chapter. The list shall be in alphabetical order by owner. The Department shall also certify and similarly file a list of any changes of parcel numbers subject to such right-of-way or assessment annually. Additionally, the Department shall certify and similarly file a list of any addition or deletion of a parcel or parcels subject to a right-of-way or assessment immediately upon making any such addition or deletion.

(b) No later than 180 days after complying with subsection (a) of this section the Department shall certify and file with the prothonotary of each county a list of all parcels by county tax parcel numbers and all owners of said parcels listed in alphabetical order and designating which parcels are subject to a right-of-way and assessment, and which parcels are subject only to an assessment.

(c) The certified list submitted pursuant to subsection (a) or (b) of this section shall be confirmed by order of the Resident Judge of Superior Court for each county, which order shall:

(1) State the name of the tax ditch;

(2) State the owner's name or names and that owner's county tax parcel number for each parcel subject to the right-of-way and assessment and each parcel subject to an assessment only; and

(3) Direct that the order be recorded in the Office of the Recorder of Deeds in and for that county.

(d) There shall be no charge or fee to file the list required by subsection (a) of this section.

(e) There shall be no charge or fee to record the order pursuant to this subsection.

[75 Del. Laws, c. 321, § 1.](#);

TITLE 29

State Government

Departments of Government

CHAPTER 80. Department of Natural Resources and Environmental Control

Subchapter I. Natural Resources and Environmental Control

§ 8012 Division of Watershed Stewardship.

The Division of Watershed Stewardship is established having powers, duties and functions as follows:

(1) The Division of Watershed Stewardship shall have the power to perform and shall be responsible for the performance of all of the powers, duties and functions heretofore vested in the Delaware Soil and Water Conservation Commission, pursuant to Chapters 39 and 41 of Title 7.

(2) The administrative, ministerial, fiscal and clerical functions of the Boards of Ditch Commissioners, set forth in Chapter 41 of Title 7, shall be performed by the Division of Watershed Stewardship. Except as otherwise provided in this subdivision, the membership, remuneration, organization, meetings, powers, duties and functions of the Boards of Ditch Commissioners shall remain as prescribed by Chapter 41 of Title 7.

29 Del. C. 1953, § 8011; [57 Del. Laws, c. 302, § 1](#); [77 Del. Laws, c. 430, § 67](#);

Resource, Conservation & Development Projects

FY 2019 Annual Report

Presented to:

Joint Committee on Capital Improvement

Members:

| | |
|---------------------------------|------------------------------|
| Rep. Debra Heffernan (Co-Chair) | Sen. David P. Sokola (Chair) |
| Rep. Edward S. Osienski | Sen. Darius J. Brown |
| Rep. Kimberly Williams | Sen. Bryan Townsend |
| Rep. Gerald L. Brady | Sen. John Walsh |
| Rep. Ronald E. Gray | Sen. Colin Bonini |
| Rep. Michael Ramone | Sen. Brian Pettyjohn |

June 13, 2019

Department of Natural Resources and Environmental Control
Division of Watershed Stewardship
Drainage Program

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Fiscal Year 2019 Annual Report Resource, Conservation, and Development Fund

Background:

The Resource, Conservation and Development (“RC&D”) Fund was originally established by the Twenty-First Century Fund Investments Act of 1995 that resulted from a settlement with the State of New York. The RC&D portion of the Act was created to provide funding to enhance the health of communities by improving watershed and drainage issues statewide. The fund is implemented by a partnership between the Department of Natural Resources and Environmental Control (“DNREC”) and Delaware’s three Conservation Districts. The New Castle Conservation District takes the lead on projects located in New Castle County. DNREC takes the lead on projects in Kent and Sussex Counties, with assistance from the Kent and Sussex Conservation Districts. This report will provide a review of the work completed in FY 2019 and a look ahead at activities anticipated for FY 2020.

Fund Status:

Starting with the FY 1996 Bond Bill and continuing through the FY 2009 Bond Bill, over \$62 million was allocated to the fund. There were no new appropriations to the fund between FY 2009 and FY 2016. However, starting in FY 2016, the Joint Committee on Capital Improvements allocated over \$12 million to the fund between FY 2016 and FY 2019. The allocations to the fund are summarized in Table 1. There was not an allocation in FY 2018.

Table 1

| | NEW CASTLE | KENT | SUSSEX | TOTAL |
|-------------------------------|----------------------|---------------------|----------------------|----------------------|
| ALLOCATIONS | | | | |
| Allocated – FY 1996 – FY 2009 | \$ 44,552,468 | \$ 6,503,822 | \$ 11,311,984 | \$ 62,368,275 |
| Allocated FY 2016 | \$ 1,350,458 | \$ 427,730 | \$ 1,221,812 | \$ 3,000,000 |
| Allocated FY 2017 | \$ 1,795,962 | \$ 533,784 | \$ 1,483,054 | \$ 3,812,800 |
| Allocated FY 2019 | \$ 1,890,000 | \$ 756,000 | \$ 1,554,000 | \$ 4,200,000 |
| Total Allocated | \$ 49,588,888 | \$ 8,221,337 | \$ 15,570,852 | \$ 73,381,076 |

The DNREC Drainage Program, with its partners at the Conservation Districts, is having a productive year in FY 2019. Expenditures through June 10th are over \$2.6 million and are expected to exceed \$3 million in FY 2019. The New Castle Conservation District (“NCCD”) has been especially productive completing 30 of their 50 highest priority projects. Two examples of NCCD projects include the Carrcroft drainage improvement project on Baynard Boulevard that installed a new closed drainage system benefiting nine properties in north Wilmington and the Blackbird Station Road project that installed over 3,300 feet of pipe to improve drainage on a state maintained road and adjoining residential and farm properties in southern NCC. The Johnson Development Drainage Improvement Project near Blades in Sussex County is a \$1.6 million project that will improve drainage to over 50 properties and four state maintained roads. In Kent County, the Willow Grove / Blackwell project reconstructed over 6,000 feet of privately owned ditches. This project will provide needed relief to residential and agricultural lands near Willow Grove. We are anticipating a busy construction season as we move into spring and summer.

Table 2 is an excerpt from the RC&D Fund Expenditure Report (Appendix A). It shows the funds expended between FY 2015 and FY 2019. A list of the projects that have been completed in FY 2019 is contained in Appendix B. The lists are reported by county and contain the total project cost and the legislative district where the project was located. Projects that DNREC or one of the Conservation Districts is recommending be discontinued or removed from the approved list are also included in Appendix B.

Table 2

| | NEW CASTLE | KENT | SUSSEX | TOTAL |
|--|----------------------|---------------------|----------------------|----------------------|
| EXPENDITURES | | | | |
| Expended FY 2015 | \$ 1,309,287 | \$ 563,513 | \$ 586,9734 | \$ 2,459,775 |
| Expended FY 2016 | \$ 1,448,683 | \$ 568,644 | \$ 1,187,669 | \$ 3,204,996 |
| Expended FY 2017 | \$ 1,315,066 | \$ 460,894 | \$ 541,334 | \$ 2,317,294 |
| Expended FY 2018 | \$ 1,299,277 | \$ 239,440 | \$ 498,488 | \$ 2,037,204 |
| Expended FY 2019 | \$ 838,392 | \$ 326,556 | \$ 1,529,364 | \$ 2,694,312 |
| Total Expended (FY 1996 - FY2019) | \$ 47,732,715 | \$ 6,905,130 | \$ 13,901,440 | \$ 68,539,286 |

Table 3 summarizes the remaining balance of RC&D program funds as of June 10, 2019. Epilogue language requires, once funding is allocated to a particular county, that funding can only be spent within that county. As such, when reviewing balances of the RC&D Fund, it is important to consider the remaining balances within each county, rather than the remaining balances statewide. Unexpended funds are allocated dollars that have not been spent by DNREC. Encumbered funds are funds that are unspent, but committed to another entity, including the Conservation Districts, through a signed agreement or contract. Unencumbered funds are unspent funds that are available to be committed to a project through agreement or contract. One way to think of unencumbered funds is to view them as dollars available for future work.

Table 3

| | Unexpended | Encumbered | Unencumbered |
|------------------|---------------------|---------------------|---------------------|
| New Castle | \$ 1,856,173 | \$ 1,856,173 | \$ 0 |
| Kent | \$ 1,316,207 | \$ 326,556 | \$ 989,651 |
| Sussex | \$ 1,669,410 | \$ 580,555* | \$ 1,088,855 |
| Statewide | \$ 4,841,790 | \$ 2,763,283 | \$ 2,078,506 |

**Does not include \$750,000 reserved for Mercer Ave. project in Oak Orchard*

Although, there are balances remaining for each county, the work currently being planned in New Castle County and Sussex County exceeds the available funding. The funds available in Sussex County do not take into account \$750,000 that has been set aside for the Mercer Avenue project in Oak Orchard scheduled for construction in FY 2020. That leaves a balance of less than \$400,000 that is available in Sussex County. The next sections of this report will provide an explanation of the work being planned in each county in FY 2020.

Active and Proposed Projects:

Each year DNREC, in consultation with the Conservation Districts, prepares a list of prioritized projects in each county (Appendix C). Project prioritization is used as a tool to guide project development. However, it is an ongoing process that is flexible and allows funds to be directed to the projects that are most critical. This flexibility has been necessary in FY 2019 because it has allowed funds to be directed to areas damaged by the record rainfall. The following factors are considered when prioritizing projects.

- Public Safety
- Frequency of Flooding
- Project Status
- Property Damage
- Ability to leverage other funds
- Project Age

In 2007, DNREC implemented a Statewide Drainage Concern Hotline to provide a single point of contact to help constituents get assistance from the agency best suited to address their drainage issue. In 2018, all of Delaware received significantly higher than average rainfall. This excessive rainfall resulted in 602 new drainage concerns from July 1, 2018 – March 31, 2019. This already exceeds the annual average of 575 drainage concerns with three months still remaining in the fiscal year. This number only represents contacts through DNREC. If constituents reach out directly to the conservation district, these are not included in DNREC’s metrics. Concerns not related to stormwater management and on private property, are generally assigned to the DNREC Drainage Program in Kent and Sussex Counties. In New Castle County, these concerns are investigated by the New Castle Conservation District. This increased volume in investigations has led to an increase in the project requests proposed in Appendix D and projects added through the emergency provisions provided in epilogue language. Table 4 provides a summary of active and proposed projects.

Table 4

| | NEW CASTLE | KENT | SUSSEX | TOTAL |
|-----------------|-------------------|-------------|---------------|--------------|
| Active | 466 | 209 | 238 | 913 |
| Proposed | 113 | 20 | 30 | 163 |
| Total | 579 | 229 | 268 | 1076 |

There are now 913 active projects that have been approved by the Joint Committee on Capital Improvement. This is an 11% increase over the number of active projects in June, 2018. Appendix D includes an additional 163 proposed projects that DNREC is recommending for approval. The total cost of just these proposed projects is over \$7.7 million. The proposed additions to the list already exceed the FY 2019 appropriation further increasing the funding deficit.

It is estimated that the total cost to complete all 1,076 active and proposed projects as described herein is \$103 million. If all projects are matched at the minimum requirement, (10%), then \$93 million of RC&D funds will be required to construct these projects. When including the \$4.8 million of unexpended RC&D funds, an additional \$88 million of RC&D funds will be needed to solve watershed and drainage issues identified in this report. DNREC is not suggesting an appropriation of \$88 million because there is not enough capacity to expend those dollars. However, the \$88 million is a useful reference to understand the statewide need for assistance with watershed and drainage issues.

Table 5 contains a summary of the estimated funding necessary to complete the active and proposed projects.

Table 5

| | Active Projects Est. Cost | FY19 New Projects Est. Cost | Est. Cost All Projects | RC&D Funds Required | RC&D Unexpended | Fund Deficit |
|------------|---------------------------|-----------------------------|------------------------|---------------------|-----------------|---------------|
| New Castle | \$ 43,044,938 | \$ 4,356,550 | \$ 47,401,488 | \$ 42,661,339 | \$ 1,856,173 | \$ 40,805,166 |
| Kent | \$ 16,995,402 | \$ 1,007,000 | \$ 18,002,402 | \$ 16,202,162 | \$ 1,316,207 | \$ 14,885,955 |
| Sussex | \$ 35,315,750 | \$ 2,348,000 | \$ 37,663,750 | \$ 33,897,375 | \$ 1,669,410 | \$ 32,227,965 |
| Total | \$ 95,356,090 | \$ 7,711,550 | \$ 103,067,640 | \$ 92,760,876 | \$ 4,841,790 | \$ 87,919,086 |

Fiscal Year 2019 Priorities:

DNREC and the Conservation Districts do not have the capacity to complete all of the approved projects in a single year. Therefore, as part of the project prioritization process, we look at the fiscal year ahead and develop priorities to estimate the funding needs in each county. As expected, the Prioritized Project List and Annual Priorities for each county can change over the course of any given year. Changes could be for a number of reasons including severe weather events, a public safety problem, issues with landowners on a project, or the opportunity to leverage RC&D funds to get additional dollars. DNREC and the Conservation Districts look for opportunities to leverage RC&D funds through grants. If a particular project meets grant criteria, it may be prioritized in order to take advantage of the opportunity. RC&D funds have been used to leverage federal dollars through the Chesapeake Bay Implementation Grant and the Section 319 Grant. Projects have also taken advantage of surface water planning grants from the Water Infrastructure Advisory Committee and the National Fish and Wildlife Federation. The next three sections explain the priorities of each of the three counties as we move into FY 2020. These priorities are developed without consideration of available funding.

New Castle County Priorities FY 2020:

This section explains what projects DNREC anticipates working on in FY 2020. This plan was developed with the assumption that funds are available. As always, it is worth noting that projects require 100% agreement from landowners. As such, the time required to obtain landowner agreement may affect the construction schedule.

Projects in the "Construction" pipeline (fully funded)

- **Elsmere – Sycamore Avenue** - installation of an enclosed stormwater drainage system.
- **Edgemoor Gardens** - installation of upgraded drainage systems - NCC completed its component in December, 2018.
- **Dunleith** – installation of an enclosed drainage system within this 60+ year old community.
- **Simonds Gardens** - installation of upgraded drainage systems and water quality improvements.
- **Bayview Beach flood protection** – collaboration with NCC to elevate homes above the flood elevations of the Delaware Bay.
- **3734 Kirkwood Highway – Bulls Eye** – replace failed drainage system and repair sinkhole.
- **Shallcross Place** – resurface and upgrade drainage system.
- **The Millrace** – make drainage improvements and provide flood protection.
- **Breezewood** - working with impacted property owners on a final design.
- **Beech Hill** - working with impacted property owner on a final design.

Key projects in the Development Phase:

- Odessa National Drainage improvements
- Woods Road Tax Ditch
- Countryside Farms Tax Ditch
- Fishers Wharf ditch
- Autumn Horseshoe ditch
- Carrie Downie School drainage
- Marshallton Drainage improvements
- Wiggins Mill pond structures
- Covered Bridge Farms – Trotters Turn
- Woodland Park Drainage improvements
- Old New Castle flood protection
- Cragmere Woods drainage

Key projects needing funding:

- **Port Penn Dike rehabilitation project** – significant areas of Port Penn are at risk of possible flooding in the advent of changes in the elevation of the Delaware Bay. Complex engineering and flood management issues need to be addressed in order to prepare plans and specifications for a dike reconstruction project.
- **Hunters Ridge** – street drainage from the adjoining subdivision is causing erosion issues.
- **Pike Creek Road** – drainage improvements are needed near St. Marks High School.
- **Westover Hills Drainage** – Ditch on Hopeton Road needs to be cleaned and regraded.

Kent County Priorities FY2020:

This section explains what projects DNREC anticipates working on in FY 2020. This plan was developed with the assumption that funds are available. As always, it is worth noting that projects require 100% agreement from landowners. As such, the time required to obtain landowner agreement may affect the construction schedule.

Projects in the "Construction" pipeline (fully funded)

- **Town of Bowers (Tidegate on Hubbard Ave.)** – RC&D portion is complete, but the Town is still having issues with the tide gate.
- **Willow Grove Road / Blackwell** – Excavation complete, but spoils need to be spread.
- **Prospect Tax Ditch Maintenance** – Scheduled for completion in Spring of 2019
- **Town of Viola Drainage Improvements** – Construction is 90% complete, but a field change required an additional catch basin. Scheduled for completion in Spring of 2019.
- **Leipsic Tax Ditch Dipout** – Cleanout of the Leipsic Tax Ditch scheduled for completion in Spring of 2019
- **Shaws Corner Road / Miller / Tracy** – Replacement of 400' of stormdrain and reconstruction of 400 feet of ditch. Scheduled for construction in the Spring of 2019.
- **Lane View Drive, Scenic Acres / Sac** – Reconstruction of 600' of drainage swale near the Scenic Acres Development
- **Wheatley's Pond Road / Durham** – Installation of 700' feet of drainage tile to be scheduled for construction in Spring 2019
- **Bowers Beach Road / Malleck Phase II** – Installation of over 1,000 feet of tile drainage prevent lots on Bowers Beach Road from flooding.

Key projects in the Development Phase:

- South Bowers Drainage improvements
- Silver Lake Water management / DelTech Terry Campus
- Gravelly Run T.D. Main / Severson
- Hidden Acres Drainage Improvements
- Bush Dr. / Morris
- Shore Shore Drive / DelDOT
- Walnut Shade Road / Lavender
- Pearson Corner Road / Trice
- Voshells Cove / Richard Blvd / Gibson
- Hudson Rd /Taubler
- 241 S. Shore Dr. / Green
- 4948 Halltown Road / Butz
- 4938 Halltown Road. /Carey
- Pearsons Corner Road / Detweiler
- Alley Corner Rd. / Loman
- Smyrna Leipsic Rd. / Scuse
- Greenbriar Road / Pennypacker
- Willow Grove Rd. / Pratt
- 54 West Huntington / Lundy Phase I

Key Projects Needing Funding

Tar Ditch, also known as Meeting House Branch, is a critical project in Dover that will provide flood relief for State Street, Governors Avenue, Water Street, and Kent General Hospital (Bay Health). This project has been designed by the City of Dover utilizing a Surface Water Planning Grant. However, the cost is estimated to be \$8 million. It is anticipated that RC&D funds will be one part of the funding package the City will put together for this project.

Sussex County Priorities FY 2020:

This section explains what projects DNREC anticipates working on in Sussex County during FY 2020. This plan was developed with the assumption that funds are available. As always, it is worth noting that projects require 100% agreement from landowners. As such, the time required to obtain landowner approval may affect the construction schedule.

Projects in the "Construction" pipeline (fully funded)

- **Chesapeake, Delaware, & Inland Bay Atlantic Ocean Violator of Probation Projects** – Projects utilize labor from Sussex Community Corrections to manually remove debris from ditch in these three Sussex County watersheds. Over 30 small projects have been requested.
- **Elliott-Nichols Tax Ditch Main Channel Pipe Replacements** – Construction is complete except for regrading and seeding of the yard area that was disturbed. Anticipated completion in the Spring of 2019.
- **Johnson Development Drainage Improvements Phase II** – \$1.6 million storm drain project started an estimated completion in the Spring of 2019.
- **Selbyville Flood Drainage Project Phase II** – replacement of culverts under Railroad Avenue in Selbyville. Town has completed engineering, but needs funding for construction. Railroad Avenue is currently closed to traffic. Project will be complete by the summer of 2019.
- **Highland Acres Tax Ditch** installation of the pipe will be complete in the Spring of 2019.
- **Silver Lake Rehoboth Phase II** – Portion of sinkhole was backfilled in Fall of 2019. Pipe to be lined in the Spring of 2019.
- **Diamond Acres Drainage Improvements** Rehabilitation of an infiltration that was constructed prior to stormwater law.
- **Little Hill Road /Leonard Drainage Improvements Phase I** – Replacement of culvert under Little Hill Road and replacement of driveway pipes.
- **Argyle Lane / Fise / Gugerty Phase 1** – Removal of large tree that is blocking the ditch and reconstruction of swale on Argyle Lane
- **Nanticoke Watershed Parrot Feather Milfoil Eradication** – project to control Parrott Feather Milfoil in 5 tax ditches in Sussex County.

Key projects in the Development Phase:

- Herring Branch Tax Ditch Main / Johnson/McCabe
- Oak Orchard Drainage Improvements - Phase 1 & Phase 4 (Mercer Ave. & Captains Grant)
- Russell Road / Harris
- Reid / Delmar Road
- Bear Hole Tax Ditch / Johnson
- Old Rauetmack / Malone Drainage
- Mt. Joy Road / Hoopes
- Raccoon Branch Tax Ditch Bank Stabilization
- Pepper Creek Tax Ditch Bank Stabilization
- Frankford Library/Green Street Drainage Improvements
- Bay Beach Drainage Improvements
- Oak Orchard Drainage Improvements
- Little Bay Tax Ditch Oceanside Pkwy Culvert Replacement
- Carsyljan Acres / Jordan Phase I
- Rd. 550 / Harry Simionick
- Trap Pond / White
- Town of Bethel / Snake Road Drainage Improvements Phase I
- Baltimore Avenue / Cheeks
- Dukes Job Tax Ditch / Morris Bank Stabilization
- Johnson Road (S434A) / Wojciechowski/ McCabe
- Woodpecker Rd / Wollschlager Drainage Improvements
- Ennis Road / Owens
- Pusey Road / Hudson
- Clearbrooke Estates / Damms
- Denton Manor/Jensen (*Proposed FY2020 Project*)
- Rt. 24 / Harper / Fox Hollow Drainage Improvements

Key Projects Needing Funding

Oak Orchard Drainage Improvements – The five high priority drainage projects identified in the Oak Orchard Drainage Study are currently being designed by AECOM. Four contracts will be issued for the 5 locations and construction will be spread over multiple fiscal years. The Mercer Avenue project is planned first and should go to construction in the fall of 2019 (FY2020) and funding has been set aside for that project. However, the other projects will need substantial funding to move forward.

FY 2020 Funding Need

As of June 10, 2019, there are \$4,841,790 of unexpended funds remaining in the RC&D Fund (refer to Table 3). Funds appropriated to DNREC are then allocated to each county based upon each county's percentage of the estimated total cost of all projects (refer to Table 6). As stated above, epilogue language in the Bond Bill requires DNREC to track the funds by county and mandates that funds allocated to a particular county be used within that county.

To determine the FY 2020 funding needs, DNREC has worked with the three Conservation Districts to identify priorities and estimate the funding needed to meet those priorities, as explained in the previous three sections of this report. Table 6 below shows the projected expenditures for each county and then the entire state based upon these priorities. Although these projections show negative values, actual spending cannot exceed available funding. The negative values represent the additional funding required to meet FY 2020 project priorities.

Table 6

| | New Castle | Sussex | Kent | Statewide |
|--------------------------------|-------------------|----------------|--------------|------------------|
| FY 2019 Starting Balance* | \$ 2,694,565 | \$ 3,198,775 | \$ 1,642,762 | \$ 7,536,101 |
| FY 2019 Projected Expenditures | \$ 2,000,000 | \$ 2,000,000 | \$ 430,000 | \$ 4,430,000 |
| FY 2019 Year End Balance | \$ 694,565 | \$ 1,198,775 | \$ 1,212,762 | \$ 3,106,101 |
| FY 2020 Projected Expenditures | \$ 2,500,000 | \$ 2,300,000 | \$ 1,500,000 | \$ 6,300,000 |
| FY 2020 Year End Balance | (\$ 1,805,435) | (\$ 1,101,225) | (\$ 287,238) | (\$ 3,193,899) |

*FY2019 Starting Balance includes FY2019 Appropriation as allocated to each county.

These projections are based upon the priorities developed by each county and explained in the previous three sections of this report. As mentioned previously, many factors impact actual expenditures in any particular year. Those factors can include weather, landowner permission, permitting, as well as others. There is, based upon the priorities presented in this report and the increased demand for assistance in FY 2019, a need for at least \$3.2 million. In a normal weather year, an appropriation of \$4.5 million would keep pace with requests and allow DNREC and the Conservation Districts to address additional projects. However, it should be noted, with the challenging weather conditions Delaware experienced in FY2019, additional one time funding could be utilized. The FY 2020 Governor's Recommended Capital Budget does not include funding for this program. We will continue to work on projects based on the priorities presented in this report as long as funds are remaining.

Appendix C
Proposed FY 2020 RC&D Projects

Proposed FY2020 New Resource Conservation and Development Projects

21st Century Fund

New Castle County -- 6/11/19

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|---|----------------------|-------------------------|---------------------|
| 109 N. Dupont Road | Placeholder | \$30,000 | 4 | 4 |
| 204 Eagles Landing Road | Install pipe and regrade | \$25,000.00 | 9 | 14 |
| 207 Wiggins Mill Road | Install control structures at the ponds | \$160,000.00 | 11 | 14 |
| 409 Junction Street | Placeholder | \$20,000.00 | 13 | 7 |
| 409 New Road | Install closed drainage system | \$29,700.00 | 13 | 7 |
| 705 Bay View Road | Placeholder | \$40,000.00 | 9 | 14 |
| 960 S. Chapel Street | Placeholder | \$20,000.00 | 24 | 11 |
| 1112 Smyrna Landing Road | Clean and regrade ditch | \$23,500.00 | 9 | 14 |
| 3520 Newport Gap Pike | Placeholder | \$20,000.00 | 4 | 7 |
| 4293 Dupont Parkway | Placeholder | \$20,000.00 | 11 | 14 |
| Afton - 1603 Bolton Road | Placeholder | \$20,000.00 | 10 | 5 |
| Anglesey - 19 Harlech Drive | Placeholder | \$20,000.00 | 4 | 7 |
| Appoquin Farms - 8 Brant Court | Placeholder | \$10,000.00 | 9 | 14 |
| Ashbourne Hills - 11 East Dickens Drive | Install closed drainage system | \$42,000.00 | 7 | 1 |
| Aspen Woods - 37 Cardenti Court | Placeholder | \$1,000.00 | 26 | 11 |
| Augustine Hills - Stone Hill Road | Placeholder | \$10,000.00 | 4 | 4 |
| Augustine Ridge - Rock Manor Avenue | Drainage improvements | \$50,000.00 | 4 | 4 |
| Barrett Run - Barrett Run Place | Placeholder | \$1,000.00 | 26 | 11 |
| Beech Hill - 109 Beech Hill Drive | Placeholder | \$1,000.00 | 22 | 8 |
| Bellevue - 506 Calhoun Road | Install closed drainage system | \$20,500.00 | 6 | 1 |
| Brack Ex - 117 Exmore Avenue | Install closed drainage system | \$26,500.00 | 13 | 7 |
| Brackenville Road Drainage | Placeholder | \$1,000.00 | 12 | 4 |
| Brandywine Hunt - 405 Derby Way | Install closed drainage system | \$40,700.00 | 10 | 5 |
| Brookland Terrace - Bookland Ave. and Rhode Island Avenue | Placeholder | \$50,000.00 | 7 | 13 |
| Brookmeade - Redstart Court | Install closed drainage system | \$32,700.00 | 4 | 7 |
| Caravel Farms - 248 Benjamin Blvd. | Regrade backyard | \$13,500.00 | 27 | 12 |
| Caravel Farms - Forrestral Drive | Placeholder | \$20,000.00 | 27 | 12 |
| Carpenter Row Sign and Drainage | New sign and drainage improvements | \$11,500.00 | 4 | 4 |
| Carrie Downie School Drainage | Placeholder | \$25,000.00 | 16 | 12 |
| Cedar Farms - 1 Cedar Farms Drive | Install closed drainage system | \$94,700.00 | 26 | 11 |
| Centerville Point - Centerville Terrace Circle | Install swale and regrade yards to drain | \$25,000.00 | 4 | 7 |
| Chelfonte - Granby Road and Oakmere Road | Placeholder | \$30,000.00 | 10 | 5 |
| Chestnut Valley - Renee Lane | Placeholder | \$30,000.00 | 22 | 4 |
| Chestnut Valley - Willow Creek Lane | Placeholder | \$30,000.00 | 22 | 4 |
| Cragmere Woods | Install closed drainage system | \$119,200.00 | 6 | 1 |
| Dartmouth Woods - 2611 Abington Road | Placeholder | \$30,000.00 | 10 | 5 |
| Dartmouth Woods - 31 Ross Road | Install swale and regrade yard to drain | \$19,500.00 | 10 | 5 |
| Dartmouth Woods - 35 Sturbridge Drive | Placeholder | \$1,000.00 | 10 | 5 |
| Deerborne Woods - 47 Derrborne Trail | Placeholder | \$1,000.00 | 27 | 10 |
| Duncan Woods - 3731 Wild Cherry Lane | Install closed drainage system | \$146,600.00 | 19 | 8 |
| Edinburgh Villas - MacKenzie Court | Placeholder | \$40,000.00 | 5 | 13 |
| Edinburgh Villas - MacTavish Court | Placeholder | \$40,000.00 | 5 | 13 |
| Elmwood - Majestic Drive | Placeholder | \$1,000.00 | 24 | 9 |
| Estates of Red Lion - 8 S. Gabriel Drive | Install closed drainage system | \$36,600.00 | 15 | 12 |
| Exton - 2103 Exton Drive | Install closed drainage system | \$33,700.00 | 10 | 5 |
| Fairfax Farms - Nenagh Drive | Re-grade rear yard | \$18,200.00 | 12 | 4 |
| Faulkland Road Drainage | Placeholder | \$20,000.00 | 4 | 7 |
| Forest Glen 2 - 312 Paddington Drive | Install closed drainage system | \$57,750.00 | 15 | 12 |
| Four Seasons - Autumn Horseshoe Bend | Clean and regrade ditch | \$95,000.00 | 25 | 10 |
| Gateway Townhomes - Beech Tree Lane | Placeholder | \$30,000.00 | 12 | 4 |
| Harmony Hills - 208 Catalina Drive | Install swale and regrade yard to drain | \$24,400.00 | 21 | 9 |
| Harvey Run - Nikhil Court | Install closed drainage system and underdrain | \$37,500.00 | 7 | 1 |
| Heatherbrooke Drainage - East Heather Road | Placeholder | \$60,000.00 | 6 | 5 |
| Hockessin Greene | Placeholder | \$50,000.00 | 22 | 4 |
| Hockessin Valley Falls | Placeholder | \$10,000.00 | 22 | 4 |

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|--|--|----------------------|-------------------------|---------------------|
| Hunters Ridge - Entrance Drainage | Placeholder | \$30,000.00 | 22 | 4 |
| Hunters Ridge - Haystack Drive | Placeholder | \$50,000.00 | 22 | 4 |
| Hyde Run - 3316 Heritage Drive | Placeholder | \$20,000.00 | 4 | 7 |
| Kirkwood Gardens - 2414 Hammond Place | Placeholder | \$25,000.00 | 19 | 7 |
| Lamatan - Flint and Quartz Mill Roads | Placeholder | \$30,000.00 | 22 | 8 |
| Llangollen Estates - 316 Wooddale Ave. | Placeholder | \$5,000.00 | 17 | 12 |
| Manley - Robin Drive | Placeholder | \$20,000.00 | 22 | 4 |
| Mariners Watch -157 & 159 Portside Court | Regrade area to drain | \$13,900.00 | 15 | 12 |
| Marshallton Drainage Study | Study | \$60,000.00 | 19 | 7 |
| Marshallton - Washington Avenue | Drainage improvements | \$175,000.00 | 19 | 7 |
| Meadow Glen Ditch | Regrade ditch | \$22,500.00 | 27 | 12 |
| Melody Meadows - Misty Court | Clean ditch and install driveway pipes | \$41,500.00 | 27 | 10 |
| Melody Meadows - 53 Stardust Drive | Clean ditch and install driveway pipes | \$36,600.00 | 27 | 10 |
| Milltown Road | Drainage improvements | \$80,000.00 | 21 | 9 |
| Monterey Farms - 841 Reybold Drive | Clean ditch and install driveway pipes | \$42,700.00 | 5 | 13 |
| Northcrest - 1812 Walter Drive | Regrade yard to drain | \$33,200.00 | 10 | 5 |
| Oak Hill School Road - Ditch | Placeholder | \$40,000.00 | 11 | 14 |
| Oak Lane Manor - 2104 Allendale Road | Placeholder | \$1,000.00 | 12 | 4 |
| Pike Creek Road and Pennock Road | Install closed drainage system | \$85,000.00 | 21 | 9 |
| Pleasant Valley Estates - 125 and 127 Bartley Road | Placeholder | \$30,000.00 | 27 | 10 |
| Rising Sun Lane - Drainage Improvements | Regrade area and support railroad abutment | \$225,000.00 | 4 | 1 |
| River Ridge - Villa Road | Install closed drainage system | \$40,000.00 | 6 | 1 |
| Rivers End - Bynum Place | Placeholder | \$1,000.00 | 18 | 11 |
| Rockland Mills Pond | Placeholder | \$50,000.00 | 4 | 4 |
| Rose Hill - 16 Crimson King Drive | Install ditch | \$13,600.00 | 27 | 10 |
| Salem Woods - 9 Linette Court | Placeholder | \$1,000.00 | 26 | 11 |
| Sedgley Farms - Stone Barn Lane | Placeholder | \$35,000.00 | 4 | 4 |
| Sharpley - 722 to 726 Foulkstone Road | Placeholder | \$50,000.00 | 12 | 4 |
| Sherwood Forest Stream Restoration | Stream restoration | \$130,000.00 | 7 | 5 |
| Shipley Road and Wilson Road Drainage | Placeholder | \$50,000.00 | 6 | 5 |
| Simonds Gardens Park Drainage | Drainage improvements | \$243,500.00 | 16 | 2 |
| Southwood - Slashpine Circle | Placeholder | \$15,000.00 | 22 | 8 |
| Spring Creek - 246 Labrador Lane | Install closed drainage system | \$37,700.00 | 9 | 14 |
| Stenning Woods - 302 Hadley Court | Placeholder | \$30,000.00 | 22 | 8 |
| Stonefield - 21 Mica Street | Regrade ditch | \$37,500.00 | 9 | 14 |
| Summer Hill - 2 Jaymar Drive | Placeholder | \$1,000.00 | 26 | 11 |
| The Ridge - Sleepy Hollow Court | Placeholder | \$20,000.00 | 22 | 4 |
| Timber Farms - Timber Wood Blvd. | Install underdrain and grade | \$34,100.00 | 26 | 11 |
| Timber Farms - West Hummock Lane | Placeholder | \$50,000.00 | 26 | 11 |
| Tybrook and Woodland Park Drainage Study | Study | \$25,000.00 | 4 | 7 |
| Tybrook - Frann Road | Drainage improvements | \$6,000.00 | 4 | 7 |
| Upper Pike Creek Road Stream Restoration | Placeholder | \$60,000.00 | 22 | 4 |
| Villages at Fairview Farm - 19 Fairview Avenue | Placeholder | \$20,000.00 | 8 | 10 |
| Village of Red Lion Creek | Placeholder | \$30,000.00 | 15 | 12 |
| Weber Tract - Lloyd Place | Placeholder | \$40,000.00 | 10 | 5 |
| Webster Farms - 1115 Webster Drive | Placeholder | \$20,000.00 | 6 | 5 |
| Weldin Farms - 1506 Turkey Run Road | Regrade ditch | \$11,700.00 | 6 | 5 |
| Wellington Hills - Pierson Drive | Placeholder | \$30,000.00 | 10 | 8 |
| West Cedar Heights - 326 Clyde Street | Install closed drainage system | \$50,000.00 | 19 | 9 |
| Westhaven - Willing Way | Placeholder | \$50,000.00 | 4 | 4 |
| Westover Chase - Moorfield Turn | Install closed drainage system | \$17,600.00 | 12 | 4 |
| Westover Hills - Hopeton Road | Clean ditch | \$23,900.00 | 4 | 4 |
| Westover Hills - 702 to 704 Hopeton Road | Install closed drainage system | \$82,000.00 | 4 | 4 |
| Westover Woods - Sarah Court | Clean channel | \$18,100.00 | 26 | 11 |
| Westridge - 512 Thorndale Drive | Install ditch | \$26,600.00 | 12 | 8 |
| Windy Hill - 34 Ferncliff Drive | Placeholder | \$10,000.00 | 24 | 9 |
| Woodland Run Pond | Placeholder | \$1,000.00 | 26 | 11 |
| Yorklyn Ridge - 3 Yorkridge Trail | Install cutoff swale | \$63,100.00 | 12 | 4 |
| SUBTOTAL -New Castle County FY20 New Projects | 113 Projects | \$ 4,356,550 | | |

Proposed FY2020 New Resource Conservation and Development Projects

Kent County - Final 06/13/2019

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|--|--|----------------------|-------------------------|---------------------|
| 1679 Dupont Highway / KCD | Pipe and Catch Basin Repair | \$50,000 | 32 | 16 |
| Downes Drive/Rodden | channel reconstruction | \$50,000 | 11 | 15 |
| Farmington Drainage/Butler | open ditch reconstruction | \$15,000 | 30 | 16 |
| Fernwood Drive/Webber | construct open ditch through Fernwood Development | \$25,000 | 30 | 16 |
| Hopkins Cemetery Road/Peterson | installation of new piped system along road | \$60,000 | 30 | 15 |
| Ironmine Road/Ford | construct open ditch | \$20,000 | 30 | 15 |
| Kenton Rd. / High Street | Strom Drain System | \$75,000 | 30 | 18 |
| Kenton Road/Stotler | reconstruction of swales | \$12,000 | 29 | 15 |
| Kitts Hummock Road/Webb | tile drainage for crossroad pipe | \$10,000 | 32 | 16 |
| McKee Rd / Pruett | Reconstructioin of open ditch and replacement of pipes | \$25,000 | 29 | 15 |
| Moores Meadows | Construction of open ditch | \$50,000 | 29 | 17 |
| Paradise Alley Road/Bailey | installation of new tile system for road pipe | \$30,000 | 30 | 15 |
| Pearsons Corner Road/Passwaters | cleanout of roadside ditching and reset driveway pipes or tile drainage installation to the rear of property | \$60,000 | 29 | 15 |
| Plum Drive/Hurd | fix pipe with a sink hole and construct outlet ditch | \$50,000 | 34 | 16 |
| Rose Dale Lane/Fleitz | construction of open ditch and tile drainage | \$50,000 | 11 | 15 |
| Rt-9/Wicks | tile drainage for crossroad pipe | \$30,000 | 28 | 14 |
| South Little Creek Road / Little | 2,600 feet of stream restoration | \$250,000 | 32 | 16 |
| W. Fairway Circle / Hugg | channel construction and pipe installation | \$80,000 | 29 | 15 |
| Williamsville Rd / Pike | Reconstructioin of open ditch and replacement of pipes | \$50,000 | 11 | 15 |
| Windrow Way / Moreau | reconstruction of swales | \$15,000 | 33 | 16 |
| SUBTOTAL - Kent County FY20 New Projects | 20 New Projects | \$ 1,007,000 | | |
| SUBTOTAL - Kent County FY20 New Projects Required | | \$ 906,300 | | |

Proposed FY2020 New Resource Conservation and Development Projects

Sussex County - Final 06/13/2019

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|--|----------------------|-------------------------|---------------------|
| Airport Road/Hearn | 1,200 feet of storm drain along Airport Road S 2018-338 | \$100,000 | 39 | 21 |
| Branch Acres/Taylor | 450 feet of new ditch construction and 1,000 feet of channel reconstruction | \$35,000 | 41 | 20 |
| Brickyard Road/Hearn | 900 Feet of ditch reconstruction on Mobile Gardens MHP S 2018-355 | \$12,000 | 39 | 21 |
| Byard Road/Langenfelder | 1,600 feet of channel reconstruction S 2018-344 | \$25,000 | 38 | 20 |
| Cannon Raod / Cancel | Reconstruct 1,500 feet of open ditch connecting to Bucks Branch Tax Ditch | \$15,000 | 39 | 19 |
| Cedar Neck Road/Bullock | 5,000 feet of Ag Ditch maintenance, construction of 1,500 feet of new storm drain, and construction of 800 feet of new ditch. | \$200,000 | 36 | 18 |
| Clam Avenue/Brittingham | Drainage improvements in Beachwood Development 500 feet of ditch reconstruction and internal drainage improvements | \$65,000 | 38 | 20 |
| Cross Keys Road / Messick | 4,500 feet of dipout and new ditch construction S 2019-376 | \$60,000 | 41 | 21 |
| Denton Manor/Jensen | 2,000 feet of channel reconstruction. Replacement of culvert and storm drain along Railway Avenue. Reconstruction of drainage network inside of Denton Manor | \$225,000 | 38 | 20 |
| Gordy Road/Chapman | Construct swale from Gordy Road to existing Ditch along proprty line S 2018-259 | \$10,000 | 40 | 21 |
| Gordy Road/Littleton | Reconstruct 2,100 feet of argicultural drainage ditch. S 2019-249 | \$30,000 | 40 | 21 |
| Lisa Avenue/Kaufman | 1,000 feet of channel reconstruction and replacement of one crossroad pipe add to scope pending investigation on Owens DC | \$35,000 | 38 | 20 |
| Magnolia Street Drainage / Town of Milton | Town of Milton project to improve the drainage of Magnolia Street and the Municipal parking lot. | \$150,000 | 20 | 6 |
| Midpark / Pertuccy | Installation of stormdrain system in development. Potential streetscape project | \$200,000 | 14 | 6 |
| Morgan Drive/Gale | new swale construction and driveway pipe installation. 1,000 feet of ditch cleanout | \$25,000 | 35 | 18 |
| N. Union Church Rd. / Fitzgerald / Evans | 15,000 feet of ditch reconstruction and replacement of pipes. S 2019-205 | \$100,000 | 35 | 18 |
| Nelsa Lane/Valente | Addition to the scope of Oak Orchard/Oak Meadows | \$75,000 | 37 | 20 |
| Old Stage Road watershed study | Flood study of Cooper Branch tributary to Broad Creek | \$60,000 | 40 | 21 |
| Paradise Road/Richardson | 7,000 feet of channel reconstruction | \$75,000 | 40 | 19 |
| Quaint Acres / VanBergen / Pusey Drainage Improvement | Reconstruct 2,000 feet of drainage swales and road crossings in the development. This project ties into the upper end of Sub 1 of Prong 3A S 2018-294 & S 2019-327 | \$75,000 | 38 | 20 |
| Rehoboth Manor/ Difrancesco | New street drainage and rehabilitation of existing storm drain | \$150,000 | 14 | 6 |
| Route 5/Thompson | replacement of private crossroad pipe on Rock Switch street | \$20,000 | 20 | 18 |
| Shiloh Rd / Semat | Roadside Drainage Improvements and expansion of L&W Tax DitchS 2019-241 | \$50,000 | 40 | 21 |
| Smithfield Acres/Lyons | Emergency addition to replace pipe under Smith avenue and ditch cleanout | \$21,000 | 38 | 20 |
| South Hampton / McCabe Tax Ditch | Replacement of 6 private cross road pipes in the South Hampton Development. | \$150,000 | 38 | 20 |
| Spicer Road/Baynes | 4,500 feet of channel reconstruction | \$75,000 | 36 | 18 |

Sussex County - Final 06/13/2019

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|--|----------------------|-------------------------|---------------------|
| The Glade/August | 1,000 feet of channel reconstruction and replacement of 8 driveway pipes | \$35,000 | 14 | 6 |
| Warwick Park/Fowler | Solve multiple drainage issues and rehabilitate storm drain within the community | \$200,000 | 41 | 20 |
| Wil King Road / Thomas | 2,000 Feet of new ditc to provide an outlet to the nothern end of WilKing Road. S 2019-355 | \$25,000 | 14 | 6 |
| Wilson Hill Road / Klingensmith | Reconstruct 4,500 feet of open ditches that outlet to Mifflen Tax Ditch S 2019 -293 | \$50,000 | 35 | 19 |
| SUBTOTAL - Sussex County FY20 New Projects | 30 New Projects | \$ 2,348,000 | | |
| SUBTOTAL - Sussex County FY20 New Projects 21CF Required | | \$ 2,113,200 | | |

Appendix D

Prioritized Active Projects

Status Key

Construction – Notice to proceed has been issued

Contracting – Process of obtaining contractor and purchase orders

Funding – needs additional funds to move forward (21st Century or Match)

Land Rights – Obtaining landowner permission

Permitting – Obtaining environmental permits

Engineering – Surveying and Design

Scoping – Project scope development & and permission to survey

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|--------------|----------------------|-------------------------|---------------------|
| 1 | 2014 | Port Penn Dike Rehabilitation | Rehabilitate dike | Funding | \$3,000,000.00 | 9 | 14 |
| 2 | 2018 | Simonds Gardens Drainage Study | Drainage study | Scoping | \$85,000.00 | 16 | 2 |
| 3 | 2019 | Simonds Gardens Drainage Improvements | Drainage improvements | Engineering | \$391,600.00 | 16 | 2 |
| 4 | 2015 | Elsmere - Sycamore Avenue | Install closed drainage system | Engineering | \$408,300.00 | 13 | 7 |
| 5 | 2017 | Edgemoor Gardens - Rysing Drive | Install closed drainage system | Construction | \$238,000.00 | 6 | 1 |
| 6 | 2018 | Odessa National Study Phase 1 and 2 | Study | Scoping | \$60,900.00 | 9 | 14 |
| 7 | 2008 | Bayview Beach flood protection | New Castle County project in partnership with NCCD | Construction | \$750,000.00 | 9 | 14 |
| 8 | 2015 | Marshallton - Old Capitol Trail | Drainage improvements | Funding | \$225,000.00 | 19 | 7 |
| 9 | 2019 | 3734 Kirkwood Highway - Bulls Eye | Replace failed pipe | Engineering | \$110,000.00 | 19 | 7 |
| 10 | 2020 | 207 Wiggins Mill Road | Install control structures at the ponds | Funding | \$160,000.00 | 11 | 14 |
| 11 | 2019 | Shallcross Place | Drainage improvements | Engineering | \$90,000.00 | 8 | 10 |
| 12 | 2019 | 1012 Jamison Corner Road | Drainage improvements | Engineering | \$44,000.00 | 9 | 12 |
| 13 | 2019 | Beech Hill - 47 Beech Hill Drive | Install closed drainage system | Engineering | \$33,400.00 | 22 | 8 |
| 14 | 2019 | Brack Ex - 121 Exmore Avenue | Install closed drainage system | Engineering | \$16,700.00 | 13 | 7 |
| 15 | 2019 | Brandywood - 2611 Pennington Drive | Install closed drainage system | Engineering | \$47,200.00 | 10 | 5 |
| 16 | 2019 | Dunleith - 422 Carver Drive | Regrade yard to drain | Engineering | \$19,700.00 | 16 | 2 |
| 17 | 2019 | Food Bank of Delaware | Drainage improvements | Engineering | \$40,000.00 | 8 | 10 |
| 18 | 2019 | Great Good Place II - 117 Great Circle Road | Install rip rap | Engineering | \$20,500.00 | 22 | 8 |
| 19 | 2019 | Harmony Crest Sec II - 108 Plano Drive | Install closed drainage system | Engineering | \$16,000.00 | 18 | 9 |
| 20 | 2019 | Highland Woods - 4 Big Oak Lane | Regrade ditch and place riprap | Engineering | \$8,700.00 | 7 | 5 |
| 21 | 2019 | Midway Little League Drainage | Regrade swale | Engineering | \$21,400.00 | 21 | 9 |
| 22 | 2019 | North Star - 210 Mercury Road | Install closed drainage system | Engineering | \$100,400.00 | 22 | 8 |
| 23 | 2019 | Saddlebrook - 154-168 Freedom Trail | Regrade swale | Engineering | \$36,500.00 | 5 | 13 |
| 24 | 2019 | The Millrace - 649-657 Millrace Lane | Drainage improvements | Engineering | \$102,000.00 | 12 | 4 |
| 25 | 2019 | Whitebriar - 731 & 737 Whitebriar Road | Install ditch | Engineering | \$29,600.00 | 12 | 4 |
| 26 | 2019 | Whitehall - 152 W. Edinburgh Drive | Install closed drainage system | Engineering | \$38,400.00 | 18 | 13 |
| 27 | 2019 | Woodburne - 33 Elks Trail | Install inlet in backyard | Engineering | \$12,700.00 | 5 | 13 |
| 28 | 2019 | Wynthorpe - 212 Southwyk & 38 Bancroft | Install closed drainage system | Engineering | \$25,600.00 | 17 | 12 |
| 29 | 2018 | Chandeleur Woods - Niobrara Lane | Clean and regrade ditch | Construction | \$10,000.00 | 15 | 12 |
| 30 | 2018 | Riveredge Estates Bio-Swale | Clean and regrade ditch | Construction | \$11,500.00 | 17 | 12 |
| 31 | 2018 | Rutherford - 107 Greenfield Road | Regrade yard to drain | Construction | \$10,000.00 | 18 | 9 |
| 32 | 2018 | Westover Hills - 703 Westover Road | Regrade yard to drain | Construction | \$9,700.00 | 4 | 4 |
| 33 | 2018 | Rutherford - 107 Rutherford Drive | Regrade yard to drain | Construction | \$10,000.00 | 18 | 9 |
| 34 | 2018 | Caravel Farms - 304 Caravel Drive | Install closed drainage system | Construction | \$33,250.00 | 27 | 12 |
| 35 | 2009 | DELAWARE CITY DRAINAGE IMP-PHASE II (Branch Canal) | DESIGN AND CONSTRUCT CITY DRAINAGE IMPROVEMENTS | Construction | \$2,700,000.00 | 15 | 12 |
| 36 | 2016 | Melody Meadows - 70 Stardust Drive | Clean and restore drainage ditch | Construction | \$14,350.00 | 27 | 10 |
| 37 | 2017 | Gender Woods - Cypress Drive | Install closed drainage system | Construction | \$63,300.00 | 24 | 11 |
| 38 | 2017 | Melody Meadows - 120 Cann Road | Grade and clean out ditch. | Construction | \$24,700.00 | 27 | 10 |
| 39 | 2019 | 255 Union Church Road | Replace failed pipe | Construction | \$28,650.00 | 9 | 14 |
| 40 | 2019 | 856 Black Diamond Road | Install closed drainage system | Construction | \$106,850.00 | 9 | 14 |
| 41 | 2019 | Beech Hill - 41 Beech Hill Drive | install closed drainage system | Construction | \$18,500.00 | 22 | 8 |
| 42 | 2019 | Caravel Farms - 30 Kimmie Court | Clean ditch and place rip rap | Construction | \$36,200.00 | 27 | 12 |
| 43 | 2019 | Caravel Woods - McMahon Drive | Regrade swale | Construction | \$17,900.00 | 6 | 12 |
| 44 | 2019 | Centennial Village - 15 Warren Place | Regrade and clean swale | Construction | \$6,500.00 | 5 | 13 |
| 45 | 2019 | Channin - 2403 Ramblewood Drive | Install closed drainage system | Construction | \$19,400.00 | 10 | 5 |
| 46 | 2019 | Colonial Park - 107 Atkins Avenue | Install closed drainage system | Construction | \$97,700.00 | 13 | 3 |
| 47 | 2019 | Colonial Park - 18 Atkins Avenue | Install closed drainage system | Construction | \$62,250.00 | 13 | 3 |
| 48 | 2019 | Cooper Farms - 12 Cornell Road | Install closed drainage system | Construction | \$33,700.00 | 19 | 7 |
| 49 | 2019 | Green Valley - 911 8th Street | Install closed drainage system | Construction | \$27,700.00 | 21 | 9 |
| 50 | 2019 | Jarrell Farms - 7 Jarrell Farms Drive | Install underdrain | Construction | \$11,500.00 | 22 | 8 |
| 51 | 2019 | Lindamere 503 River Road | Install closed drainage system | Construction | \$39,800.00 | 6 | 1 |
| 52 | 2019 | Melody Meadows - 84 Stardust Drive | Clean ditch and place a low flow channel | Construction | \$17,350.00 | 27 | 10 |
| 53 | 2019 | Stone's Throw - Cobble Creek Curve | Repair pipe and patch roadway | Construction | \$10,000.00 | 25 | 10 |
| 54 | 2019 | Timber Farms - 618 - 630 Timber Wood | Install closed drainage system | Construction | \$60,900.00 | 26 | 11 |
| 55 | 2019 | Woodland Park - 2109 Peachtree Drive | Drainage improvements | Construction | \$16,500.00 | 4 | 7 |
| 56 | 2018 | River Walk - Darling Street & Charles Court Drainage | Install closed drainage system. | Construction | \$28,500.00 | 26 | 11 |
| 57 | 2018 | River Walk - Darling street & Lisa Drive | Closed system and swale | Construction | \$35,200.00 | 26 | 11 |
| 58 | 2018 | Rutledge - Marlin Court | Install closed drainage system. | Construction | \$26,000.00 | 5 | 13 |
| 59 | 2017 | Little Falls Village | Curb replacement | Construction | \$96,000.00 | 4 | 7 |
| 60 | 2017 | Pleasant Valley Estates - Bartley Drive | Grade and clean out ditch. | Construction | \$25,300.00 | 27 | 10 |
| 61 | 2015 | Dunleith - 422 Bethune Drive | Install curb with underdrain along side of house. | Construction | \$14,850.00 | 16 | 2 |
| 62 | 2017 | 1609 Joe Goldsborough Road | Install ditch | Engineering | \$72,000.00 | 11 | 14 |
| 63 | 2018 | Old Coaches Bridge Road Drainage | Replace pipes and ditch | Engineering | \$39,500.00 | 25 | 10 |
| 64 | 2019 | Whethersfield - Dasher Avenue | Install closed drainage system | Engineering | \$47,750.00 | 18 | 13 |
| 65 | 2019 | Whethersfield - Penny Lane | Install closed drainage system | Engineering | \$42,300.00 | 18 | 13 |
| 66 | 2019 | Whitebriar - 741 Whitebriar Road | Install underdrain | Engineering | \$15,300.00 | 12 | 4 |
| 67 | 2019 | Sunnybrae - 13 Crenshaw Drive | Stream stabilization | Engineering | \$39,200.00 | 10 | 5 |
| 68 | 2019 | Sharpley - Foulkstone Road | Install closed drainage system | Engineering | \$40,700.00 | 12 | 4 |
| 69 | 2019 | Sherwood Forest - 39 Stature Drive | Regrade yard to drain | Engineering | \$9,900.00 | 24 | 9 |
| 70 | 2019 | Spring Creek Pond #1 and #2 | Erosion at pond outfalls | Engineering | \$105,000.00 | 9 | 14 |
| 71 | 2019 | Odessa National - Loft Street | Install closed drainage system | Engineering | \$40,200.00 | 9 | 14 |
| 72 | 2019 | Oak Hill School Road | Remove and replace farm crossing pipe | Engineering | \$20,800.00 | 11 | 14 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|---|---|-------------|----------------------|-------------------------|---------------------|
| 73 | 2019 | Morningside - Morning Glen Lane | Install closed drainage system | Engineering | \$120,000.00 | 22 | 4 |
| 74 | 2019 | Londonderry - Emerald Place | Install closed drainage system | Engineering | \$29,250.00 | 10 | 5 |
| 75 | 2019 | Devon - Malvern Ct. and Morningside Rd. | Install closed drainage system | Engineering | \$49,900.00 | 10 | 5 |
| 76 | 2019 | Enclave at Odessa - Barcelona & Madrid | Regrade swale | Engineering | \$45,800.00 | 9 | 14 |
| 77 | 2019 | Breezewood - Eastwind Court | Install closed drainage system | Engineering | \$41,900.00 | 24 | 11 |
| 78 | 2019 | 2404 North Grant Avenue | Install Trench Drain | Engineering | \$27,400.00 | 4 | 1 |
| 79 | 2019 | 1940 Rising Sun Lane | Install drainage system | Engineering | \$90,500.00 | 4 | 1 |
| 80 | 2020 | 109 N. Dupont Road | Placeholder | Funding | \$30,000.00 | 4 | 4 |
| 81 | 2020 | 204 Eagles Landing Road | Install pipe and regrade | Funding | \$25,000.00 | 9 | 14 |
| 83 | 2020 | 409 Junction Street | Placeholder | Funding | \$20,000.00 | 13 | 7 |
| 84 | 2020 | 409 New Road | Install closed drainage system | Funding | \$29,700.00 | 13 | 7 |
| 85 | 2020 | 705 Bay View Road | Placeholder | Funding | \$40,000.00 | 9 | 14 |
| 86 | 2020 | 960 S. Chapel Street | Placeholder | Funding | \$20,000.00 | 24 | 11 |
| 87 | 2020 | 1112 Smyrna Landing Road | Clean and regrade ditch | Funding | \$23,500.00 | 9 | 14 |
| 88 | 2020 | 3520 Newport Gap Pike | Placeholder | Funding | \$20,000.00 | 4 | 7 |
| 89 | 2020 | 4293 Dupont Parkway | Placeholder | Funding | \$20,000.00 | 11 | 14 |
| 90 | 2020 | Afton - 1603 Bolton Road | Placeholder | Funding | \$20,000.00 | 10 | 5 |
| 91 | 2020 | Anglesey - 19 Harlech Drive | Placeholder | Funding | \$20,000.00 | 4 | 7 |
| 92 | 2020 | Appoquin Farms - 8 Brant Court | Placeholder | Funding | \$10,000.00 | 14 | |
| 93 | 2020 | Ashbourne Hills - 11 East Dickens Drive | Placeholder | Funding | \$20,000.00 | 7 | 1 |
| 94 | 2020 | Aspen Woods - 37 Cardenti Court | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 95 | 2020 | Augustine Hills - Stone Hill Road | Placeholder | Funding | \$10,000.00 | 4 | 4 |
| 96 | 2020 | Augustine Ridge - Rock Manor Avenue | Drainage improvements | Funding | \$50,000.00 | 4 | 4 |
| 97 | 2020 | Barrett Run - Barrett Run Place | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 98 | 2020 | Beech Hill - 109 Beech Hill Drive | Placeholder | Funding | \$1,000.00 | 22 | 8 |
| 99 | 2020 | Bellevue - 506 Calhoun Road | Install closed drainage system | Funding | \$20,500.00 | 6 | 1 |
| 100 | 2020 | Brack Ex - 117 Exmore Avenue | Install closed drainage system | Funding | \$26,500.00 | 13 | 7 |
| 101 | 2020 | Brackenville Road Drainage | Placeholder | Funding | \$1,000.00 | 12 | 4 |
| 102 | 2020 | Brandywine Hunt - 405 Derby Way | Install closed drainage system | Funding | \$40,700.00 | 10 | 5 |
| 103 | 2020 | Brookland Terrace - Bookland Ave. and Rhode Island Avenue | Placeholder | Funding | \$50,000.00 | 7 | 13 |
| 104 | 2020 | Brookmeade - Redstart Court | Install closed drainage system | Funding | \$32,700.00 | 4 | 7 |
| 105 | 2020 | Caravel Farms - 248 Benjamin Blvd. | Regrade backyard | Funding | \$13,500.00 | 27 | 12 |
| 106 | 2020 | Caravel Farms - Forrester Drive | Placeholder | Funding | \$20,000.00 | 27 | 12 |
| 107 | 2020 | Carpenter Row Sign and Drainage | New sign and drainage improvements | Funding | \$11,500.00 | 4 | 4 |
| 108 | 2020 | Carrie Downie School Drainage | Placeholder | Funding | \$25,000.00 | 16 | 12 |
| 109 | 2020 | Cedar Farms - 1 Cedar Farms Drive | Install closed drainage system | Funding | \$94,700.00 | 26 | 11 |
| 110 | 2020 | Centerville Point - Centerville Terrace Circle | Install swale and regrade yards to drain | Funding | \$25,000.00 | 4 | 7 |
| 111 | 2020 | Chelfonte - Granby Road and Oakmere Road | Placeholder | Funding | \$30,000.00 | 10 | 5 |
| 112 | 2020 | Chestnut Valley - Renee Lane | Placeholder | Funding | \$30,000.00 | 22 | 4 |
| 113 | 2020 | Chestnut Valley - Willow Creek Lane | Placeholder | Funding | \$30,000.00 | 22 | 4 |
| 114 | 2020 | Cragmere Woods | Install closed drainage system | Funding | \$119,200.00 | 6 | 1 |
| 115 | 2020 | Dartmouth Woods - 2611 Abington Road | Placeholder | Funding | \$30,000.00 | 10 | 5 |
| 116 | 2020 | Dartmouth Woods - 31 Ross Road | Install swale and regrade yard to drain | Funding | \$19,500.00 | 10 | 5 |
| 117 | 2020 | Deerborne Woods - 47 Derrborne Trail | Placeholder | Funding | \$1,000.00 | 27 | 10 |
| 118 | 2020 | Duncan Woods - 3731 Wild Cherry Lane | Install closed drainage system | Funding | \$146,600.00 | 19 | 8 |
| 119 | 2020 | Edinburgh Villas - MacKenzie Court | Placeholder | Funding | \$40,000.00 | 5 | 13 |
| 120 | 2020 | Edinburgh Villas - MacTavish Court | Placeholder | Funding | \$40,000.00 | 5 | 13 |
| 121 | 2020 | Estates of Red Lion - 8 S. Gabriel Drive | Install closed drainage system | Funding | \$36,600.00 | 15 | 12 |
| 122 | 2020 | Exton - 2103 Exton Drive | Install closed drainage system | Funding | \$33,700.00 | 10 | 5 |
| 123 | 2020 | Fairfax Farms - Nenagh Drive | Re-grade rear yard | Funding | \$18,200.00 | 12 | 4 |
| 124 | 2020 | Faulkland Road Drainage | Placeholder | Funding | \$20,000.00 | 4 | 7 |
| 125 | 2020 | Forest Glen 2 - 312 Paddington Drive | Install closed drainage system | Funding | \$57,750.00 | 15 | 12 |
| 126 | 2020 | Four Seasons - Autumn Horseshoe Bend | Clean and regrade ditch | Funding | \$95,000.00 | 25 | 10 |
| 127 | 2020 | Gateway Townhomes - Beech Tree Lane | Placeholder | Funding | \$30,000.00 | 12 | 4 |
| 128 | 2020 | Harmony Hills - 208 Catalina Drive | Install swale and regrade yard to drain | Funding | \$24,400.00 | 21 | 9 |
| 129 | 2020 | Harvey Run - Nikhil Court | Install closed drainage system and underdrain | Funding | \$37,500.00 | 7 | 1 |
| 130 | 2020 | Heatherbrooke - East Heather Road | Placeholder | Funding | \$60,000.00 | 6 | 5 |
| 131 | 2020 | Hockessin Greene | Placeholder | Funding | \$50,000.00 | 22 | 4 |
| 132 | 2020 | Hockessin Valley Falls | Placeholder | Funding | \$10,000.00 | 22 | 4 |
| 133 | 2020 | Hunters Ridge - Entrance | Placeholder | Funding | \$30,000.00 | 22 | 4 |
| 134 | 2020 | Hunters Ridge - Haystack Drive | Placeholder | Funding | \$50,000.00 | 22 | 4 |
| 135 | 2020 | Hyde Run - 3316 Heritage Drive | Placeholder | Funding | \$20,000.00 | 4 | 7 |
| 136 | 2020 | Kirkwood Gardens - 2414 Hammond Place | Placeholder | Funding | \$25,000.00 | 19 | 7 |
| 137 | 2020 | Lamatan - Flint and Quartz Mill Roads | Placeholder | Funding | \$30,000.00 | 22 | 8 |
| 138 | 2020 | Llangollen Estates - 316 Wooddale Ave. | Placeholder | Funding | \$5,000.00 | 17 | 12 |
| 139 | 2020 | Manley - Robin Drive | Placeholder | Funding | \$20,000.00 | 22 | 4 |
| 140 | 2020 | Mariners Watch -157 & 159 Portside Court | Regrade area to drain | Funding | \$13,900.00 | 15 | 12 |
| 141 | 2020 | Marshallton Drainage Study | Study | Funding | \$60,000.00 | 19 | 7 |
| 142 | 2020 | Marshallton - Washington Avenue | Drainage improvements | Funding | \$175,000.00 | 19 | 7 |
| 143 | 2020 | Meadow Glen Ditch | Regrade ditch | Funding | \$22,500.00 | 27 | 12 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|---|---|---------|----------------------|-------------------------|---------------------|
| 144 | 2020 | Melody Meadows - Misty Court | Clean Ditch and Install Driveway Pipes | Funding | \$41,500.00 | 27 | 10 |
| 145 | 2020 | Melody Meadows - 53 Stardust Drive | Clean Ditch and Install Driveway Pipes | Funding | \$36,600.00 | 27 | 10 |
| 146 | 2020 | Milltown Road | Drainage improvements | Funding | \$80,000.00 | 21 | 9 |
| 147 | 2020 | Monterey Farms - 841 Reybold Drive | Clean ditch and install driveway pipes | Funding | \$42,700.00 | 5 | 13 |
| 148 | 2020 | Northcrest - 1812 Walter Drive | Regrade yard to drain | Funding | \$33,200.00 | 10 | 5 |
| 149 | 2020 | Oak Hill School Road - Ditch | Placeholder | Funding | \$40,000.00 | 11 | 14 |
| 150 | 2020 | Oak Lane Manor - 2104 Allendale Road | Placeholder | Funding | \$1,000.00 | 12 | 4 |
| 151 | 2020 | Pike Creek Road and Pennock Road | Install closed drainage system | Funding | \$85,000.00 | 21 | 9 |
| 152 | 2020 | Pleasant Valley Estates - 125 and 127 Bartley Road | Placeholder | Funding | \$30,000.00 | 27 | 10 |
| 153 | 2020 | Rising Sun Lane - Drainage Improvements | Regrade area and support railroad abutment | Funding | \$225,000.00 | 4 | 1 |
| 154 | 2020 | River Ridge - Villa Road | Placeholder | Funding | \$40,000.00 | 6 | 1 |
| 155 | 2020 | Rivers End - Bynum Place | Placeholder | Funding | \$1,000.00 | 18 | 11 |
| 156 | 2020 | Rockland Mills Pond | Placeholder | Funding | \$50,000.00 | 4 | 4 |
| 157 | 2020 | Rose Hill - 16 Crimson King Drive | Install ditch | Funding | \$13,600.00 | 27 | 10 |
| 158 | 2020 | Salem Woods - 9 Linette Court | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 159 | 2020 | Sedgley Farms - Stone Barn Lane | Placeholder | Funding | \$35,000.00 | 4 | 4 |
| 160 | 2020 | Sharpley - 722 to 726 Foulstone Road | Placeholder | Funding | \$50,000.00 | 12 | 4 |
| 161 | 2020 | Sherwood Forest Stream Restoration | Stream restoration | Funding | \$130,000.00 | 7 | 5 |
| 162 | 2020 | Shipleigh Road and Wilson Road Drainage | Placeholder | Funding | \$50,000.00 | 6 | 5 |
| 163 | 2020 | Simonds Gardens Park Drainage | Drainage improvements | Funding | \$243,500.00 | 16 | 2 |
| 164 | 2020 | Southwood - Slashpine Circle | Placeholder | Funding | \$15,000.00 | 22 | 8 |
| 165 | 2020 | Spring Creek - 246 Labrador Lane | Install closed drainage system | Funding | \$37,700.00 | 9 | 14 |
| 166 | 2020 | Stenning Woods - 302 Hadley Court | Placeholder | Funding | \$30,000.00 | 22 | 8 |
| 167 | 2020 | Stonefield - 21 Mica Street | Regrade ditch | Funding | \$37,500.00 | 9 | 14 |
| 168 | 2020 | Summer Hill - 2 Jaymar Drive | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 169 | 2020 | The Ridge - Sleepy Hollow Court | Install underdrain and grade | Funding | \$26,350.00 | 22 | 4 |
| 170 | 2020 | Timber Farms - Timber Wood Blvd. | Install underdrain and grade | Funding | \$34,100.00 | 26 | 11 |
| 171 | 2020 | Timber Farms - West Hummock Lane | Placeholder | Funding | \$50,000.00 | 26 | 11 |
| 172 | 2020 | Tybrook and Woodland Park Drainage Study | Study | Funding | \$25,000.00 | 4 | 7 |
| 173 | 2020 | Tybrook - Frann Road | Drainage improvements | Funding | \$6,000.00 | 4 | 7 |
| 174 | 2020 | Upper Pike Creek Road Stream Restoration | Placeholder | Funding | \$60,000.00 | 22 | 4 |
| 175 | 2020 | Villages at Fairview Farm - 19 Fairview Avenue | Placeholder | Funding | \$20,000.00 | 8 | 10 |
| 176 | 2020 | Village of Red Lion Creek | Placeholder | Funding | \$30,000.00 | 15 | 12 |
| 177 | 2020 | Weber Tract - Lloyd Place | Placeholder | Funding | \$40,000.00 | 10 | 5 |
| 178 | 2020 | Webster Farms - 1115 Webster Drive | Placeholder | Funding | \$20,000.00 | 6 | 5 |
| 179 | 2020 | Weldin Farms - 1506 Turkey Run Road | Regrade ditch | Funding | \$11,700.00 | 6 | 5 |
| 180 | 2020 | Wellington Hills - Pierson Drive | Placeholder | Funding | \$30,000.00 | 10 | 8 |
| 181 | 2020 | West Cedar Heights - 326 Clyde Street | Install closed drainage system | Funding | \$50,000.00 | 19 | 9 |
| 182 | 2020 | Westhaven - Willing Way | Placeholder | Funding | \$50,000.00 | 4 | 4 |
| 183 | 2020 | Westover Chase - Moorfield Turn | install closed drainage system | Funding | \$17,600.00 | 12 | 4 |
| 184 | 2020 | Westover Hills - 702 to 704 Hopeton Road | Install closed drainage system | Funding | \$82,000.00 | 4 | 4 |
| 185 | 2020 | Westover Hills - Hopeton Road | Clean ditch | Funding | \$23,900.00 | 4 | 4 |
| 186 | 2020 | Westover Woods - Sarah Court | Clean channel | Funding | \$18,100.00 | 26 | 11 |
| 187 | 2020 | Westridge - 512 Thorndale Drive | Install ditch | Funding | \$26,600.00 | 12 | 8 |
| 188 | 2020 | Windy Hill - 34 Ferncliff Drive | Placeholder | Funding | \$10,000.00 | 24 | 9 |
| 189 | 2020 | Woodland Run Pond | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 190 | 2020 | Yorklyn Ridge - 3 Yorkridge Trail | Install cutoff swale | Funding | \$63,100.00 | 12 | 4 |
| 191 | 2019 | 1109 Clayton Greenspring Road | Placeholder | Funding | \$1,000.00 | 11 | 14 |
| 192 | 2019 | 1163 Valley Road Drainage | install closed drainage system | Funding | \$20,200.00 | 12 | 4 |
| 193 | 2019 | 1515 Dexter Corner Road | Placeholder | Funding | \$1,000.00 | 11 | 14 |
| 194 | 2019 | 1920 Clayton Delaney Road | Repair Eerosion | Funding | \$12,500.00 | 11 | 14 |
| 195 | 2019 | Afton - 2603 Fairhope Road | install closed drainage system | Funding | \$45,500.00 | 10 | 5 |
| 196 | 2019 | Alapocas - 17 and 19 Alapocas Road | Install closed drainage system | Funding | \$32,000.00 | 4 | 4 |
| 197 | 2019 | Alapocas - Granite Road Drainage | Placeholder | Funding | \$1,000.00 | 4 | 4 |
| 198 | 2019 | Ashbourne Hills - 30 East Avon Drive | Placeholder | Funding | \$1,000.00 | 7 | 1 |
| 199 | 2019 | Augustine Ridge Drainage | Install closed drainage system | Funding | \$36,200.00 | 4 | 4 |
| 200 | 2019 | Black Diamond Road | Install closed drainage system | Funding | \$98,900.00 | 11 | 14 |
| 201 | 2019 | Breezewood - Noble Court & Newland Court | Placeholder | Funding | \$1,000.00 | 24 | 11 |
| 202 | 2019 | Brookmeade - 8 Waxwing Court | Install trench drain and closed drainage system | Funding | \$36,600.00 | 4 | 7 |
| 203 | 2019 | Chatam - 2401 Brookshire Drive | Placeholder | Funding | \$1,000.00 | 6 | 5 |
| 204 | 2019 | Chelsea Estates - 107 Talbot Drive | Placeholder | Funding | \$1,000.00 | 17 | 13 |
| 205 | 2019 | Christiana Village - Barnaby Street | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 206 | 2019 | City of Wilmington - Helen Chambers Playground Drainage | Placeholder | Funding | \$1,000.00 | 3 | 3 |
| 207 | 2019 | Covered Bridge Farms - 5 Trotters Turn | Placeholder | Funding | \$275,000.00 | 23 | 8 |
| 208 | 2019 | Estates of Red Lion | Clear and grade open space | Funding | \$10,000.00 | 15 | 12 |
| 209 | 2019 | Fairway Falls | Placeholder | Funding | \$1,000.00 | 21 | 4 |
| 210 | 2019 | Faulkland Woods - 2301 Woods Road | Install trench drain | Funding | \$66,400.00 | 4 | 7 |
| 211 | 2019 | Glen Berne Estates - 1601 Glenmore Drive | Placeholder | Funding | \$1,000.00 | 19 | 9 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|-------------|----------------------|-------------------------|---------------------|
| 212 | 2019 | Graylyn Crest - 1813 Jaybee Drive | Install closed drainage system | Funding | \$15,700.00 | 6 | 5 |
| 213 | 2019 | Gwinhurst - Laurel Avenue | Place trench drain and closed drainage system | Funding | \$40,000.00 | 7 | 1 |
| 214 | 2019 | Hickory Woods - 651 Clifton Drive | Placeholder | Funding | \$1,000.00 | 15 | 12 |
| 215 | 2019 | Hickory Woods - North Hickory Drive | Clean and regrade ditch | Funding | \$114,700.00 | 27 | 12 |
| 216 | 2019 | Lynnfield - Homewood Rd. and Ridgeland Rd. | Placeholder | Funding | \$1,000.00 | 6 | 5 |
| 217 | 2019 | Monterey Farms - 856 Reybold Drive | Regrade and clean ditch | Funding | \$32,900.00 | 5 | 13 |
| 218 | 2019 | Mt. Zion Cemetery Drainage | Placeholder | Funding | \$1,000.00 | 4 | 4 |
| 219 | 2019 | North Grant Avenue | Repave street to address drainage issues. | Funding | \$63,000.00 | 4 | 1 |
| 220 | 2019 | Oak Ridge - 3703 Oak Ridge Road | Reinstall swale and replace headwalls | Funding | \$88,000.00 | 22 | 4 |
| 221 | 2019 | Odessa National - 220 - 224 Alloway Place | Placeholder | Funding | \$1,000.00 | 9 | 14 |
| 222 | 2019 | Paper Mill Farms - 8 Ranch Court | Stabilize slopes | Funding | \$62,500.00 | 23 | 8 |
| 223 | 2019 | Pencader Village - Garvey Lane | Placeholder | Funding | \$1,000.00 | 25 | 10 |
| 224 | 2019 | Rambleton Acres Drainage | Clear area and install channel | Funding | \$158,000.00 | 5 | 13 |
| 225 | 2019 | Stoney Batter Condominium Drainage | Create two outfalls and stabilize eroded areas | Funding | \$36,500.00 | 22 | 4 |
| 226 | 2019 | Thornwood - Spur Ridge Court | Placeholder | Funding | \$1,000.00 | 27 | 10 |
| 227 | 2019 | Village of Lindell | Placeholder | Funding | \$1,000.00 | 21 | 9 |
| 228 | 2019 | Village of Red Lion Creek | Placeholder | Funding | \$1,000.00 | 15 | 12 |
| 229 | 2019 | Westwoods - 311 Blue Jay Drive | Install underdrain | Funding | \$29,600.00 | 12 | 4 |
| 230 | 2019 | Yorklynn - Center for the Creative Arts | Placeholder | Funding | \$1,000.00 | 8 | 4 |
| 231 | 2018 | Asbury Chase Drainage | Placeholder | Funding | \$1,000.00 | 9 | 12 |
| 232 | 2018 | Beau Tree Stormwater Pond | Stormwater pond rehabilitation | Funding | \$17,250.00 | 10 | 5 |
| 233 | 2018 | Brandywood - 2133 Brandywood Drive | Install closed drainage system | Funding | \$27,000.00 | 10 | 5 |
| 234 | 2018 | Cambridge Gardens - 24 Beacon Lane | Install closed drainage system | Funding | \$22,400.00 | 5 | 13 |
| 235 | 2018 | Cardiff - 3203 & 3205 Landsdowne Drive | Closed drainage system | Funding | \$10,950.00 | 10 | 5 |
| 236 | 2018 | Christ The Teacher Stormwater Pond | Placeholder | Funding | \$1,000.00 | 27 | 10 |
| 237 | 2018 | Christine Manor - 101 Mason Drive | Stabilize eroded area. | Funding | \$5,000.00 | 23 | 8 |
| 238 | 2018 | Colonial Woods - Brandywine Boulevard | Remove and replace deteriorated curb | Funding | \$50,000.00 | 12 | 5 |
| 239 | 2018 | Country Woods - 202 Timber Knoll Drive | Place swale | Funding | \$18,500.00 | 15 | 13 |
| 240 | 2018 | Fox Hunter Crossing - 401 Draper Drive | Install catch basin and regrade swale | Funding | \$22,500.00 | 8 | 10 |
| 241 | 2018 | Guyencourt Road Drainage | Placeholder | Funding | \$1,000.00 | 12 | 4 |
| 242 | 2018 | Heather Woods - 5 Pine Court | Install closed drainage system | Funding | \$18,200.00 | 26 | 11 |
| 243 | 2018 | Hickory Woods - Clifton Drive | Placeholder | Funding | \$1,000.00 | 15 | 12 |
| 244 | 2018 | Hockessin Glen Stormwater Pond | Placeholder | Funding | \$1,000.00 | 12 | 4 |
| 245 | 2018 | Holly Oak Terrace - 1217 Washington Place | Install concrete gutter | Funding | \$26,700.00 | 6 | 1 |
| 246 | 2018 | North Hills - Marsh Road - Brighton Road Drainage | Install closed drainage system | Funding | \$82,500.00 | 1 | 1 |
| 247 | 2018 | Northshire - Graywood Road | Placeholder | Funding | \$1,000.00 | 7 | 5 |
| 248 | 2018 | Pyles Lane and Pigeon Point Road Ditching | Placeholder | Funding | \$1,000.00 | 16 | 2 |
| 249 | 2018 | Springfields - Charles Drive | Placeholder | Funding | \$1,000.00 | 5 | 13 |
| 250 | 2018 | Sycamore Gardens - Brewster Drive | Clean and regrade ditch | Funding | \$16,700.00 | 24 | 9 |
| 251 | 2018 | Valley Run - Thistle Court | Placeholder | Funding | \$1,000.00 | 10 | 5 |
| 252 | 2018 | Village of Becks Pond - Becks Woods Road | Placeholder | Funding | \$1,000.00 | 15 | 12 |
| 253 | 2018 | Wellington Meadows - Cromell Court & St. Thomas Lane | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 254 | 2018 | Whethersfield - Daniels Place | Placeholder | Funding | \$1,000.00 | 18 | 13 |
| 255 | 2018 | Wrangle Hill Estates - 124 Carlotta Drive | Install a grass swale | Funding | \$7,150.00 | 15 | 12 |
| 256 | 2017 | Timber Farms - 623 Timber Wood Blvd. | Install closed drainage system | Funding | \$25,100.00 | 26 | 11 |
| 257 | 2017 | 3323 Silverside Road | Install closed drainage system | Funding | \$36,500.00 | 10 | 5 |
| 258 | 2017 | Devonshire - Rockfield Drive | Install closed drainage system | Funding | \$37,500.00 | 10 | 5 |
| 259 | 2017 | Drexel - 3210 Drexel Drive | Install closed drainage system | Funding | \$12,800.00 | 10 | 5 |
| 260 | 2017 | Fox Fire - Foxfire Drive | Stabilize eroded area | Funding | \$5,800.00 | 22 | 4 |
| 261 | 2017 | Massey's Church Tax Ditch | Tax ditch maintenance | Engineering | \$24,000.00 | 11 | 14 |
| 262 | 2017 | Drawyer's Branch Tax Ditch | Tax ditch maintenance | Engineering | \$60,000.00 | 8 | 10 |
| 263 | 2017 | Jefferson Farms Tax Ditch | Tax ditch maintenance | Engineering | \$20,000.00 | 16 | 2 |
| 264 | 2017 | 1038 Fieldsboro Road | Clean out ditch. Install crossroad pipes | Engineering | \$27,000.00 | 9 | 14 |
| 265 | 2017 | Bristol Place Drainage | Install closed drainage system | Funding | \$25,300.00 | 27 | 12 |
| 266 | 2017 | Caravel Farms - 255 Benjamin Drive | Grade and clean out ditch. | Funding | \$23,200.00 | 27 | 12 |
| 267 | 2017 | Caravel Farms - 5 Congress Drive | Grade and clean out ditch. | Funding | \$30,900.00 | 27 | 12 |
| 268 | 2017 | Castleshire - Dandenog Drive | Stabilize eroded areas | Funding | \$15,000.00 | 21 | 7 |
| 269 | 2017 | Ballymeade Drainage | Placeholder | Funding | \$1,000.00 | 10 | 5 |
| 270 | 2017 | Afton - Fairhope Road | Placeholder | Funding | \$1,000.00 | 10 | 5 |
| 271 | 2017 | Northgate | Placeholder | Funding | \$1,000.00 | 10 | 5 |
| 272 | 2017 | A-Street Ditch Project | Placeholder | Funding | \$1,000.00 | 16 | 2 |
| 273 | 2017 | Barretts Run Ponds | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 274 | 2017 | Becks Pond | Placeholder | Funding | \$1,000.00 | 26 | 11 |
| 275 | 2017 | Chapelcroft - Burnett Drive | Armor bank with rip rap | Funding | \$6,500.00 | 10 | 5 |
| 276 | 2017 | City of New Castle - Harmony Street | Placeholder | Funding | \$1,000.00 | 17 | 12 |
| 277 | 2017 | City of New Castle - Stuyvesant Avenue | Placeholder | Funding | \$1,000.00 | 16 | 12 |
| 278 | 2017 | City of New Castle - West Third Street | Placeholder | Funding | \$1,000.00 | 17 | 12 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|-------------|----------------------|--|-----------------------|
| 279 | 2017 | Cotswold Hills | Placeholder | Funding | \$1,000.00 | 22 | 8 |
| 280 | 2017 | Elmwood Pond | Placeholder | Funding | \$1,000.00 | 24 | 9 |
| 281 | 2017 | Grantchester Ponds | Study | Funding | \$5,000.00 | 22 | 8 |
| 282 | 2017 | Holly Oak Terrace - 3 Brookside Place | Replace failed pipe | Funding | \$20,500.00 | 6 | 1 |
| 283 | 2017 | Leatherems Run Improvements | Placeholder | Funding | \$1,000.00 | | |
| 284 | 2017 | Lukens Drive - Zenith | Placeholder | Funding | \$1,000.00 | 17 | 2 |
| 285 | 2017 | Owls Nest Road Drainage | Placeholder | Funding | \$1,000.00 | 12 | 4 |
| 286 | 2017 | Owls Ridge Pond | Placeholder | Funding | \$1,000.00 | 12 | 4 |
| 287 | 2017 | Perch Creek Ponds | Placeholder | Funding | \$1,000.00 | 27 | 10 |
| 288 | 2017 | Westbrite - Westbrite Court | Placeholder | Funding | \$1,000.00 | 10 | 5 |
| 289 | 2017 | Windy Hills - Dillwyn Road | Install underdrain | Funding | \$10,000.00 | 24 | 9 |
| 290 | 2017 | Woods Road Tax Ditch | Placeholder | Funding | \$1,000.00 | 15 | 12 |
| 291 | 2017 | 185 Blackbird Station Road | Placeholder | Funding | \$1,000.00 | 11 | 14 |
| 292 | 2017 | Brandywine Park Improvements | Placeholder | Funding | \$1,000.00 | 4 | 3 |
| 293 | 2017 | City of Wilmington Drainage Improvements | Drainage and flooding problems in Wilmington | Funding | \$0.00 | | |
| 294 | 2015 | Boxwood Road | Flood study | Study | \$10,000.00 | 13 | 7 |
| 295 | 2016 | Guthie Tax Ditch | Tax ditch maintenance | Engineering | \$55,000.00 | 27 | 10,12 |
| 296 | 2016 | Countryside Farms Tax Ditch | Tax ditch maintenance | Engineering | \$30,000.00 | 27 | 12 |
| 297 | 2016 | David's Corner Tax Ditch | Tax ditch maintenance | Engineering | \$102,000.00 | 9 | 14 |
| 298 | 2016 | 130 Upper Pike Creek Road | Flood study | Study | \$120,000.00 | 21 | 9 |
| 299 | 2016 | 600 N. DuPont Parkway | Install curb | Funding | \$12,500.00 | 17 | 12 |
| 300 | 2016 | Beacon Hill - East Court | Install closed drainage system | Funding | \$38,500.00 | 10 | 5 |
| 301 | 2016 | Channin - 2501 Ruthwell Road | Recommend a study | Funding | \$5,000.00 | 10 | 5 |
| 302 | 2016 | Christina River - Christiana Flood Study | Flood study | Funding | \$42,000.00 | 18 | 13 |
| 303 | 2016 | Country Creek - 444 Barley Drive | Extend sump pump discharge to existing system | Funding | \$8,100.00 | 26 | 11 |
| 304 | 2016 | Coventry - Dunsinane Drive | Install closed drainage system | Funding | \$25,400.00 | 18 | 13 |
| 305 | 2016 | Governor Printz & Rolling Road | Install closed drainage system | Funding | \$39,000.00 | 6 | 1 |
| 306 | 2016 | Harmony Hills - Kingsley Drive | Install closed drainage system | Funding | \$44,000.00 | 21 | 9 |
| 307 | 2016 | Norwegian Woods - Penney Lane | Install trench drain | Funding | \$13,000.00 | 26 | 11 |
| 308 | 2016 | Rolling Meadows - 900 & 902 Clydesdale Drive | Clean and restore drainage ditch | Funding | \$24,800.00 | 15 | 12 |
| 309 | 2016 | Rolling Meadows - 908 Clydesdale Drive | Replace driveway pipe | Funding | \$5,500.00 | 15 | 12 |
| 310 | 2016 | Rutherford - 4 Rolling Drive | Install closed drainage system | Funding | \$74,000.00 | 18 | 9 |
| 311 | | LITTLE MILL CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$2,750,000.00 | 2,3,4,12,13,19 | 3,4,7 |
| 312 | | NAAMANS CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$750,000.00 | 7,10 | 15 |
| 313 | | NAAMANS WATERSHED PROJECTS | PROJECTS IDENTIFIED IN THE NAAMANS CREEK FLOOD ABATEMENT STUDY | Funding | \$100,000.00 | 7,10 | 1,5 |
| 314 | | RED CLAY CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$250,000.00 | 4,12,21,22 | 4,7,8,9 |
| 315 | | WHITE CLAY CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED | Funding | \$250,000.00 | 21,22,23,24,25 | 4,7,8,9 |
| 316 | | PIKE CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$147,000.00 | 12,17,18,19,21,22,24 | 4,7,8,9 |
| 317 | | SHELLPOT CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$1,100,000.00 | 1,2,6,7,10,12 | 1,2,5 |
| 318 | | SHELLPOT CREEK- STORM WATER MANAGEMENT | DEVELOP LAND FOR STORMWATER CONTROL | Funding | \$2,000,000.00 | 1,2,6,7,10,12 | 1,2,5 |
| 319 | | CHRISTINA CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$300,000.00 | 2,3,4,5,12,13,16,17,18,19,23,24,25,26,27 | 2,3,7,8,9,10,11,12,13 |
| 320 | | DRAGON RUN CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$150,000.00 | 12,22 | 4,8 |
| 321 | 2012 | 2217 Pleasant Valley Road | Channel erosion and cleaning | Funding | \$25,000.00 | 27 | 10 |
| 322 | 2003 | ABSALOM JONES DRAINAGE PHASE II | WALL REPAIR AND DRAINAGE IMPROVEMENTS OUTLETTING TO STREAM UNDER CEDAR AVE | Planning | \$700,000.00 | 19 | 9 |
| 323 | | WILMINGTON SOUTH DRAINAGE | DRAINAGE PROBLEMS IN WATERSHED | Planning | \$250,000.00 | 16 | 2 |
| 324 | 2003 | MILL CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$300,000.00 | 12,19,21,22 | 4,7,8,9 |
| 325 | 2006 | RIVER PARK CONDOMINIUM 1100 LORE AVENUE | STABILIZE DRAINAGE CHANNEL WITH BOULDER WALL AND RIPRAP | Funding | \$87,000.00 | 6 | 1 |
| 326 | 2004 | WILMINGTON - WEBB ST. | STUDY FLOODING PROBLEMS | Funding | \$1,450,000.00 | 3,4 | 1,3,4 |
| 327 | 2014 | Brairwood - Briar Road | Install closed drainage system that ties into DelDOT's syste. | Funding | \$26,650.00 | 6 | 5 |
| 328 | 2014 | Caravel Farms - West Savannah Drive | Recommend a study be done. | Funding | \$37,200.00 | 27 | 12 |
| 329 | 2014 | Devon - Rosetree Court | Install inlets with pipe. | Funding | \$26,200.00 | 10 | 5 |
| 330 | 2014 | Elwin Manor - Godwin Drive | Erosion Repair at pipe outlet | Funding | \$14,500.00 | 25 | 10 |
| 331 | 2014 | Jamison Corner Road | Placeholder | Funding | \$1,000.00 | 9 | 12 |
| 332 | 2014 | Naamans Creek - Brandywine LL | Modify drainage system to correct problem. | Funding | \$250,000.00 | 10 | 5 |
| 333 | 2014 | Post & Rail Farms - Old School House Road | Install swales to convey runoff to DelDOT's system. | Funding | \$26,700.00 | 8 | 10 |
| 334 | 2014 | Sharpley - Whitby Road | Replace curb and install 2 new drainage inlets | Funding | \$32,288.00 | 12 | 4 |
| 335 | 2014 | Shellpot Creek - Flood/Drainage Study Cardiff, Woodbine and Tarleton | Study for FEMA Map Revision | Funding | \$24,300.00 | 10 | 5 |
| 336 | 2014 | St. Georges Heights - Hybridge Avenue | Redirect swale to Colton Meadows. | Funding | \$18,500.00 | 9 | 14 |
| 337 | 2014 | The Oaks - Split Rail Lane | Clear & grub invasives. Needs wetlands permit | Funding | \$12,400.00 | 26 | 11 |
| 338 | 2014 | Wilmington - 9th Avenue | Repair catch basin | Funding | \$4,500.00 | 2 | 3 |
| 339 | 2014 | Wilmington Marsh Wetlands Project | Wetland rehabilitation | Funding | \$100,000.00 | 2 | 3 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|---|---------|----------------------|-------------------------|---------------------|
| 340 | 2014 | Woodburne - Wildfire Lane | Install closed drainage system | Funding | \$30,200.00 | 5 | 13 |
| 341 | 2015 | 2018 Marsh Road | Remove and replace failed pipe and catch basin. | Funding | \$14,900.00 | 7 | 5 |
| 342 | 2015 | Brandywood - Valley Avenue | Install closed drainage system | Funding | \$37,900.00 | 10 | 5 |
| 343 | 2015 | Brennan Estates - Sarah Circle | Install underdrain along Sarah Court | Funding | \$62,000.00 | 27 | 10 |
| 344 | 2015 | Chalfonte - Landon Drive | Install closed drainage system. | Funding | \$44,500.00 | 10 | 5 |
| 345 | 2015 | Chestnut Hills Estates - 66 E. Stephen Drive | Clean out channel, remove tree and sediment | Funding | \$37,900.00 | 24 | 11 |
| 346 | 2015 | Christiana - E. Main Street | Study on flooding conditions in Christiana. | Funding | \$50,000.00 | 18 | 13 |
| 347 | 2015 | Christiana Green - Old Baltimore Pike | Placeholder | | \$1,000.00 | 26 | 11 |
| 348 | 2015 | Fairway Falls - Stream Stabilization | Stream Stabilization | Funding | \$210,000.00 | 21 | 4 |
| 349 | 2015 | Grantchester - Findall Drive | Placeholder | | \$1,000.00 | 22 | 8 |
| 350 | 2015 | Hillcrest - Beverly Place | Install swale in back yard. | Funding | \$10,400.00 | 6 | 1 |
| 351 | 2015 | Magazine Ditch | Placeholder | | \$1,000.00 | 16 | 2 |
| 352 | 2015 | Marrows Road - Marrows Court-Chaucer Drive | Study with City of Newark | Funding | \$50,000.00 | 24 | 11 |
| 353 | 2015 | Marshallton Heights - Overlook Avenue | Clear & grub ditch remove sediment and armor with riprap. | Funding | \$29,500.00 | 19 | 7 |
| 354 | 2015 | New Castle - Battery Park | Drainage improvements in the park | Funding | \$25,000.00 | 17 | 12 |
| 355 | 2015 | Old Baltimore Pike (1205 & 1211) | Stabilize channel with riprap. | Funding | \$29,900.00 | 25 | 10 |
| 356 | 2015 | Pleasant Hills - Kentucky Avenue | Install closed drainage system that ties into DelDOTs. | Funding | \$65,000.00 | 19 | 9 |
| 357 | 2015 | Red Mill Farms - 14 to 20 Andries Road | Repair erosion with bank stabilization. | Funding | \$62,900.00 | 24 | 9 |
| 358 | 2015 | Rutherford - 123 & 125 Rolling Drive | Install closed drainage system. | Funding | \$61,600.00 | 18 | 9 |
| 359 | 2015 | Saint Georges - Church Street | Replace driveway pipe and regrade as needed. | Funding | \$13,600.00 | 15 | 12 |
| 360 | 2015 | Upper Pike Creek Road | Study on flooding conditions. | Funding | \$36,000.00 | 22 | 4 |
| 361 | 2015 | Vineyards Maintenance Corporation | Install underdrain from rear yard to existing catch basin. | Funding | \$12,800.00 | 7 | 5 |
| 362 | 2015 | Wilmington - 2401 Paper Lane | Placeholder | | \$1,000.00 | 10 | 5 |
| 363 | 2015 | Wilton - 19 Blyth Court | Placeholder | | \$1,000.00 | 18 | 13 |
| 364 | 2015 | Windy Hills -314 North Dillwyn Road | Install slot drain and outlet into back yard. | Funding | \$18,000.00 | 24 | 9 |
| 365 | 2016 | 1010 Red Lion Road | Placeholder | | \$1,000.00 | 15 | 12 |
| 366 | 2016 | 130 Upper Pike Creek Road | 520 ft. of stream bank stabilization. | Funding | \$120,000.00 | 21 | 9 |
| 367 | 2016 | 202 East 6th Street | Placeholder | | \$1,000.00 | 16 | 12 |
| 368 | 2016 | 600 N. DuPont Parkway | Install curb | Funding | \$12,500.00 | 17 | 12 |
| 369 | 2016 | 770 Blackbird Station Road | Placeholder | | \$1,000.00 | 11 | 14 |
| 370 | 2016 | Addicks Estates - 26 Marion Avenue | Placeholder | | \$1,000.00 | 10 | 1 |
| 371 | 2016 | Anglesey - Harlech Drive | Placeholder | | \$1,000.00 | 4 | 7 |
| 372 | 2016 | Beacon Hill - East Court | Closed drainage system to tie-in roof drains | Funding | \$38,500.00 | 10 | 5 |
| 373 | 2016 | Benton - 15 Benton Court | Install closed drainage system | Funding | \$38,000.00 | 10 | 5 |
| 374 | 2016 | Brandywine Falls Raceway Rehabilitation | Repair raceway | Funding | \$90,000.00 | 4 | 1 |
| 375 | 2016 | Christianstead Pedestrian Bridge | STABILIZE STREAM BANKS WITH RIPRAP | Funding | \$45,000.00 | 23 | 8 |
| 376 | 2016 | Commodore Estates II - 106 Bakerfield Drive | Placeholder | | \$1,000.00 | 9 | 12 |
| 377 | 2016 | Dunleith - Bunche Blvd | Placeholder | | \$1,000.00 | 16 | 2 |
| 378 | 2016 | Dunleith - Morehouse Drive | Placeholder | | \$1,000.00 | 16 | 2 |
| 379 | 2016 | Dunleith - Oval Circle | Placeholder | | \$1,000.00 | 16 | 02 |
| 380 | 2016 | Grande View Farms - Bullen Drive | Clean ditch | | \$100,000.00 | 9 | 10 |
| 381 | 2016 | Woodland Park - Glenoak Road | Drainage study | Study | \$50,000.00 | 4 | 7 |
| 382 | 2016 | Woodrose - Rose Circle | Stabilize banks | Funding | \$460,000.00 | 21 | 9 |
| 383 | | CALF RUN WATERSHED | STUDY BANK STABILIZATION PROBLEMS AND IMPLEMENT SOLUTIONS | Funding | \$250,000.00 | 15 | 12 |
| 384 | | BRIDLESHIRE FARMS | DESIGN AND CONSTRUCT SECONDARY SPILLWAY TO POND | Funding | \$200,000.00 | 10 | 1 |
| 385 | | ARMY CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$50,000.00 | 19 | 7 |
| 386 | | BRANDYWINE CREEK WATERSHED | SEDIMENT CONTROL | Funding | \$120,000.00 | 5,17,18 | 1,2,13 |
| 387 | | BUTTONWOOD CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA -TIDE GATE REPLACEMENT | Funding | \$217,500.00 | 1,2,4,6,10,12 | 1,2,3,4 |
| 388 | | BACK CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$500,000.00 | 16,17 | 2 |
| 389 | | AUGUSTINE CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$50,000.00 | 22 | 8 |
| 390 | | Red Clay Creek Watershed - Hyde Run | Streambank stabilization & erosion control for water quality | Funding | \$50,000.00 | 16 & 17 | 2 & 12 |
| 391 | 2013 | Rogers Road - Community Presbyterian Church | Remove sediment and debris from the pond along with increasing the ponds capacity | Funding | \$168,000.00 | 16 | 2 |
| 392 | 2013 | Chelsea Estates - Mark Drive/Louise Road | Install underdrain to intercept spring that freezes on roadway. | Funding | \$71,200.00 | 17 | 13 |
| 393 | 2013 | Hockessin Valley Falls - Peoples Way | Realign, reshape and stabilize existing channel. | Funding | \$23,300.00 | 22 | 4 |
| 394 | 2013 | Wilmington - 6 to 12 Main Street | Eliminate drainage problem in street. | Funding | \$76,700.00 | 4 | 4 |
| 395 | 2013 | Alapocas - Edgewood Road | Placeholder | | \$1,000.00 | 4 | 4 |
| 396 | 2012 | 1117 Bohemia Mill Road | Drainage problem | Funding | \$110,500.00 | 8 | 10 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|---------|----------------------|-------------------------|---------------------|
| 397 | 2012 | 3097 New Castle Avenue | Redefine and improve drainage flow adjacent to 3097 and install closed drainage system behind units 233 to 239 Mansion Parkway | Funding | \$40,800.00 | 16 | 2 |
| 398 | 2012 | 3110 Old Limestone Road | Install closed drainage system of pipe and inlets from existing DelDOT C.B. | Funding | \$42,600.00 | 21 | 9 |
| 399 | 2012 | Caravel Woods - 102 Savannah Drive | Reconstruct roadside swale | Funding | \$9,600.00 | 27 | 12 |
| 400 | 2012 | Chalfonte - 2305 Berwyn Drive | Install pipe system with inlets & connect rear roof drains. | Funding | \$15,450.00 | 10 | 5 |
| 401 | 2012 | Chatham - 1204 Windon Drive | Redirect sump pump outlet to DelDOT's drainage system. | Funding | \$15,000.00 | 6 | 5 |
| 402 | 2012 | Chestnut Hills Estates - Merion & Davies | Clear & grub, remove sediment and replace any damaged concrete gutter | Funding | \$48,500.00 | 24 | 11 |
| 403 | 2012 | Christiana Green - 504 Blacksmith Lane | Construct swale in backyards of 506, 504, 502 & 500 and adjust fences. | Funding | \$5,100.00 | 26 | 11 |
| 404 | 2012 | Elmwood - Marie Court & Spectrum Drive | Install 2 lawn inlets with underdrain that ties into existing C.B. Repair C.B. | Funding | \$25,500.00 | 24 | 11 |
| 405 | 2012 | English Creek - 1993 Carol Drive | Install underdrain under curb. | Funding | \$28,850.00 | 21 | 9 |
| 406 | 2007 | GEORGE READ VILLAGE | FENCE REPAIRS | Funding | \$6,500.00 | 25 | 8 |
| 407 | 2006 | GRANDE VIEW FARMS-WELLINGTON WAY | REESTABLISH DRAINAGE DITCH AND ALIGN TO PIPE CROSSING OF RT. 13 | Funding | \$19,100.00 | 9 | 12 |
| 408 | 2012 | Gears Acres - 923 Gears Corner Road | Drainage & swale improvements | Funding | \$11,800.00 | 11 | 14 |
| 409 | 2012 | Hillcrest - 305 & 307 Woodside Avenue | Install berm with swale and concrete curb. | Funding | \$22,150.00 | 6 | 1 |
| 410 | 2012 | Hockessin Valley Falls - 502 Wilson Drive | Replace with larger pipe | Funding | \$37,000.00 | 22 | 4 |
| 411 | 2005 | HYDE PARK | FLOODING PROBLEMS IN AREA | Funding | \$150,000.00 | 19 | 7 |
| 412 | 2012 | Lakeside at Riversedge - 107 Einstein Drive | Line channel from Providence Drive to pond with riprap. Permit may be required. | Funding | \$30,800.00 | 18 | 11 |
| 413 | 2012 | Lancashire - Inwood Road | Parcels being considered for flood remediation. | Funding | \$1,280,000.00 | 7 | 5 |
| 414 | | New Castle County Flood Studies | Flood studies to revise poorly mapped floodplains in New Castle County | Funding | \$250,000.00 | 5 | 13 |
| 415 | 2012 | Old Kennett Road near Way Road | Install underdrain | Funding | \$12,600.00 | 12 | 9 |
| 416 | 2008 | PLEASANT VALLEY FARMS - FERRIS COURT | REALIGN AND STABILIZE A SECTION OF MUDDY RUN | Funding | \$136,600.00 | 27 | 10 |
| 417 | 2012 | Ramblewood Pond | Water quality assessment & improvement project | Funding | \$175,000.00 | 10 | 5 |
| 418 | 2012 | Salem Woods - 1 White Drive | Debris pit remediation | Funding | \$100,000.00 | 26 | 11 |
| 419 | 2009 | SHIPLEY ROAD - 1501 | INSTALL A GRASS SWALL FROM A NEW DELDOT VALLEY GUTTER ACROSS TO THE EXISTING STREAM | Funding | \$13,180.00 | 6 | 5 |
| 420 | 2012 | Stockdale - 11 Palace Drive | Construct swale with berm behind 11 Palace Drive & adjacent properties. | Funding | \$29,900.00 | 7 | 1 |
| 421 | 2012 | Sunset Lake - Sediment Control & Habitat Enhancement | Water quality | Funding | \$225,000.00 | 24 | 10 |
| 422 | 2012 | Sycamore Gardens - 3 Medill Lane | Install underdrain under sidewalk | Funding | \$17,000.00 | 24 | 5 |
| 423 | 2012 | The Timbers - 7 Magnolia Court | Remove and replace damaged sections of concrete channel. | Funding | \$13,000.00 | 10 | 5 |
| 424 | 2012 | Thornwood - 2 Hazelwood Drive | Request letter was dated June 16, 2010, but was received Oct. 4, 2010. | Funding | \$21,800.00 | 25 | 10 |
| 425 | 2012 | Village of Lindell - 2315 & 2313 St. Francis Street | Repair or replace deteriorated timber retaining wall. | Funding | \$71,000.00 | 21 | 9 |
| 426 | 2012 | Wedgewood - 128 Dutton Court | Install basin with pipe connection to existing basin | Funding | \$14,700.00 | 18 | 13 |
| 427 | 2012 | Weldin Wood - Weldin Circle Drainage | Install closed drainage system. | Funding | \$99,700.00 | 6 | 5 |
| 428 | 2012 | Willow Run - 10 Harrow Place | Construct swale/berm | Funding | \$6,200.00 | 13 | 7 |
| 429 | 2012 | Brookside - Keller Road | Clear & regrade swale | Funding | \$38,000.00 | 24 | 11 |
| 430 | 2007 | DIXIE LINE ROAD - NORTH OF I-95 | RESOLVE FLOODING ISSUES | Funding | \$25,000.00 | 25 | 10 |
| 431 | | DEBRIS PITS | DEBRIS PIT REMEDIATION | | \$150,000.00 | | |
| 432 | | RUTHERFORD - W. RUTHERFORD DR. #102-#104 | SOLUTION TO BE DETERMINED | Funding | \$13,000.00 | 18 | 9 |
| 433 | 2004 | ROSEVILLE PARK - BOXWOOD AVENUE | RECONSTRUCT BOXWOOD AVE. BETWEEN OAK AVE. AND CHESTNUT AVE. | Funding | \$134,000.00 | 21 | 9 |
| 434 | 2010 | ROBSCOTT MANOR 36 & 38 GILL DRIVE | REPLACE DRIVEWAY PIPE AT EAST CHESTNUT HILL ROAD | Funding | \$26,800.00 | 25 | 12 |
| 435 | 2006 | ROLLING MEADOWS-HACKNEY DRIVE | INSTALL PIPE IN ROAD SIDE SWALE | Funding | \$15,400.00 | 15 | 12 |
| 436 | 2006 | NAAMANS MANOR - VALLEY & CLEARVIEW AVES | INSTALL CURBING AND CLOSED SYSTEM FOR DRAINAGE CONTROL | Funding | \$93,400.00 | 7 | 5 |
| 437 | 2007 | NAAMANS MANOR - VALLEY AVENUE #2204 | SOLUTION TO BE DETERMINED | Funding | \$66,800.00 | 7 | 5 |
| 438 | 2005 | RIVERS END WEST DRIVE | REPLACE CURB TO PROPER GRADE TO PREVENT RUNOFF ONTO DRIVEWAY | Funding | \$20,500.00 | 5 | 11 |
| 439 | 2008 | BARLEY MILL COURT STREAM STABILIZATION | STREAM IMPROVEMENTS | Funding | \$105,000.00 | 12 | 4 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|---------|----------------------|-------------------------|---------------------|
| 440 | 2007 | ARDEN - MARSH ROAD | INSTALL DRAINAGE SYSTEM TO CONTROL RUNOFF FROM MARSH ROAD | Funding | \$83,200.00 | 7 | 5 |
| 441 | 2005 | RIVERS END EAST DRIVE | INSTALL UNDERDRAINS AND CATCH BASINS TO RESOLVE DRAINAGE PROBLEMS IN YARD | Funding | \$20,800.00 | 5 | 11 |
| 442 | 2010 | RED CLAY WATERSHED SURFACE WATER CONSTROL FOR AI DUPONT HS | AREA TO BE REGRADED TO PROVIDE FOR POSITIVE RUNOFF | Funding | \$52,000.00 | 12 | 4 |
| 443 | 2011 | Buckingham Heights - 2116 Buckingham Road | Install closed drainage system behind homes. | Funding | \$28,200.00 | 7 | 5 |
| 444 | 2007 | BROOKSIDE - KENMAR DRIVE | REESTABLISH AND STABILIZE DRAINAGE DITCH | Funding | \$37,000.00 | 24 | 11 |
| 445 | 2006 | BROOKMEADE - SKYLARK ROAD | INSTALL CATCH BASINS AND PIPE IN STREET TO CONTROL SURFACE RUNOFF | Funding | \$17,700.00 | 4 | 7 |
| 446 | 2010 | Brookhaven - 45 to 71 Green Ridge Road | Install closed drainage system behind homes. | Funding | \$167,800.00 | 21 | 9 |
| 447 | 2007 | ROCKLAND - MT. LEBANON ROAD | DRAINAGE IMPROVEMENTS TO CONTROL FLOODING | Funding | \$350,000.00 | 12 | 4 |
| 448 | | CHESTNUT RUN | STUDY AND MODELING TO DEVELOP SOLUTIONS TO FLOODING | Funding | \$45,000.00 | 24 | 11 |
| 449 | 2006 | CANNONSHIRE-CANNON RUN #16 & #18 | INSTALL CLOSED DRAINAGE SYSTEM AND SWALE. CONNECT TO DELDOT | Funding | \$34,100.00 | 25 | 10 |
| 450 | 2008 | AIRPORT ROAD # 168 - # 174 | CONSTRUCT DETENTION POND AND LATERAL DITCHING TO CONTROL RUNOFF | Funding | \$153,000.00 | 17 | 13 |
| 451 | 2006 | ALBAN PARK - HOMESTEAD ROAD | REPLACE FAILED STORM SEWER SYSTEM | Funding | \$37,000.00 | 2 | 3 |
| 452 | | STONE CREEK WATERSHED | EROSION CONTROL ALONG STREAM | Funding | \$15,600.00 | 21 | 4 |
| 453 | | RED LION CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$50,000.00 | 5 | 13 |
| 454 | | PLUM RUN WATERSHED | EROSION AND STORMWATER CONTROL | Funding | \$125,000.00 | 1-13; 15-27 | 1,14 |
| 455 | | DRAWYERS CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$50,000.00 | 18 | 9 |
| 456 | 2009 | SOUTH WILMINGTON - CENTRAL PARK | REGIONAL STORMWATER MANAGEMENT STUDY | Funding | \$150,000.00 | 2 | 3 |
| 457 | 2008 | BECHTEL PARK - WALKING PATH BRIDGE | SOLUTION TO BE DETERMINED | Funding | \$36,600.00 | 10 | 5 |
| 458 | 2006 | BELLE TERRE | STORMWATER MANAGEMENT POND | Funding | \$50,000.00 | 12 | 4 |
| 459 | 2006 | BRANDYWINE SPRINGS MANOR-ADDISON DRIVE | INST. CLOSED DRAINAGE AND SWALE TO ELIMINATE BASEMENT FLOODING & EROSION | Funding | \$48,900.00 | 4 | 7 |
| 460 | 2006 | BREEZEWOOD II - W. SHADY DRIVE | EXTEND EXISTING PIPE. CONSTRUCT DRAINAGE INLET, INSTALL PROTECTION GRATE | Funding | \$19,500.00 | 24 | 11 |
| 461 | 2007 | BRANDYWOOD - VALLEY ROAD | FLOODPROOFING, BOULDER BANK STABILIZATION, SWALE CONSTRUCTION | Funding | \$66,800.00 | 10 | 5 |
| 462 | 2006 | BRANDYWOOD - MAJESTIC DRIVE | CONSTRUCT DRAINAGE SWALES TO DIRECT RUNOFF AWAY FROM HOUSE STRUCTURE | Funding | \$9,700.00 | 10 | 5 |
| 463 | 2007 | FAULKLAND ROAD # 2203 | INSTALL DRAINAGE SYSTEM TO ALLEVIATE RUNOFF ENTERING HOUSE | Funding | \$37,600.00 | 4 | 7 |
| 464 | 2003 | DUNLEITH - ANDERSON DR. | INSTALL UNDERDRAIN, CONNECT TO CB ON BUNCHE BOULEVARD | Funding | \$52,000.00 | 16 | 2 |
| 465 | 2009 | SOUTH WILMINGTON - WEST | NEIGHBORHOOD WIDE DRAINAGE ISSUES | Funding | \$200,000.00 | 16 | 2 |
| 466 | | SILVERBROOK RUN | STUDY FLOODING PROBLEMS | Funding | \$100,000.00 | 12 | 4 |
| 467 | 2008 | HARMONY WOODS - DIMINISH DRIVE #140 | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE STANDING WATER | Funding | \$28,800.00 | 18 | 9 |
| 468 | 2010 | HARMONY WOODS - DIMINISH DRIVE #150 | INSTALL CLOSED DRAINAGE SYSTEM BEHIND 148 & 150 | Funding | \$25,400.00 | 18 | 9 |
| 469 | 2008 | HARMONY WOODS - MINOR COURT | INSTALL CLOSED DRAINAGE SYSTEM IN REAR YARD. CONNECT TO DOT ON DIMINISH DR. | Funding | \$32,200.00 | 18 | 9 |
| 470 | 2008 | HARMONY WOODS - PIANO DRIVE # 106 | CONSTRUCT SWALES TO RELIEVE STANDING WATER | Funding | \$13,100.00 | 18 | 9 |
| 471 | 2006 | HARMONY HILLS - KINGSLEY DRIVE | INSTALL DRAINAGE SYSTEM IN REAR YARDS TO ELIMINATE FLOODING | Funding | \$44,400.00 | 21 | 9 |
| 472 | 2006 | HYDE RUN EROSION CONTROL | EROSION CONTROL AND STABILIZATION MEASURES | Funding | \$110,000.00 | 12 | 7 |
| 473 | 2005 | ELSMERE - TOWN WIDE | ANALYZE DRAINAGE INFRASTRUCTURE. SUGGEST IMPROVEMENTS TO REDUCE FLOODING | Funding | \$66,000.00 | 13 | 7 |
| 474 | 2006 | ELSMERE - LOCUST AVENUE | STUDY & DEVELOP SOLUTION TO DRAINAGE PROBS BEHIND 242 TO 268 LOCUST AVE. | Funding | \$15,000.00 | 13 | 7 |
| 475 | 2006 | COOPER FARMS - YALE ROAD | REPLACE EXISTING C&G WITH FULL HEIGHT C&G TO CONTROL RUNOFF FROM YALE ROAD | Funding | \$29,900.00 | 19 | 7 |
| 476 | 2005 | COOPER FARM - LOCUST ROAD #15 | INSTALL SWALE AND BERM TO DRICT RUNOFF FROM SCHOOL PROPERTY TO A JUNCTION BOX CONVERTED TO A CATCH BASIN | Funding | \$9,400.00 | 19 | 7 |
| 477 | 2006 | CHRISTIANA BRACE | STORMWATER MANAGEMENT POND | Funding | \$100,000.00 | 24 | 11 |
| 478 | 2005 | DELPARK MANOR - REESE COURT | INSTALL CLOSED DRAINAGE SYSTEM. CONNECT TO DELDOT | Funding | \$59,800.00 | 19 | 9 |
| 479 | 2005 | CEDARCREST | FLOOD DAMAGE REPAIRS | Funding | \$20,000.00 | 19 | 7 |
| 480 | 2006 | CHANNIN - RAMBLEWOOD DRIVE | REPLACE FAILED DRAINAGE SYSTEM | Funding | \$26,800.00 | 10 | 5 |
| 481 | 2006 | CHRISTIANA ACRES-MEADOW LANE | CLEAN AND RESHAPE TIDAL DRAINAGE DITCH | Funding | \$65,000.00 | 17 | 13 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|---------|----------------------|-------------------------|---------------------|
| 482 | 2008 | CARAVEL HUNT - RICE DR. | SOLUTION TO BE DETERMINED | Funding | \$14,700.00 | 15 | 12 |
| 483 | 2000 | WESTOVER HILLS- DRAINAGE- 5 LOCATIONS | STUDY OF DRAINAGE PROBLEMS IN WESTOVER HILLS | Funding | \$615,000.00 | 4 | 4 |
| 484 | 2006 | WESTOVER HILLS-WESTOVER CIRCLE | STUDY AND DEVELOP SOLUTIONS AND ESTIMATES TO CORRECT RETAINING WALL AND SLOPE FAILURES | Funding | \$71,000.00 | 4 | 4 |
| 485 | 2007 | WESTOVER HILLS - SECT. B | REPAIR /REPLACE DETERIORATED AND DAMAGED SIDEWALKS | Funding | \$31,100.00 | 4 | 4 |
| 486 | 2001 | WILMINGTON - ROCKFORD & IVY/BANCROFT MILLS | INVESTIGATE DRAINAGE AND POLLUTION PROBLEMS | Funding | \$80,000.00 | 4 | 1 |
| 487 | 2007 | PINE VALLEY FARMS - WHITE PINE DRIVE | REPLACE PIPE UNDER ROAD WITH ONE OF ADEQUATE CAPACITY | Funding | \$48,400.00 | 9 | 14 |
| 488 | 2006 | VILLAGE OF LINDELL - GREENWAY | CONSTRUCT GREENWAY PATH | Funding | \$427,400.00 | 21 | 9 |
| 489 | 2005 | SHELLBURNE DRAINAGE IMPROVEMENTS | CONST. STUDY SOLUTION TO DRAINAGE PROBS ON CARWELL, PASC10, SHELLBURNE | Funding | \$240,500.00 | 6 | 5 |
| 490 | 2007 | RADNOR GREEN - OSAGE ROAD | REESTABLISH SWALE WITH BERM ALONG SCHOOL PROPERTY TO CONTROL RUNOFF | Funding | \$80,800.00 | 7 | 1 |
| 491 | 2010 | OLD CAPITOL TRAIL - 4400 | REPAIR STREAM BANK EROSION | Funding | \$12,800.00 | 19 | 7 |
| 492 | 2009 | NEWPORT GAP PIKE - 3704 | RIPRAP PROTECTION AND WATER MANAGEMENT | Funding | \$68,000.00 | 22 | 4 |
| 493 | 2007 | MORNINGSIDE - MORNING GLEN LANE # 2 | REESTABLISH DRAINAGE DITCH AND STABILIZE WITH RIPRAP TO PREVENT EROSION | Funding | \$120,000.00 | 22 | 4 |
| 494 | 2009 | MORNINGSIDE - MORNING GLEN LANE # 30 | SOLUTION TO BE DETERMINED | Funding | \$16,200.00 | 22 | 4 |
| 495 | 2010 | SHIPLEY ROAD - 1919 | INSTALL RIPRAP PROTECTION AT CRITICAL POINTS ALONG BANK AND PIPE OUTLET | Funding | \$60,500.00 | 6 | 5 |
| 496 | 2007 | FOX WOODS - FOX DRIVE # 106 (REINSTATE) | INSTALL DRAINAGE SYSTEM TO RELIEVE BACKYARD FLOODING | Funding | \$22,500.00 | 24 | 9 |
| 497 | 2007 | GRAYLYN CREST - GRAYLYN ROAD | STABILIZE STREAM BANKS WITH RIPRAP | Funding | \$49,000.00 | 6 | 5 |
| 498 | 2006 | COLONIAL PARK-ATKINS AVENUE | INSTALL CLOSED DRAINAGE SYSTEM TO RELIEVE BACK YARD FLOODING AND PONDING | Funding | \$40,400.00 | 13 | 3 |
| 499 | 2006 | EDINBURGH VILLAS-SHETLAND WAY | INSTALL DRAINAGE SYSTEM IN REAR YARDS TO ELIMINATE STANDING WATER PROBLEMS | Funding | \$49,900.00 | 5 | 13 |
| 500 | 2009 | Fairfax - 201 Pinehurst Drive | Install closed pipe system with inlet. | Funding | \$26,000.00 | 12 | 4 |
| 501 | 2008 | MARSHALLTON - DUNCAN AND GREENBANK ROAD | REPLACE GUARDRAIL AND RETAINING WALL WITH CONCRETE CHANNEL AND DECORATIVE PARAPET | Funding | \$205,000.00 | 19 | 7 |
| 502 | 2008 | GREENBANK ROAD # 610 | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE BANK EROSION | Funding | \$24,400.00 | 19 | 7 |
| 503 | 2008 | HOCESSIN VILLAGE | IMPLEMENT STUDY RECOMMENDATIONS | Funding | \$100,000.00 | 20 | 4 |
| 504 | 2005 | LIMESTONE HILLS - GREENWAY | REPAIR AND RESURFACE GREENWAY PATH | Funding | \$110,000.00 | 20 | 8 |
| 505 | 2005 | HYDE PARK - DUNCAN ROAD | REMOVE AND REPLACE CURB TO PROPER GRADE. INSTALL CLOSED DRAINAGE SYSTEM | Funding | \$28,300.00 | 19 | 7 |
| 506 | 2005 | GREEN ACRES - GRINNELL ROAD | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE PONDING IN REAR YARD | Funding | \$27,000.00 | 6 | 5 |
| 507 | 2008 | LEXINGTON SQUARE - SENTRY LANE | REPAIR CATCH BASIN AND SINKHOLES. REGRADE SWALE | Funding | \$13,700.00 | 21 | 9 |
| 508 | 2004 | WOODLAND TRAILS - DEFOE CIRCLE | INSTALL U-DRAIN SYSTEM CONNECTING TO CB ON TAYLOR DR. TO SOLVE PONDING | Funding | \$85,500.00 | 18 | 11 |
| 509 | 2008 | STONEFIELD - BASALT STREET | CONSTRUCT DRAINAGE SWALE IN REAR YARDS FOR PROPER DRAINAGE | Funding | \$11,600.00 | 9 | |
| 510 | 2009 | Stratford - 33 E. Edinburgh Drive | Install swale & lawn inlets | Funding | \$21,000.00 | 17 | 13 |
| 511 | 2008 | WELDIN WOODS - WELDIN CIRCLE | INSTALL UNDERDRAIN AND SWALE TO DRAIN PROPERTY TO STREAM | Funding | \$77,700.00 | 6 | 5 |
| 512 | 2008 | STONEFIELD - OLIVINE CIR. | INSTALL CB AND PIPE TO DRAIN PONDING AREA | Funding | \$7,600.00 | 9 | 14 |
| 513 | 2006 | YORK FARMS-CORNWELL DRIVE | CLEAR VEGETATION AND INSTALL UNDERDRAIN TO ALLEVIATE ROAD ICING CONDITIONS | Funding | \$24,800.00 | 15 | 12 |
| 514 | 2006 | CHARTER OAKS 1 | STORMWATER MANAGEMENT POND | Funding | \$35,000.00 | 12 | 4 |
| 515 | 2005 | SOUTHWOOD | IMPI ENT STUDY SOLUTIONS FOR EROSION AND DRAINAGE PROBLEMS ON MILL CREEK | Funding | \$200,000.00 | 22 | 8 |
| 516 | 2006 | STUYVESANT HILLS | STORMWATER MANAGEMENT POND | Funding | \$100,000.00 | 12 | 4 |
| 517 | 2006 | MENDENHALL VILLAGE 1 | STORMWATER MANAGEMENT POND | Funding | \$250,000.00 | 22 | 4 |
| 518 | 2008 | MENDENHALL VILLAGE - BEECHWOOD CIRCLE TO TALL OAKS DRIVE | SOLUTION TO BE DETERMINED | Funding | \$10,800.00 | 22 | 4 |
| 519 | 2007 | FOULK WOODS - DEEPWOOD DRIVE | RESOLVE EROSION CONDITIONS | Funding | \$50,000.00 | 10 | 5 |
| 520 | 2008 | CANNONSHIRE - GENERAL MAXWELL COURT | SOLUTION TO BE DETERMINED | Funding | \$32,700.00 | 25 | 10 |
| 521 | 2008 | ADDICKS ESTATE 14 MARION AVE | INSTALL CURB & GUTTER WITH CLOSED DRAINAGE SYSTEM TO DIVERT RUNOFF | Funding | \$54,800.00 | 10 | 1 |
| 522 | 2008 | HARMONY WOODS - CORONET COURT # 5 | CONSTRUCT SWALE TO DRAIN STANDING WATER AREAS IN FRONT AND SIDE YARDS | Funding | \$14,800.00 | 18 | 9 |
| 523 | 2010 | HARMONY WOODS - HARMONY CREST DR. # 123 | INSTALL A CLOSED DRAINAGE SYSTEM | Funding | \$26,100.00 | 18 | 9 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|---|---------|----------------------|-------------------------|---------------------|
| 524 | 2007 | LUMS POND ESTATES III - HOPE COURT EAST | INSTALL DRAINAGE SYSTEM TO REDIRECT FLOW ALONG BACK OF PROPERTY | Funding | \$16,500.00 | 15 | 12 |
| 525 | 2008 | FAULKLAND WOODS - WOODS ROAD | INSTALL NEW ROAD DRAINAGE SYSTEM | Funding | \$357,000.00 | 4 | 7 |
| 526 | 2006 | THE MILLRACE (ROCKLAND) | DRAINAGE IMPROVEMENTS TO RESOLVE FLOODING PROBLEMS | Funding | \$344,400.00 | 10 | 4 |
| 527 | 2005 | WESTMINSTER | DETENTION BASIN | Funding | \$100,000.00 | 4 | 7 |
| 528 | 2006 | WESTGATE FARMS-WESTGATE DRIVE | INSTALL UNDERDRAIN SYSTEM, WITH INLETS, DISCHARGING INTO STREAM IN PARKLAND | Funding | \$75,700.00 | 4 | 7 |
| 529 | 2008 | WEBSTER FARMS - WEBSTER DRIVE #1119 - #1121 | INSTALL CLOSED SYSTEM TO RELIEVE FLOODING CONDITIONS | Funding | \$54,000.00 | 6 | 5 |
| 530 | 2006 | CLELAND HEIGHTS-CLELAND COURSE | PE TO EVALUATE FLOODING PROBLEMS AND DEVELOP SOLUTIONS | Funding | \$15,000.00 | 13 | 3 |
| 531 | 2005 | CONCORD MANOR - BETHEL STREET | INSTALL DRAINAGE SYSTEM TO RELIEVE BACK YARD PONDING | Funding | \$20,800.00 | 12 | 5 |
| 532 | 2007 | CONCORD MANOR - BROOKFIELD AVE. & MARIANNA DRIVE | STUDY TO DEVELOP SOLUTION TO FLOODING OF INTERSECTION | Funding | \$30,000.00 | 12 | 5 |
| 533 | 2008 | DARTMOUTH WOODS - STURBRIDGE DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE SUMP PUMP DISCHARGE INTO STREET | Funding | \$34,500.00 | 10 | 5 |
| 534 | 2002 | DEERHURST - PIERCE RD | INSTALL UNDERDRAIN AND CATCH BASINS | Funding | \$29,300.00 | 6 | 5 |
| 535 | 2008 | DEVONSHIRE - ALTAMONT DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO CONTROL RUNOFF DIRECTED AT BASEMENT WALL | Funding | \$12,500.00 | 10 | 5 |
| 536 | 2006 | DRUMMOND FARMS - DRUMMOND FARMS LANE | INSTALL SLOTTED DRAIN IN CURB AND BUILD CB TO ELIMINATE FREEZING WATER ON ROAD | Funding | \$39,400.00 | 22 | 4 |
| 537 | 2010 | MEADOWOOD - 118 FORSYTHIA DRIVE | INSTALL CLOSED DRAINAGE SYSTEM IN REAR YARDS. | Funding | \$20,900.00 | 21 | 9 |
| 538 | 2005 | LINDAMERE - NORTH RD | REMOVE PCC SLAB AND BUILD CATCH BASIN | Funding | \$7,400.00 | 6 | 1 |
| 539 | 2007 | HOCKESSIN HUNT - BRIDLE PATH EAST | REDEFINE AND STABILIZE DRAINAGE CHANNEL | Funding | \$17,400.00 | 22 | 4 |
| 540 | 2006 | HICKORY WOODS - CHRISSEY COURT & SHAGBARK COURT | REESTABLISH DRAINAGE SWALE | Funding | \$48,500.00 | 27 | 12 |
| 541 | 2006 | GREEN VALLEY-6TH STREET | CONSTRUCT SWALE TO CONVEY RUNOFF OUT OF REAR YARDS | Funding | \$11,800.00 | 21 | 9 |
| 542 | 2008 | MIDDLETOWN-SLOOP LANE | INSTALL CLOSED DRAINAGE SYSTEM WITH DROP STRUCTURES TO CHECK EROSION | Funding | \$34,000.00 | 9 | 10 |
| 543 | 2006 | MILLCREEK ROAD # 2802 | INSTALL UNDERDRAIN SYSTEM TO CONTROL SPRING ACTIVITY | Funding | \$14,900.00 | 21 | 7 |
| 544 | 2010 | 1125 Old Baltimore Pike | Install lawn inlet in back yard of 704 Springcreek Ct. with pipe that outlets into SWMP | Funding | \$12,700.00 | 25 | 10 |
| 545 | 2006 | ASHBOURNE HILLS - 8 RUBY DRIVE | REPLACE FAILED STORM SEWER PIPE. INSTALL CB TO CONTROL STREET RUNOFF | Funding | \$15,000.00 | 7 | 1 |
| 546 | 2008 | BELLEFONTE - PROSPECT AVENUE | IMPLEMENT STREAM STABILIZATION AND EROSION CONTROL MEASURES | Funding | \$58,600.00 | 6 | 1 |
| 547 | 2006 | BELLEFONTE-BEESON ROAD | INSTALL CLOSED DRAINAGE SYSTEM TO RELIEVE BASEMENT AND GARAGE FLOODING | Funding | \$47,300.00 | 6 | 1 |
| 548 | 2006 | BRANDON-SMITH LANE | INSTALL CLOSED SYSTEM TO ELIMINATE PONDING IN REAR YARD OF 2313 SMITH LN. | Funding | \$30,700.00 | 10 | 5 |
| 549 | 2005 | POSSUM HOLLOW ROAD | SURVEY, INVESTIGATE, AND PREPARE PLANS AND ESTIMATES FOR DRAINAGE IMPROVEMENTS | Funding | \$30,000.00 | 21 | 8 |
| 550 | 2006 | NORTHCREST - WALTER DRIVE | INSTALL SWALE TO DRAIN REAR YARDS | Funding | \$24,800.00 | 10 | 5 |
| 551 | 2006 | SCOTTFIELD - BROADFIELD DRIVE | INSTALL CLOSED DRAINAGE SYSTEM WITH SWALES TO RELIEVE PONDING | Funding | \$15,500.00 | 24 | 11 |
| 552 | 2004 | VALLEY RUN - BUTTERNUT LANE | INSTALL CLOSED DRAINAGE SYSTEM ALONG VALLEY | Funding | \$14,000.00 | 10 | 5 |
| 553 | 2006 | WEMBLEY-WEMBLEY DRIVE | INSTALL COMBINED DRAINAGE/UNDERDRAIN SYSTEM TO SOLVE SPRING & ICING PROBS. | Funding | \$39,100.00 | 7 | 1 |
| 554 | 2006 | WESTWOOD MANOR-BEECHWOOD DRIVE | REPLACE FAILED DRAINAGE SYSTEM | Funding | \$30,300.00 | 7 | 5 |
| 555 | 2006 | WOODMILL II-W. WOODMILL DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO CONTROL RUNOFF | Funding | \$24,900.00 | 21 | 9 |
| 556 | 2005 | EAGLE GLEN-WINBURNE DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE SWALE DISCHARGE ONTO PAVEMENT | Funding | \$10,800.00 | 18 | 13 |
| 557 | 2008 | EDENRIDGE - MT. LEBANON ROAD # 721 | INSTALL CATCH BASIN AND PIPE TO DRAIN LOW AREA IN REAR YARD | Funding | \$41,000.00 | 12 | 4 |
| 558 | 2007 | HICKMAN ROAD | CONSTRUCT CURB AND SIDEWALK ALONG HICKMAN RD. | Funding | \$33,200.00 | 10 | 1 |
| 559 | 2008 | THE TIMBERS - MAGNOLIA COURT | INSTALL CATCH BASIN AND PIPE TO ELIMINATE PONDING IN LOW AREA OF CURB | Funding | \$19,600.00 | 10 | 5 |
| 560 | 2004 | WOODS - SIOUX COURT | INSTALL U-DRAIN TO RELIEVE PONDING. CONNECT TO DELDOT. | Funding | \$17,000.00 | 18 | 9 |
| 561 | 2012 | DuRoss Heights | | Funding | \$225,000.00 | 17 | 13 |

Prioritized Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|---|------|---|---|----------|----------------------|-------------------------|---------------------|
| 562 | 2005 | WEST BRANCH -EAST MILL STATION DRIVE | STUDY AND DEVELOP AND IMPLEMENT SOLUTION FOR STABILIZING FAILING BOULDER RETAINING WALL | Funding | \$220,320.00 | 23 | 8 |
| *E | | Woodland Run - 12 Buttonwood Court | Place topsoil in low area & regrade to drain. | Funding | \$2,600.00 | 22 | 4 |
| E | | CANNONSHIRE-CANNON RUN #41-#43 | REPLACE FAILED CURB | Funding | \$2,100.00 | 6 | 1 |
| E | | Chestnut Hills Estates - 13 to 17 E. Stephens Drive | Install closed drainage system behind 13, 15 & 17 E. Stevens Drive | Funding | \$71,000.00 | 18 | 9 |
| E | | Deer Run Road - 145 | Replace three driveways with elliptical arch pipes. | Funding | \$160,000.00 | 18 | 9 |
| E | | FAIRWINDS - GREEN STREET | SOLUTION TO BE DETERMINED | Funding | \$90,000.00 | 4 | 7 |
| E | | LIFTWOOD - WELDIN ROAD | PLACE TOPSOIL, REGRADE, SEED & MULCH TO ELIMINATE LOW AREAS IN FRONT YARD | Funding | \$14,000.00 | 4 | 7 |
| E | | Linden Heath - 6 Inverness Court | Construct a grass swale along side yard thru to back yard and 3LBGC open space. | Funding | \$13,500.00 | 4 | 7 |
| E | | LONGVIEW FARMS - SOUTH OVERHILL COURT | STUDY AND DESIGN SOLUTION TO FAILING RETAINING WALL | Funding | \$85,000.00 | 6 | 5 |
| E | | MIDDLE RUN CROSSING GREENWAY | CONSTRUCT GREENWAY PATH CONNECTING STARLING STREET TO PARK ON EBENEZER CHURCH ROAD | Funding | \$497,800.00 | 22 | 8 |
| E | | MILL CREEK- HOCKESSIN TO LANTANA | GREENWAY | Funding | \$463,800.00 | 25 | 10 |
| E | | MILL CREEK-PIERSONS RIDGE TO BRACKENVILLE | STUDY FLOODING PROBLEMS, PREPARE PRELIMINARY DESIGN, PERMITS, IMPLEMENT IMPROVEMENTS | Planning | \$1,200,000.00 | 10 | 5 |
| E | | MONTGOMERY WOODS - MONTGOMERY WOODS DR. # 616 | CONSTRUCT SWALE TO DRAIN PONDING WATER ON PROPERTY | Funding | \$17,800.00 | 10 | 5 |
| E | | RADNOR GREEN - NEWCOMB COURT | CONNECT SUMP PUMP DISCHARGE TO DEDOT STORM SEWER SYSTEM | Funding | \$9,900.00 | 13 | 3 |
| E | | Stage Road - 33 Stage Road | Install approx. 150 lf of curbing. | Funding | \$16,900.00 | 12 | 5 |
| E | | THE LANDINGS TWIN C LANE | STUDY TO RESOLVE DRAINAGE ISSUES IN BACKYARDS | Funding | \$25,000.00 | 10 | 5 |
| E | | Village of Lindell - 2111 Lindell Blvd. | Recommend a concrete retaining wall. | Funding | \$68,400.00 | 6 | 5 |
| SUBTOTAL** - New Castle County Active Projects | | | | | \$ 43,044,938 | | |

* Too low of a priority for ranking.

** Does not include costs of proposed FY2020 projects contained in Appendix D

Prioritized Active Resource Conservation and Development Projects

Kent County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|--------------|----------------------|-------------------------|---------------------|
| 1 | 2014 | Viola Phase II drainage improvements | various drainage improvements within the town | Construction | \$ 60,000 | 30, 34 | 15, 16 |
| 2 | 2018 | Prospect Tax Ditch Main | Approx. 20,000' of tax ditch dip out | Construction | \$ 50,000 | 30 | 15 & 18 |
| 3 | 2003 | Willow Grove Road / Blackwell | Approx 5000' of ditch reconstruction | Construction | \$ 36,000 | 29 | 15 |
| 4 | 2017 | Leipsic Tax Ditch Dip Out | Dip out of full system; replace maintenance pipes as needed; soil testing required for ACOE permits. Ready for Construction | Construction | \$ 30,000 | 28 | 14 |
| 5 | 1999 | Bowers Beach Road / Mallek Phase II | Approx. 1000' of 6 inch Field Tile and Inlet Ready for Construction | Construction | \$ 60,000 | 33 | 16 |
| 6 | 2013 | Shaws Corner Road / Miller / Tracy | Replace approx. 400' of 18" pipe, reconstruct approx. 400' of channel outlet | Construction | \$ 20,000 | 11 | 15 |
| 7 | 2011 | Lane View Drive, Scenic Acres / Sak | reconstruct approx. 600' of yard swale | Contracting | \$ 6,000 | 30 | 18 |
| 8 | 2015 | Wheatleys Pond Road / Durham | 700' of Tile Drain | Contracting | \$ 20,000 | 29 | 15 |
| 9 | 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase V - South Bowers | Reconstruction of tidal ditch to provide an outlet to S. Bowers Beach Road. | Permitting | \$ 83,280 | 32 | 16 |
| 10 | 2018 | Hudson Branch Rd / Taubler | Repair Storm drain outlet and bank repair | Engineering | \$ 100,000 | 33 | 16 |
| 11 | 2007 | Tarr Ditch, City of Dover | Improvements to drain system system and | Funding | \$ 8,000,000 | 32, 31 | 17 |
| 12 | 2017 | Gravelly Run T.D. Main / Severson | Replace crossing | Engineering | \$ 75,000 | 11 | 15 |
| 13 | 2003 | Pearsons Corner Road / Detweiler | Approx. 7000' of ditch reconstruction | Engineering | \$ 75,000 | 11, 29 | 15 |
| 14 | 2000 | Silver Lake Water Management Project - DelTech Terry Campus | Design, construct and improve the drainage and stormwater system within DelTech Terry campus | Engineering | \$ 350,000 | 31 | 17 |
| 15 | 2016 | 4948 Halltown Rd / Butz | repair pipe from rt 8 to the Tappahanna Main and fill wash | Engineering | \$ 20,000 | 11 | 15 |
| 16 | 2016 | 4938 Halltown Rd. / Carey | Pipe replacement | Engineering | \$ 100,000 | 11 | 15 |
| 17 | 2002 | Hidden Acres | Stream Improvements | Permitting | \$ 40,000 | 29 | 15 |
| 18 | 2017 | 241 S. Shore Dr. / Green | 600' road side ditch with pipe replacements and rock outlet protection. | Engineering | \$ 60,000 | 34 | 16 |
| 19.1 | 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase II - Pickering Beach | Project PB_04 in Bay Beach Drainage Study - Installation of approximately 1,250 feet of road side ditch and 50 feet of storm drain near the intersection of Pickering Beach Road and entrance to Little Creek Wildlife Area. All Bay Beach Project will be completed with on the same construction contract. | Engineering | \$ 50,318 | 32 | 16 |
| 19.2 | 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase III - Kitts Hummock | Project KH_06 in Bay Beach Drainage Study - Install drainage inlets and 100 feet of storm drain with backflow prevention. All Bay Beach Project will be completed with on the same construction contract. | Engineering | \$ 53,044 | 32 | 16 |
| 19.3 | 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase IV - Kitts Hummock | Project KH_07 in Bay Beach Drainage Study - Install 7-feet of roadside drainage with riprap protection. All Bay Beach Project will be completed with on the same construction contract. | Engineering | \$ 18,500 | 32 | 16 |
| 19 | 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase V - Kitts Hummock | Project KH_09 in Bay Beach Drainage Study - Maintain roadside ditches from the intersection of Bay Drive to Community entrance. All Bay Beach Project will be completed with on the same construction contract. | Engineering | \$ 83,280 | 32 | 16 |
| 20 | 2019 | Alley Corner Rd. / Loman | Install 160' pipe and two catch basins | Engineering | \$15,000 | 29 | 15 |
| 21 | 2019 | Bush Dr. / Morris | Construction of Open ditch with pipe crossing | Land Rights | \$10,000 | 29 | 17 |
| 22 | 2019 | Shore Shore Drive / DeIDOT | Repair Catchbasin | Scoping | \$8,000 | 34 | 16 |
| 23 | 2013 | Walnut Shade Road / Lavender | Clean and or flush pipe and outlet of pipe | Scoping | \$ 10,000 | 34 | 16 |
| 24 | 2008 | Seeneytown Road / Peet | Approx. 4000' of ditch reconstruction | Engineering | \$ 24,000 | 11 | 15 |
| 25 | 2010 | Houston, Town of, drainage improvements Phase I | Improve drainage outlets for various low areas in and around the Town of Houston, Phase I is for Breeders Crown | Land Rights | \$ 90,000 | 33 | 18 |
| 26 | 2017 | 54 West Huntington / Lundy Phase I | replace approx. 300' of pipe | Contracting | \$ 30,000 | 29 | 15 |
| 27 | 2006 | Greenbriar Road / Penneypacker | Flood study | Engineering | \$ 15,000 | 11 | 15 |
| 28 | 2015 | Pearsons Corner Road / Trice | 1,500' of Pipe and catch basins | Engineering | \$ 100,000 | 29 | 15 |
| 29 | 2015 | 1778 Peachtree Run / Walsh | 4000' Open ditch construction | Discontinue? | \$ 40,000 | 34 | 16 |
| 30 | 2018 | Smyrna Leipsic Rd / Scuse | Approx. 450' storm drain & 3 catch basins | Engineering | \$ 100,000 | 28 | 14 |
| 31 | 2017 | Willow Grove Rd / Pratt | 1000' 6" tile and well | Scoping | \$ 10,000 | 30 | 15 |
| 32 | 2012 | Voshells Cove, Richard Blvd. / Gibson | Approx. 2000' of channel reconstruction | Scoping | \$ 30,000 | 29 | 15 |
| 33 | 2011 | Persimmon Park Place | approx. 4000' of channel reconstruction | Scoping | \$ 675,000 | 28 | 17, 14 |
| 34 | 2002 | Pearsons Corner Road / Sbriglia | Approx. 5000' of ditch reconstruction | Land Rights | \$ 10,000 | 11, 29 | 15 |
| 35 | 2011 | Plymouth Road / Langley drainage Improvements | approx. 750' of channel reconstruction | Scoping | \$ 8,000 | 30 | 15 |
| 36 | 2011 | Plymouth Road / Miller drainage improvements | approx. 450' of channel reconstruction | Scoping | \$ 5,000 | 30 | 15 |
| 37 | 2004 | Barbara Blvd., Breezewood / Cerbone | 4000' of ditch reconstruction | Engineering | \$ 37,800 | 34 | 16 |
| 38 | 2008 | Bryn Zion Road / Timber Mills / Kreiger | Replace approx. 1200' of deteriorated storm drain, install approx. 4 catch basins | Scoping | \$ 200,000 | 11 | 15 |
| 39 | 2004 | Raughley Hill Road / Faircloth | Approx. 2400' of ditch reconstruction | Scoping | \$ 25,000 | 30 | 18 |
| 40 | 2017 | N. Little Creek Rd. / Denham | Pipe replacement | Scoping | \$ 50,000 | 32 | 17 |
| 41 | 2007 | W. Denneys Road, near Maidstone Branch Road / Blose / Foltz | reconstruct approx 4000' of channel outlet | Scoping | \$ 80,000 | 29 | 15 |

Prioritized Active Resource Conservation and Development Projects

Kent County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|---------|----------------------|-------------------------|---------------------|
| 42 | 2013 | Abbotts Pond Road / Gallagher | Reconstruct approx. 1000' of channel outlet, replace DelDOT crossing pipe | Scoping | \$ 20,000 | 30 | 18 |
| 43 | 2010 | Hazelwood Subdivision drainage improvements | roadside swale or pipe along private road, improve drainage outlet for Hazelwood subdivision | Scoping | \$ 40,000 | 28 | 14 |
| 44 | 2011 | Pearsons Corner Road / Durham | approx. 2000' of channel outlet | Scoping | \$ 20,000 | 29, 11 | 15 |
| 45 | 2012 | Andrews Lake Road / Baker | Approx. 4000' of channel reconstruction | Scoping | \$ 40,000 | 33 | 16 |
| 46 | 2011 | Dyke Branch Road / Keltz | approx. 900' of channel reconstruction | Scoping | \$ 6,480 | 29 | 17 |
| 47 | 2011 | West Big Woods Road / Lafon | approx. 500' of channel reconstruction | Scoping | \$ 5,000 | 28 | 15 |
| 48 | 2011 | West Evens Road / Seeley | approx. 2500' of channel reconstruction | Scoping | \$ 30,000 | 34 | 16 |
| 49 | 2007 | Burnite Mill Road / Dearman | reconstruct approx 4000' of channel outlet | Scoping | \$ 60,000 | 30 | 15 |
| 50 | 2011 | Hidden Pond, Felton | approx. 2000' of channel reconstruction, | Scoping | \$ 10,000 | 30 | 15 |
| 51 | 2017 | 751 Oak Point School Rd / Slack | 1000' ditch reconstruction and regrade yard. | Scoping | \$ 10,000 | 11 | 15 |
| 52 | 2012 | North Rehoboth Blvd., Milford / Kent Sussex Industries | Bank stabilization | Scoping | \$ 35,000 | 33 | 18 |
| 53 | 2012 | Rosebowl Road / Seeney | Approx. 2000' of channel reconstruction | Scoping | \$ 30,000 | 29 | 15 |
| 54 | 2012 | South State Street / Young | Storm drain maintenance | Scoping | \$ 20,000 | 34 | 16 |
| 55 | 2012 | Star Hill Village, Lingo Drive / Freeman | Storm drain maintenance | Scoping | \$ 35,000 | 34 | 16 |
| 56 | 2012 | Windward Drive, Lakewind / Whidby | Subdivision storm drain maintenance | Scoping | \$ 30,000 | 33 | 16 |
| 57 | 2013 | Big Ditch Road / Szewczyk | reconstruct approx. 600' of channel outlet | Scoping | \$ 5,000 | 11 | 15 |
| 58 | 2013 | Carpenters Bridge Road / Wooters | Reconstruct approx. 2000' of channel outlet | Scoping | \$ 20,000 | 33 | 15, 18 |
| 59 | 2013 | Clapham Road / Roe | Reconstruct approx. 1000' of channel outlet | Scoping | \$ 15,000 | 33 | 16 |
| 60 | 2013 | Deep Grass Lane / Griffith | Reconstruct approx. 4000' of channel outlet | Scoping | \$ 40,000 | 30, 33 | 18 |
| 61 | 2013 | Dickerson Street/Clayton/Pazdalski | reconstruct approx. 600' of channel outlet | Scoping | \$ 5,000 | 28 | 14 |
| 62 | 2013 | Evens Road / Stevens / Dill | repair / replace 6" tile outlet | Scoping | \$ 7,500 | 34 | 16 |
| 63 | 2013 | Little Mastens Corner Road / Alexander | Reconstruct approx. 1000' of channel outlet | Scoping | \$ 10,000 | 30 | 15 |
| 64 | 2013 | Paradise Alley Road / Wright | Solution to be determined | Scoping | \$ 20,000 | 30 | 15 |
| 65 | 2013 | Twin Eagles Farms / Caldwell | Reconstruct approx. 7000' of channel outlet | Scoping | \$ 70,000 | 11 | 15 |
| 66 | 2013 | Willow Grove Road / Blawn | reconstruct approx. 1000' of channel outlet | Scoping | \$ 15,000 | 34 | 15 |
| 67 | 2014 | Bethesda Tax Ditch / Shetzler | bank stabilization | Scoping | \$ 15,000 | 11 | 15 |
| 68 | 2014 | Bowers Beach Road / Tuthill | reconstruct approx. 300' of channel outlet | Scoping | \$ 5,000 | 33? | 16 |
| 69 | 2014 | Bryn Zion Road / Tackett | install approx. 300 feet of new storm drain | Scoping | \$ 20,000 | 11 | 14 |
| 70 | 2014 | Thompsonville Road / Cohee | reconstruct approx. 3500' of channel outlet | Scoping | \$ 25,000 | 33 | 16 |
| 71 | 2014 | Vining Road, Pharsalla | bank stabilization / stream restoration | Scoping | \$ 20,000 | 34 | 16 |
| 72 | 2014 | Woodmill Drive / Hill | reconstruct approx. 2500' of channel outlet | Scoping | \$ 20,000 | 31 | 17 |
| 73 | 2004 | Midtree Drive / Murphy | 600' of ditch reconstruction | Scoping | \$ 6,000 | 33 | 18 |
| 74 | 2004 | North Little Creek Road / Maurer / Miller | Replace approx. 1200' of storm drain | Scoping | \$ 36,000 | 32 | 17 |
| 75 | 2005 | Swain Ave., Tara Subdivision / Murray | Reconstruct approx. 1200' of road side swale within Tara subdivision | Scoping | \$ 24,000 | 33 | 16 |
| 76 | 2011 | Owls Nest Road / Payes | approx. 800' of channel reconstruction | Scoping | \$ 5,000 | 11 | 15 |
| 77 | 2006 | Commerce Street, Cheswald / Caldwell | Repair approx. 500' of deteriorated storm drain | Scoping | \$ 65,000 | 29 | 15 |
| 78 | 2006 | Karl Drive, Eberton / Towery | Remove debris from existing ditch | Scoping | \$ 3,000 | 29 | 17 |
| 79 | 2006 | Seven Hickories Road / Towery | Reconstruct approx. 1000' of existing ditch | Scoping | \$ 12,000 | 29 | 15 |
| 80 | 2007 | Carlson Way | reconstruct approx. 3500' of channel outlet | Scoping | \$ 60,000 | 29 | 15 |
| 81 | 2007 | North Little Creek Road / Desanto | install approx. 400' of storm drain, reconstruct approx. 300' of channel | Scoping | \$ 20,000 | 32 | 17, 16 |
| 82 | 2008 | Paradise Lane / Pallum / Looney | Beaver dam removal | Scoping | \$ 5,000 | 31 | 17 |
| 83 | 2009 | Millington Road / Walsh | approx. 1000' of outlet reconstruction | Scoping | \$ 12,000 | 11 | 15 |
| 84 | 2010 | McGinnis Pond Road / Wilgus | reconstruct approx. 1000' of channel outlet | Scoping | \$ 12,000 | 33 | 16 |
| 85 | 2010 | Millchop Lane / Perry | approx 500' of ditch reconstruction | Scoping | \$ 6,000 | 34 | 16 |
| 86 | 2010 | Mt. Friendship Road / Miller | pipe replacement and ditch reconstruction | Scoping | \$ 20,000 | 29 | 15 |
| 87 | 2010 | Westville Road / Hurd | approx 500' of ditch reconstruction | Scoping | \$ 4,000 | 29 | 15 |
| 88 | 2011 | Moose Lodge Road / Larrimore drainage improvements | approx. 2500' of channel reconstruction | Scoping | \$ 30,000 | 34 | 16 |
| 89 | 2011 | Woods Haven / New Wharf Road drainage improvements | approx. 2000' of channel reconstruction, replace/repair portion of storm drain system | Scoping | \$ 65,000 | 33 | 18 |
| 90 | 2015 | 155 Carlisle Dr. / Maccolley | Install yard basin and 200' of pipe out to road side pipe. | Scoping | \$ 20,000 | 29 | 15 |
| 91 | 2015 | 128 Rocky Meadows Ln. / Reyna | 3000' open ditch construction | Scoping | \$ 20,000 | 29 | 17 |
| 92 | 2015 | 1463 Hartly Rd. / Hightman | 200' Open ditch construction. | Scoping | \$ 1,000 | 29 | 15 |
| 93 | 2015 | 272 Mt. Friendship Rd. / Sebastianelli | 1000' tile replacement. | Scoping | \$ 8,000 | 29 | 15 |
| 94 | 2015 | 9 Vigil Ct. / Jester | Yard basin and 200' of 6" tile. | Scoping | \$ 2,000 | 29 | 15 |
| 95 | 2015 | 307 Gettysburg Rd. / Burton | Repair existing pipe joint. | Scoping | \$ 1,000 | 31 | 17 |
| 96 | 2015 | 50 Bulldog Dr. / Gondeck | 3000' Open ditch construction. | Scoping | \$ 20,000 | 32 | 17 |
| 97 | 2015 | 53 East St. / Hutchins | Pipe replacement with catch basin. | Scoping | \$ 50,000 | 29 | 15 |
| 98 | 2015 | 566 Upper King / Mathews | 4000' open ditch construction and 500' pipe replacement. | Scoping | \$ 70,000 | 34 | 15 |
| 99 | 2015 | 651 Strauss Ave. / Pinder | Replace 450' of 24" CPP, install three catch basins. | Scoping | \$ 40,000 | 29 | 15 |
| 100 | 2015 | 27 Wildwood Road / Fairfield Farms / Ott | Streambank Stabilization on Isaac's Branch | Scoping | \$ - | 34 | 16 |
| 101 | 2015 | 7435 Pearsons Corner Rd. / Scott | 600' Open ditch construction. | Scoping | \$ 3,000 | 29 | 16 |
| 102 | 2015 | 75 Aspencade Dr. / Washington | 800' Open ditch construction. Total disposal of debris. | Scoping | \$ 10,000 | 34 | 15 |
| 103 | 2015 | 86 Logan Dr. / Johnson | 500' open ditch construction and 90' pipe replacement | Scoping | \$ 20,000 | 30 | 15 |
| 104 | 2015 | Still Rd / Berhaier / Storage | 9,000' of Open Ditch | Scoping | \$ 45,000 | 30 | 15 |
| 105 | 2016 | Tomahawk T.D / Greenwood Rd | (P-6) Bank stabilization | Scoping | \$ 40,000 | 30 | 18 |
| 106 | 2016 | 410 Holletts Corner Rd / Thorstenson | 4000' Ditch reconstruction and pipe replacement | Scoping | \$ 40,000 | 11 | 15 |

Prioritized Active Resource Conservation and Development Projects

Kent County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|---|--|---------|----------------------|-------------------------|---------------------|
| 107 | 2016 | 12938 South Dupont Hwy. / Alam | 2500' Ditch reconstruction | Scoping | \$ 25,000 | 30 | 15 |
| 108 | 2016 | 703 Fence Post Ln. / Burgess | 4000' Ditch reconstruction | Scoping | \$ 40,000 | 34 | 17 |
| 109 | 2016 | 2608 Hunting Quarter Rd. / Passwaters | 1500' Ditch reconstruction | Scoping | \$ 10,000 | 30 | 18 |
| 110 | 2016 | 863 Peach Basket Rd. / Crouch | 1500' Ditch reconstruction | Scoping | \$ 10,000 | 30 | 15 |
| 111 | 2016 | 1335 Hazletville Rd. / Rogers | 2000' Ditch reconstruction and new pipe under Rd. | Scoping | \$ 30,000 | 29 | 15 |
| 112 | 2016 | 3132 Kenton Rd. / Kaper | 300' Ditch reconstruction | Scoping | \$ 3,000 | 29 | 15 |
| 113 | 2016 | 866 Sunnyside Rd. / Jones | 150' Road side swale | Scoping | \$ 2,000 | 29 | 14 |
| 114 | 2016 | 52 Luther Marvel Rd. / Smith-Morlock | 600' Road side ditch and pipe | Scoping | \$ 6,000 | 11 | 15 |
| 115 | 2016 | 245 Artis Dr. / Emerson | 3000' Ditch reconstruction | Scoping | \$ 30,000 | 29 | 17 |
| 116 | 2016 | 861 Rothermel Rd. / Runkel | 1000' Swale / Ditch | Scoping | \$ 10,000 | 33 | 18 |
| 117 | 2016 | 936 Proctors Purchase Rd. / Walker | 500' Ditch reconstruction | Scoping | \$ 5,000 | 11 | 15 |
| 118 | 2016 | 844 Big Ditch Rd. / Szewczyk | 900' Ditch reconstruction | Scoping | \$ 9,000 | 11 | 15 |
| 119 | 2016 | 3698 Judith Rd. / Gonzalez | 4000' Ditch reconstruction | Scoping | \$ 40,000 | 11 | 15 |
| 120 | 2016 | 56 Myrtle St. / English | Back yard drainage | Scoping | \$ 30,000 | 28 | 14 |
| 121 | 2016 | 1142 Lynnbury Rd. / Knieriem | Replace old field tile | Scoping | \$ 10,000 | 29 | 15 |
| 122 | 2016 | 2887 McKee Rd. / Pruett | 1000' Ditch reconstruction and pipes | Scoping | \$ 20,000 | 29 | 15 |
| 123 | 2016 | 2484 Arthursville Rd / Metheny | 500' open ditch | Scoping | \$ 10,000 | 11 | 15 |
| 124 | 2016 | 414 Turkey Point Rd / Thompson | 800' open ditch | Scoping | \$ 16,000 | 34 | 16 |
| 125 | 2016 | 292 Evelyndale Dr. / Ballis | 2000' road side ditches | Scoping | \$ 75,000 | 29 | 17 |
| 126 | 2016 | 105 Fox Hall Dr / Posey | 800' open ditch | Scoping | \$ 16,000 | 31 | 17 |
| 127 | 2016 | 219 Fox Crossing Dr. / Foltz | 1000' open ditch replace 2 pipes | Scoping | \$ 30,000 | 11 | 15 |
| 128 | 2017 | 115 Stevenson Dr / McDonald | 4500' open ditch in yards | Scoping | \$ 70,000 | 34 | 16 |
| 129 | 2017 | 1472 Log Cabin Rd / Peterman | 4500' open ditch, pipe replacement | Scoping | \$ 35,000 | 33 | 16 |
| 130 | 2017 | 1697 Sorghum Mill Rd. / Hoffecker | 600' ditch reconstruction and bank stabilization. | Scoping | \$ 20,000 | 34 | 16 |
| 131 | 2017 | 299 Daniel Rodney Dr. / Bryant | Pipe repair | Scoping | \$ 5,000 | 32 | 16 |
| 132 | 2017 | 4134 Dupont Hwy. / Kisner | 1700' ditch reconstruction. | Scoping | \$ 10,000 | 29 | 17 |
| 133 | 2017 | 727 Twin Willows Rd / Boyer | 100' ditch reconstruction and repair or replace old dam. | Scoping | \$ 20,000 | 28 | 14 |
| 134 | 2017 | Carlisle Village / Palchik | 350' ditch reconstruction | Scoping | \$ 2,500 | 29 | 15 |
| 135 | 2017 | Gunter Road / Hamonko | 700' ditch reconstruction and replace (2) 18" X 30' pipes | Scoping | \$ 10,000 | 11 | 15 |
| 136 | 2017 | Millchop Lane / Shuford | 2000' ditch reconstruction and 200' pipe replacement | Scoping | \$ 40,000 | 34 | 16 |
| 137 | 2017 | Pearsons Corner Rd / Mosley | 1500' ditch reconstruction | Scoping | \$ 7,500 | 29 | 15 |
| 138 | 2017 | Pearsons Corner Rd / Simpers | 2300' of ditch reconstruction | Scoping | \$ 25,000 | 29 | 15 |
| 139 | 2017 | Brook Court / Nabb | 1700' Ditch Reconstruction | Scoping | \$ 15,000 | 11 | 15 |
| 140 | 2018 | 48 Joshua Dr (Church Creek Subd.) | Pipe joint repair | Scoping | \$ 5,000 | 33 | 16 |
| 141 | 2018 | 85 Laurel Dr Malago | Approx. 600' storm drain system and 5 catch basins | Scoping | \$ 125,000 | 32 | 17 |
| 142 | 2018 | Brookview Ave / Hans | Rock outlet protection | Scoping | \$ 7,000 | 34 | 16 |
| 143 | 2018 | Central Church Rd / Pritchett | Approx. 800' open ditch & 500' storm drain & 3 catch basins | Scoping | \$ 100,000 | 29 | 15 |
| 144 | 2018 | Cypress Branch Rd Goodwill | Approx. 300' storm drain system and 3 catch basins | Scoping | \$ 60,000 | 32 | 16 |
| 145 | 2018 | Fast Landing Rd / Mack | Approx. 500' open ditch | Scoping | \$ 10,000 | 28 | 14 |
| 146 | 2018 | Gravelly Run Tax Ditch S-3 of S-12 of P-8 | Approx. 800' of open ditch reconstruction | Scoping | \$ 10,000 | 11 | 15 |
| 147 | 2018 | Heritage Dr Hutchins | Approx. 2000' open ditch | Scoping | \$ 15,000 | 31 | 17 |
| 148 | 2018 | Janice Dr / Reinholz | Approx. 2000' open ditch | Scoping | \$ 20,000 | 34 | 16 |
| 149 | 2018 | Marvels Crossroads TD dipout | Approx. 3200' of open ditch | Scoping | \$ 25,000 | 33 | 18 |
| 150 | 2018 | Marydel TD Prong H Steele | Bank stabilization | Scoping | \$ 30,000 | 11 | 15 |
| 151 | 2018 | The Mead / Cooper | 100' open ditch & 200' storm drain & 2 catch basins | Scoping | \$ 50,000 | 33 | 18 |
| 152 | 2018 | Tobacco Rd / Fulton | Approx. 600' of open ditch | Scoping | \$ 20,000 | 29 | 15 |
| 153 | 2018 | Vernon Tax Ditch | Approx. 5000' tax ditch dip out | Scoping | \$ 10,000 | 30 | 15 |
| 154 | 2018 | Westville Rd Profaci | Approx. 1000' open ditch | Scoping | \$ 10,000 | 29 | 15 |
| 155 | 2018 | Woodland Beach Rd Richards | Approx. 2000' open ditch | Scoping | \$ 15,000 | 28 | 14 |
| 156 | 2018 | Woods Edge Rd / Loeffler | Approx. 300' of yard drainage (swale or tile) | Scoping | \$ 10,000 | 30 | 15 |
| 157 | 2018 | Woodyard Rd / Brubaker | Approx. 800' open ditch & 100' tile drainage | Scoping | \$ 40,000 | 30 | 18 |
| 158 | 2019 | Delshire Dr. / Bastian | Swale and/or tile construction | Scoping | \$10,000 | 29 | 17 |
| 159 | 2019 | Elizabeth Avenue / O'Conner | Replacement of Flared End Section on pipe outlet in Pennwood Development | Scoping | \$10,000 | 34 | 16 |
| 160 | 2019 | Fast Landing Road / Worshan | Regrading and open ditching | Scoping | \$20,000 | 29 | 17 |
| 161 | 2019 | Fulton St. / Coker | Reconstruction of Approximately 1,500 feet of open ditch and replacment of pipe crossings. | Scoping | \$20,000 | 29 | 15 |
| 162 | 2019 | Glohaven Ct. / Harvey | Backyard Drainage / reconstruct swale | Scoping | \$20,000 | 34 | 16 |
| 163 | 2019 | Judith Road / Guzzie | Reconstruction of Approximately 2,000 feet of open ditch and installation of 3 pipes. | Scoping | \$25,000 | 29 | 15 |
| 164 | 2019 | Logan Dr. / Cooper | Reconstruction of 1,100 feet of roadside swale and repair of driveways. | Scoping | \$80,000 | 29 | 17 |

Prioritized Active Resource Conservation and Development Projects

Kent County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|---|-------------|----------------------|-------------------------|---------------------|
| 165 | 2019 | Lynnbury Woods Road / Kern | Reconstruction of Approximately 1,000 feet of open ditch and replacment of 4 pipe crossings. | Scoping | \$80,000 | 29 | 18 |
| 166 | 2019 | Midstate Road / George | Reconncstruction of 2,000' of roadside ditch and installation of 10 pipes | Scoping | \$40,000 | 33 | 16 |
| 167 | 2019 | N. Erin Ave / Wright | Backyard Drainage / Tile system | Scoping | \$10,000 | 30 | 15 |
| 168 | 2019 | Parkway Dr. / Lucas | Repair catchbasins and fill sinkhole around existing catchbasins | Scoping | \$10,000 | 29 | 17 |
| 169 | 2019 | Pinewood Acres MHP/ Moore | Reconstruction of Approximately 2,000 feet of open ditch. | Scoping | \$12,000 | 29 | 15 |
| 170 | 2019 | W. Denneys Rd. / Opdyke | Reconstruction of Approximately 2,000 feet of open ditch including a portion through residential yards. | Scoping | \$20,000 | 29 | 15 |
| 171 | 2019 | West Milby St. / Benson | Reconstruction of Approximately 500 feet of open ditch, | Scoping | \$5,000 | 30 | 18 |
| 172 | 2019 | Woodland Beach Rd / Richards | Reconstruction of Approximately 2,000 feet of open ditch and replacment of 41 pipe crossings. | Scoping | \$15,000 | 28 | 14 |
| 173 | 2000 | Rodney Village / Abbate | Approx. 2000' of channel reconstruction | Scoping | \$ 25,000 | 32 | 17 |
| 174 | 2004 | South Dupont Hwy. / McGowan | Approx. 1600' of ditch reconstruction, replace approx. 3 private crossing pipes | Scoping | \$ 24,000 | 30 | 18 |
| 175 | 2004 | Overlook on Silver Lake / Richardson | Retrofit catch basin City of Dover ally | Scoping | \$ 20,000 | 31 | 17 |
| 176 | 2010 | Lucky Estates Subdivision drainage improvements | Improve drainge outlet for Lucky Estates Subdivision | Scoping | \$ 50,000 | 30 | 18 |
| 177 | 2005 | Dyke Branch Road / Friedman | Reconstruct approximately 1000' of ditch through / along yards into wooded wetland | Scoping | \$ 8,000 | 29 | 17 |
| 178 | 2011 | Chesapeake Bay, Kent County, conservation initiatives | various channel and wetland restoration and creation projects | Scoping | \$ 100,000 | 11, 29, 30 | 15, 18 |
| 179 | 2010 | Planters Woods Subdivision drainage improvements | Improve drainge outlet for Planters Woods Subdivision stormwater ponds | Scoping | \$ 30,000 | 29 | 15 |
| 180 | 2002 | Wyoming Mill Pond Spillway / Bank Stabilization | Approx. 750' of bank stabilization | Scoping | \$ 120,000 | 31, 34 | 17 |
| 181 | 2013 | Little Creek, Town of | reconstruct, restore, enhance approx. 6000' of channel outlet | Scoping | \$ 60,000 | 28 | 16 |
| 182 | 2004 | Kitts Hummock Drainage Improvements - Phase II | Approximately 3000' of ditch reconstruction through marsh, petitioned to possibly form a tax ditch organization | Scoping | \$ 120,000 | 32 | 16 |
| 183 | 2000 | Beech Drive, Eden Rock / Carson Phase II | Remove invasive species from pond and revegate with native plants | Scoping | \$ 5,000 | 29 | 15 |
| 184 | 2007 | Fairfield Drive / Krum Phase 2 | Reestablish approx. 1000' of drainage way through yards | Scoping | \$ 75,000 | 34 | 16 |
| 185 | 2000 | Silver Lake Water Management Project - Dover Pool | Design and construct a 200' regenerative stormwater conveyance system | Scoping | \$ 100,000 | 28, 31 | 17 |
| 186 | 2008 | Puncheon Run Drainage & Stormwater Improvements | Stream and drainage improvements | Scoping | \$ 250,000 | 31, 32 | 16, 17 |
| 187 | 2011 | Fox Hall / Carnoustie Road | approx. 1000' of channel reconstruction | Scoping | \$ 3,600 | 31 | 17 |
| 188 | 2005 | Rt. 44 / Fedewa (Part of Altimus) | Reconstruct approximately 1000' of channel outlet | Scoping | \$ 6,600 | 11 | 15 |
| 189 | 2012 | Persimmon Park Place / Blanchfield | Reconfigure stormdrain system | Scoping | \$ 25,000 | 28 | 17, 14 |
| 190 | 2001 | Clayton, town of; drainage improvements Phase III | Storm drain improvement for the west side of the Town of Clayton | Scoping | \$ 70,000 | 28 | 14 |
| 191 | 2006 | Camden, West Street Drainage Improvements | Ditch reconstruction and storm drain improvements within the Town of Camden in the vacinity of West Street | Scoping | \$ 350,000 | 34 | 17 |
| 192 | 2017 | 267 Pardoners Tale Ln. / Jefferson | Pipe Repair | Scoping | \$ 5,000 | 30 | 15 |
| 193 | 2004 | Rt. 44 / Altemus Phase 2 | Approx. 500' of ditch reconstruction | Land Rights | \$ 15,000 | 11 | 15 |
| 194 | 1998 | South Little Creek Road / Little | Approx. 4000' of ditch reconstruction, DelDOT road crossing pipe replacement, repair and replace existing pond outlet structure | Scoping | \$ 300,000 | 32 | 17, 16 |
| 195 | 2010 | Drake Ct., Wild Quail / Susan Cook | approx. 200'of storm drain repair | Scoping | \$ 20,000 | 29 | 15 |
| 196 | 2011 | Wild Quail drainage improvements Phase II | replace / repair various storm drains & storm drain outlets | Scoping | \$ 150,000 | 29 | 15 |
| 197 | 1998 | Lockwood Chapel Road / Krupka Phase 2 (Main) | Approx. 3.5 miles of ditch reconstruction | Scoping | \$ 200,000 | 11 | 15 |
| 198 | 2002 | Apple Grove School Road, Washington / Todds Mill Road | Stream improvements | Scoping | \$ 12,000 | 29, 31 | 15 |
| 199 | 2002 | Hazletville Road / Blann | Approx. 4000' of ditch reconstruction | Scoping | \$ 30,000 | 11, 29 | 15 |
| 200 | 2004 | Judith Road / Sego | Approx. 6000' of ditch reconstruction, replaced three private crossing pipes | Scoping | \$ 36,000 | 11 | 15 |
| 201 | 2005 | Deer Track Lane / Snyder | approx. 4000' of channel reconstruction | Scoping | \$ 35,000 | 29 | 17 |
| 202 | 2000 | Silver Lake Water Management Project | update water management practices for the Silver Lake watershed | Scoping | \$ 387,000 | 31 | 17 |
| 203 | 2010 | Houston, Town of, drainage improvements Phase II | Improve drainge outlets for various low areas in and around the Town of Houston, Phase II is for Front Street | Scoping | \$ 90,000 | 33 | 18 |
| 204 | 2010 | Houston, Town of, drainage improvements | Improve drainge outlets for various low areas in and | Scoping | \$ 90,000 | 33 | 18 |
| 205 | 2000 | Silver Lake Water Management Project - Central Middle School | Design and construct a 200' regenerative stormwater conveyance system | Scoping | \$ 25,000 | 31 | 17 |
| 206 | 2011 | Deer Valley Road / Lear | approx. 3000' of channel reconstruction | Scoping | \$ 30,000 | 33 | 18 |

Prioritized Active Resource Conservation and Development Projects

Kent County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|---|------|---|---|---------|----------------------|-------------------------|---------------------|
| 207 | 2012 | Breeders Crown Farm, Foal Court / Roy Jones | Subdivision storm drain upgrade | Scoping | \$ 25,000 | 33 | 18 |
| 208 | 2013 | Brownsville Road / Arthur Biggs | Reconstruct approx. 2000' of channel outlet | Scoping | \$ 20,000 | 30 | 15 |
| 209 | 2016 | 5402 Mud Mill Rd / Strouse | S-2-S-1-P-19 Cow Marsh T.D Pipe replacement | Scoping | \$ 15,000 | 30 | 15 |
| SUBTOTAL - Kent County Active Projects | | | | | \$ 16,995,402 | | |

Prioritized Active Resource Conservation and Development Projects

Sussex County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|--------------|----------------------|-------------------------|---------------------|
| 1 | 2009 | Chesapeake Bay Watershed VOP | Removal of debris from degraded drainage channels utilization of the VOP program at the Sussex Community Correction Center | Construction | \$ 65,000 | 35, 40, 39, 37, 41, 36 | 18, 19, 20, 21 |
| 2 | 2009 | Delaware Bay Watershed VOP | Removal of debris from degraded drainage channels utilization of the VOP program at the Sussex Community Correction Center | Construction | \$ 125,000 | 14, 20, 35, 36, 37 | 6, 18, 19 |
| 3 | 2009 | Inland bays Atlantic Ocean Watershed VOP | Removal of debris from degraded drainage channels utilization of the VOP program at the Sussex Community Correction Center | Construction | \$ 167,000 | 14, 20, 37, 38, 40, 41 | 6, 19, 20, 21 |
| 4 | 2017 | Elliott-Nichols Tax Ditch Main Channel Pipe Replacements | Replacement of private crossing and driveway pipes that TD cannot afford. (1) 42" x 70', (1) 42" x 40' Ready for Construction | Construction | \$ 45,000 | 40 | 21 |
| 5 | 2006 | Highland Acres Tax Ditch Maintenance Dipout | Replacement of stormdrain along Canary Drive | Construction | \$ 160,000 | 20 | 6 |
| 6 | 1997 | Johnson Development Phase II | Reconstruction of existing ditch and installation of Storm Drain | Construction | \$ 1,600,000 | 39 | 21 |
| 7 | 2012 | Silver Lake / Rehoboth, Phase 2 | Improvements to outfall of Silver Lake. | Construction | \$ 225,000 | 14 | 6 |
| 8 | 1996 | Selbyville Flood Drainage Project Phase II Railroad Avenue | Culvert replacement and drainage improvements along Railroad Avenue | Construction | \$ 250,000 | 41 | 20 |
| 9 | 2011 | Diamond Acres / Jones Drainage Improvements | Retro Fit failed infiltration pond Ready for Construction | Construction | \$ 160,000 | 41 | 20 |
| 10 | 2007 | Little Hill Rd / Leonard Drainage Improvements Phase I | Replacement of Culverts under Little Hill Road (422A) | Construction | \$ 70,000 | 40 | 21 |
| 11 | 2014 | Argyle Lane / Fise / Gugerty Drainage Improvements Phase I | Remove tree in ditch and replace driveway culverts with minor dipout. | Funding | \$ 21,000 | 38 | 20 |
| 12 | 2015 | Nanticoke Watershed Parrot Feather Eradication | Treatment program for the removal of Parrot Feather milfoil. Partnership with several tax ditches and SCD. | Funding | \$ 10,000 | 30, 35 | 18, 19 |
| 13 | 2013 | Carslyjan Acres / Jordan Drainage Improvements | Reconstruct drainage in the Carslyjan Acres Development | Engineering | \$ 150,000 | 20 | 6 |
| 14 | 2019 | Herring Branch Tax Ditch Main / Johnson / McCabe | Replacement of approximately 300 feet of stormdrain and catchbasins. | Engineering | \$ 75,000 | 41 | 20 |
| 15 | 2004 | Baltimore Avenue / Cheeks Public Ditch | 800 feet ditch reconstruction, pipe installation and spoil disposal | Engineering | \$ 80,000 | 38 | 20 |
| 16 | 2014 | Oak Orchard Drainage Improvements - Phase 1 | Drainage improvements to the intersection of Mercer Avenue and Forest Drive. Oak Orchard Phase 1 and Phase 4 will be completed by the same contract | Engineering | \$ 750,000 | 37 | 20 |
| 16.1 | 2014 | Oak Orchard Drainage Improvements - Phase 4 | Drainage Improvements to Oak Orchard Road and Captains Grant. Oak Orchard Phase 1 and Phase 4 will be completed by the same contract | Engineering | \$ 76,000 | 37 | 20 |
| 17 | 2014 | Little Bay T.D. / Oceanside Pkwy Culvert Replacement | Replacement of culvert under Oceanside Pkwy. | Engineering | \$ 400,000 | 38 | 20 |
| 18 | 2007 | Rd 550 / Harry Simiomick Drainage Improvements | 2 miles of Channel Reconstruction | Engineering | \$ 140,000 | 39 | 21 |
| 19 | 2017 | Russel Rd. / Harris | Clean out of existing ditch with possible tree removal | Engineering | \$ 50,000 | 35 | 19 |
| 20 | 2009 | Trap Pond Rd / White Drainage Improvements | Cleanout of 1500 feet of existing ditch through woods | Engineering | \$ 40,000 | 40 | 21 |
| 21 | 2017 | Reid / Delmar Rd | Dip out of non-functioning drainage ditch | Engineering | \$ 40,000 | 40 | 21 |
| 22 | 2013 | Town of Bethel / Snake Road Drainage Improvements Phase I | Regrade swale and replace culvert under sailor's path | Engineering | \$ 25,000 | 40 | 21 |
| 23 | 2008 | Bear Hole Tax Ditch / Johnson | Bank Stabilization of Prong 9 of Tax Ditch | Engineering | \$ 35,000 | 38 | 20 |
| 24 | 2019 | Dukes Job Tax Ditch / Morris Bank Stabilization | Stabilization of the bank on the Main of Duks Jobs Tax Ditch above Prong 5 | Engineering | \$ 60,000 | 40 | 21 |
| 25 | 2008 | Old Rautemack / Malone Drainage Improvement Phase II | Internal Development Drainage Improvements | Engineering | \$ 200,000 | 40 | 21 |
| 26 | 2019 | Johnson Road (S434A) / Wojciechowski / McCabe | Reconstruction of 3,000 feet of ditch through woods or potentially new ditch to Indian Drain Tax Ditch | Scoping | \$ 75,000 | 40 | 21 |
| 27 | 2019 | Mt. Joy Road / Hoopes | New Prong to L&T Tax Ditch | Scoping | \$ 40,000 | 18 | 37 |
| 28 | 2012 | Woodpecker Rd / Wollschlager Drainage Improvements | Cleanout 6000' of ditch | Scoping | \$ 60,000 | 39 | 21 |
| 29 | 2006 | Raccoon Branch Tax Ditch Bank Stabilization | 100 feet of Bank Stabilization | Engineering | \$ 40,000 | 40 | 21 |
| 30 | 2012 | Ennis Road / Owens Drainage Improvements | 200' of Ditch Cleanout | Scoping | \$ 15,000 | 37 | 19 |
| 31 | 2015 | Pepper Creek Tax Ditch Bank Stabilization | Stabilization of Pepper Creek downstream of Rail Road crossing on Prong 6. | Engineering | \$ 35,000 | 41 | 20 |
| 32 | 2019 | Pusey Road / Hudson | reconstruction of approximately 5,000 feet of agricultural drainage ditches | Scoping | \$ 40,000 | 40 | 20 |
| 33 | 2018 | Frankford Library/Green Street Drainage Improvements | Replacement of approximately 300 feet of stormdrain pipe, currently 18" diameter. Private ditch needs to be cleaned as well, approx. 250'. The outlet will need to be explored to ensure the project stops at Main Street. | Scoping | \$ 75,000 | 38 | 20 |

Prioritized Active Resource Conservation and Development Projects

Sussex County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|---|--|-------------|----------------------|-------------------------|---------------------|
| 34 | 2018 | Clearbrooke Estates / Damms | Improve swale conveyance within development and add outlet to Hearn's pond. (2017-173) | Scoping | \$ 750,000 | 35 | 19 |
| 35 | 2014 | Oak Orchard Drainage Improvements - Phase 5 | Drainage Improvements to Oak Meadow subdivision. | Engineering | \$ 918,000 | 37 | 20 |
| 36.1 | 2012 | Broadkill Beach Drainage Improvements Phase 1 | Drainage inlet and 25 feet of storm drain with backflow prevention on Bayshore Drive. All Bay Beach Project will be completed with on the same construction contract | Engineering | \$ 37,000 | 36 | 18 |
| 36.2 | 2012 | Broadkill Beach Drainage Improvements Phase 2 | Regrade 130' of existing gravel roadway on California Avenue. All Bay Beach Project will be completed with on the same construction contract | Engineering | \$ 27,000 | 36 | 18 |
| 36.3 | 2012 | Broadkill Beach Drainage Improvements Phase 3 | Installation of a 50' gravel infiltration trench on Arizona Avenue. All Bay Beach Project will be completed with on the same construction contract | Engineering | \$ 40,000 | 36 | 18 |
| 36.4 | 2012 | Primehook / Fowlers Beach Drainage Improvements Phase 1 | 340 feet of storm drain and inlets with backflow prevention on Shore Drive. All Bay Beach Project will be completed with on the same construction contract. | Engineering | \$ 94,000 | 36 | 18 |
| 36.5 | 2012 | Slaughter Beach Drainage Improvements Phase 1 | Regrade portions of Passwaters Drive and Marina Lane and install roadside drainage. All Bay Beach Project will be completed with on the same construction contract | Engineering | \$ 147,000 | 36 | 18 |
| 36.6 | 2004 | Lewes Beach Drainage Improvements Phase 1 | Installation of 130 foot gravel infiltration trench and storm drain outfall at the intersection of Fort Lewes Court and Henlopen Drive. All Bay Beach Project will be completed with on the same construction contract | Engineering | \$ 66,000 | 20 | 6 |
| 37 | 2014 | Oak Orchard Drainage Improvements - Phase 3 | Drainage Improvements to the intersection of River Road, Cerise Avenue & Roberta Lane. | Engineering | \$ 951,000 | 37 | 20 |
| 38 | 2014 | Oak Orchard Drainage Improvements - Phase 2 | Drainage improvements to River Road approximately 2000 feet west of Chief Road. | Engineering | \$ 945,000 | 37 | 20 |
| 39 | 2006 | Heritage Village / Harper | Provide an to Atlanta Devonshire Tax Ditch for a blind ditch within the Heritage Village Development | Engineering | \$ 90,000 | 39 | 21 |
| 40 | 2005 | North Drive / Doris Kowolski | 1000' pipe with catch basins | Scoping | \$ 105,000 | 35 | 19 |
| 41 | 2008 | Rt. 24 / Harper Fox Hollow Drainage Improvement | 500' of New Pipe | Scoping | \$ 70,000 | 14 | 6 |
| 42 | 2014 | Overbrook Shores / Frey Drainage Improvements | Install approx. 500' pipe and CB's to Carslylan Acres TD | Engineering | \$ 150,000 | 20 | 6 |
| 43 | 2012 | RD 207/213 Drainage Improvements | 2700' of ditch clean out | Engineering | \$ 75,000 | 35, 36 | 18 |
| 44 | 2014 | East Drive / Harvey Trip Drainage Projects | Approx. 700' of pipes and CBs and outlet structure of existing pond. | Scoping | \$ 65,000 | 41 | 20 |
| 45 | 2012 | Bunting Tax Ditch Prong 2 Bank Stabilization | 1000' of Bank Stabilization & Culvert Replacement under Line Road | Engineering | \$ 150,000 | 38 | 20 |
| 46 | 2014 | Discount Land Rd / Carter Drainage Improvements | Addition to Prong 5 to Mirey Branch T.D. north of Discount Land Rd (S468) | Scoping | \$ 13,000 | 39 | 21 |
| 47 | 2015 | Bay Haven Street / Scott Drainage Improvements | Drainage improvements in Roger's Haven subdivision. | Scoping | \$ 25,000 | 38 | 20 |
| 48 | 2017 | Whites Neck Rd / Vella | 3200' of ditch reconstruction and cleanout of existing culvert expand scope to include improvements within Whites Neck Village (S 2019-224) | Scoping | \$ 150,000 | 38 | 20 |
| 49 | 2012 | Crestfield / Fluharty / Valentine Drainage Improvements | Placeholder while project is developed | Scoping | \$ 25,000 | 39 | 19 |
| 50 | 2019 | Herring Branch Tax Ditch Prong 8 /Town of Frankford | Reconstruction of Prong 8 of Herring Branch Tax Ditch and improve connection with Town Infra structure | Scoping | \$100,000 | 41 | 20 |
| 51 | 2019 | Anderson Corner Rd. / Marsh | Reconstruction of 1,500 feet ditch and culverts | Scoping | \$25,000 | 20 | 19 |
| 52 | 2006 | Shawnee Road / Weldon | Reconstruction of existing ditch and replacement of pipes (Kovach) | Scoping | \$ 35,000 | 36 | 18 |
| 53 | 2008 | Walker Mill Rd / Country Glenn Drainage Improvement | Drainage Improvements in development | Scoping | \$ 150,000 | 35 | 19 |
| 54 | 2015 | Ocean Way Estates - Hoffmaster Drainage Improvements | Drainage Improvements to Ocean Way Estates | Scoping | \$ 75,000 | 38 | 20 |
| 55 | 2013 | Town of Bethel / Snake Road Drainage Improvements Phase II | 3,000 feet of roadside drainage and 3000 feet of ag drainage with water quality features | Engineering | \$ 160,000 | 40 | 21 |
| 56 | 2014 | Argyle Lane / Fise / Gugerty Drainage Improvements Phase I | Construct Drainage Conveyance to Kent Avenue | Scoping | \$ 175,000 | 38 | 20 |
| 57 | 2011 | Avalon Woods / Frank Jewell Drainage Improvements | Plan, design and construct drainage system in development. | Land Rights | \$ 550,000 | 37 | 19 |
| 58 | 2014 | Reservation Trail / Grzybowski Drainage Improvements | Re-establish approx. 500' of swale | Land Rights | \$ 12,000 | 38 | 20 |
| 59 | 2016 | Harts Landing - Love Creek Pines Lane - Pizzadili Drainage Improvements | Drainage improvements to re-route flow from Harts Landing to Love Creek. | Land Rights | \$ 150,000 | 14 | 6 |
| 60 | 2012 | Iron Mine T.D. Bank Stabilization | Bank Stabilization on Main of Tax Ditch | Scoping | \$ 750,000 | 35 | 18, 19 |

Prioritized Active Resource Conservation and Development Projects

Sussex County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|--|--|-------------|----------------------|-------------------------|---------------------|
| 61 | 2015 | Long Neck Drainage Study | Drainage Studies and Improvements in the Long Neck Community | Scoping | \$ 100,000 | 37 | 6, 20 |
| 62 | 2014 | Guinea Creek TD | Creation of a new tax ditch to help Long Neck Drainage Issues | Planning | \$ 600,000 | 37 | 20 |
| 63 | 2004 | Rt. 5 & Rd. 290 / Cook Public Ditch | Creation of a new tax ditch to help intersection and adjoining drainage issues | Planning | \$ 400,000 | 20 | 6, 19 |
| 64 | 2005 | Road 357 (Piney Point Dev.) / John Bauer | 200' pipe, 700' cleanout, catch basins | Land Rights | \$ 35,000 | 38 | 20 |
| 65 | 2004 | Rd, 283 A / Kosinski Public Ditch | 500 feet ditch construction | Scoping | \$ 75,000 | 14 | 6 |
| 66 | 2017 | Walston Walk Ct. / Greene | Clean and replace approx. 420' of open and piped ditch; coordinate with DelDOT | Scoping | \$ 50,000 | 38 | 20 |
| 67 | 2007 | Rehoboth Beach Yacht & Country Club / Miller Drainage Improvements | 150 feet of pipe & catch basins | Scoping | \$ 50,000 | 14 | 6 |
| 68 | 2017 | Oyster Bay / Bay Vista Rd | Ditch/swale ponding water to catch basin. 1200' of proposed stormdrain to rehoboth canal | Scoping | \$ 250,000 | 14 | 6 |
| 69 | 2011 | Teacher Rd / Cropper Drainage Improvements | Planning, design and construction of drainage system in Forest Park MHP & reconstruction of 3000 ft. of outlet ditch | Scoping | \$ 150,000 | 41 | 20 |
| 70 | 2014 | Deer Run Acres Drainage Improvements | Stormwater management system upgrades to subdivision and Forest Rd (\$292), (\$112-118) | Scoping | \$ 315,000 | 38 | 20 |
| 71 | 2014 | Delaware Avenue / Godwin Drainage Improvements | Install approximately 2,300 lf of ditch along Delaware Ave (\$054A), private property & railroad | Scoping | \$ 96,000 | 41 | 20 |
| 72 | 2006 | Ockels Dr / Neal Public Ditch | Reconstruct approximately 1800 feet ditches upstream of Ockels Drive south of Blades. | Scoping | \$ 35,000 | 39 | 21 |
| 73 | 2004 | Earnestine Hall Rd 569 nr Omar | 18"x 250' pipe with 5 catch basins | Engineering | \$ 70,000 | 38 | 20 |
| 74 | 2004 | Rt. 9 / Mirey Branch / Tyndall | 4500' of ditch reconstruction | Scoping | \$ 500,000 | 39, 40 | 21 |
| 75 | 2008 | Nanticoke River Tax Ditch Maintenance Dipout Phase III | Dipout of Tax Ditch 4 miles | Scoping | \$ 500,000 | 35, 30 | 18, 19 |
| 76 | 2001 | Bee Branch Bank Stabilization | Protection downstream of Rt. 13. | Scoping | \$ 60,000 | 35 | 18 |
| 77 | 2009 | Bee Branch TD Restoration | Design and Construct 2000 feet TD stabilization and restoration | Scoping | \$ 685,000 | 35 | 18 |
| 78 | 2016 | Bridgeville Branch Main Channel Restoration Phase II | Stabilize and/or restore Bridgeville Branch between Route 13 and 13A. | Scoping | \$ 500,000 | 35 | 19 |
| 79 | 2013 | Georgetown Vaughn P-9 | Redesign Prong 9 of Georgetown Vaugh Tax Ditch including the replacement of 500' of storm drain | Scoping | \$ 105,000 | 37 | 19 |
| 80 | 2015 | Cart Branch Tax Ditch Prong C Bank Stabilization | Installation of approximately 300 LF of pipe and/or replacement ples. | Scoping | \$ 50,000 | 35 | 18 |
| 81 | 2010 | Herring Branch Tax Ditch / Parson Bank Stabilization | 300' of bank stabilization of Herring Branch Tax Ditch Main below Rt 20 | Scoping | \$ 30,000 | 41 | 20 |
| 82 | 2011 | Deep Creek Tax Ditch Bank Stabilization Phase 1 (Purdue) | Approximately 400 linear feet of bank stabilization need on the right side of the Deep Creek Tax Ditch Main Channel, located 6,600 linear feet upstream of Old Furnace Road. | Engineering | \$ 55,000 | 35 | 19 |
| 83 | 2008 | Morgan Branch Prong 1 / Fleetwood Drainage Improvements | Reconstruct 8000 feet of Drainage Ditch Includes Hasting Estates Drainage Improvements project | Scoping | \$ 70,000 | 39 | 21 |
| 84 | 2010 | Sandy Branch Development / Clarke | 1200' of bank stabilization | Scoping | \$ 205,000 | 41 | 20 |
| 85 | 2006 | Road 347 and 349 / Densmore | 2,200 feet of channel reconstruction with total disposal Whites Neck Village and West Ocean Farms | Scoping | \$ 70,000 | 38 | 20 |
| 86 | 2008 | Fawn Rd / Rantz Drainage Improvements | Reconstruct 5000' of existing ditch, 500' of new Storm Drain and 1000' of new ditch | Scoping | \$ 120,000 | 35 | 18, 19 |
| 87 | 2008 | Hudson Rd / Harvey Drainage Improvement | Regrade Road Ditch 1500 to SWMP, with culvert under road | Scoping | \$ 70,000 | 20 | 6 |
| 88 | 2008 | Cedar Corners Rd / Jones Drainage Improvement | 2000 feet of New Ditch North of intersection with Deer Forrest | Scoping | \$ 20,000 | 35 | 19 |
| 89 | 2008 | Baker Mill Rd / Massey Drainage Improvements | 800' of Storm Drain | Scoping | \$ 140,000 | 35 | 21 |
| 90 | 2006 | Memory Rd / Wilkens Public Ditch | Reconstruct approximately 3 mles of ditches | Scoping | \$ 125,000 | 30 | 16 |
| 91 | 2006 | Rd 224 Baird Public Ditch | Install new pipe and Catch Basins to Maple Marsh Tax Ditch | Scoping | \$ 140,000 | 35 | 18 |
| 92 | 2007 | Camp Arrowhead Rd / Angola Neck Park / Mangini Drainage Improvements | 2,000 feet of Channel Maintenance | Scoping | \$ 16,000 | 14 | 6 |
| 93 | 2006 | Route 26 / Lilly Public Ditch | Construction of new ditch | Scoping | \$ 21,000 | 38 | 20 |
| 94 | 2007 | Peppers Creek S1 of P10 Bank Stabilization | 100 ft. Bank Stabilization | Scoping | \$ 28,000 | 41 | 20 |
| 95 | 2010 | Road 213 / Driscoll / Drainage Improvements | Approx. 2500 feet of new ditch | Scoping | \$ 28,000 | 35, 36 | 18 |
| 96 | 2006 | Doddtown Road / Tice Public Ditch | Construction of 5,000 feet of new ditch and pipe and catch basins | Scoping | \$ 275,000 | 20 | 19 |
| 97 | 2008 | Bethany Forrest / Madavero Drainage Improvement | Reconstruct 300' of existing ditch & 800' Storm Drain | Scoping | \$ 41,000 | 38 | 20 |
| 98 | 2007 | Peppers Creek Rd / Dogwood Acres / McNeill Drainage Improvements | 1,050 feet of storm drain including catch basins | Scoping | \$ 137,500 | 38 | 20 |
| 99 | 2007 | Rd 305 & Rd 296 / Mifflin Drainage Improvements | 2,000 feet of storm drain including catch basins | Scoping | \$ 205,000 | 37 | 19 |

Prioritized Active Resource Conservation and Development Projects

Sussex County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|---|--|---------|----------------------|-------------------------|---------------------|
| 100 | 2008 | Hearns Pond Rd / Ensminger | Reconstruct 8,000 feet of ditch and replace culvert under road | Scoping | \$ 45,000 | 39 | 19, 21 |
| 101 | 2007 | Forrest Rd / Lewis Drainage Improvements | 2,500 feet of New Ditch | Scoping | \$ 45,000 | 20 | 6 |
| 102 | 2007 | Doorman Rd / Holly Oaks Drainage Study | Drainage study to determine feasibility of drainage improvements in this watershed | Scoping | \$ 35,000 | 20 | 6 |
| 103 | 2002 | Route 13A (O'Neal Public Ditch) Phase III | 200' addition to storm drain system with catch basin. | Scoping | \$ 30,000 | 39 | 19, 21 |
| 104 | 2008 | Brittingham Rd / Justice Drainage Improvement Project | Reconstruct 1000 feet of Drainage Ditch | Scoping | \$ 21,000 | 40 | 21 |
| 105 | 2008 | Concord Pond Rd / Hudson | Reconstruct 5000 feet of drainage ditch | Scoping | \$ 55,000 | 35, 39 | 19 |
| 106 | 2008 | Jefferson Bridge Rd / Chandross | Reconstruct 1 mile of Existing Ditch | Scoping | \$ 27,500 | 38 | 20 |
| 107 | 2008 | Lawson Rd / Setzer Drainage Improvement | 4000' of New Ditch | Scoping | \$ 35,000 | 37 | 19 |
| 108 | 2008 | Nat Turner Street / Lane Drainage Improvements | New Ditch 600' | Scoping | \$ 7,000 | 35 | 19 |
| 109 | 2008 | New Rd (391) / Higgs Drainage Improvement | 300 feet of ditch in woods | Scoping | \$ 14,000 | 38 | 20 |
| 110 | 2008 | Old Furnace Rd / Bull Drainage Improvements | 1000 Feet of Storm Drain | Scoping | \$ 137,500 | 39, 35 | 19 |
| 111 | 2008 | Rd. 350 / Gladwin Drainage Improvement | Reconstruct 600' Existing Ditch | Scoping | \$ 14,000 | 38 | 20 |
| 112 | 2008 | Rt. 10 / Dorharty Drainage Improvement | 400' New Ditch, 1100' of Storm Drain | Scoping | \$ 275,000 | 35, 39 | 21 |
| 113 | 2008 | Rt. 13A / Spicer Drainage Improvement | 1000' of New Storm Drain | Scoping | \$ 105,000 | 39 | 21 |
| 114 | 2008 | Shingle Point Rd / Antonio Drainage Improvement | Reconstruct 1000 feet of Drainage Ditch | Scoping | \$ 21,000 | 20 | 6 |
| 115 | 2009 | Sowbrise Rd / Hue Drainage Improvements | Cleanout of 2000 feet of existing drainage ditch | Scoping | \$ 28,000 | 36 | 19 |
| 116 | 2009 | City of Rehoboth Country Club Estates Drainage Improvements | Design and installation of a storm septic upgrade to existing storm drain. Reducing total suspended solids discharged to Silver Lake | Scoping | \$ 190,000 | 14 | 6 |
| 117 | 2010 | Bay View Rd / Mahon Drainage Improvement | 100' of new storm drain and 300' of ditch reconstruction | Scoping | \$ 35,000 | 14 | 6 |
| 118 | 2010 | Old Meadow Rd (Hananfeld) | 2500' of new and regrade ditch | Scoping | \$ 22,000 | 39 | 19 |
| 119 | 2010 | Parker House Rd / Noble | Installation of culvert under Oak Street | Scoping | \$ 21,000 | 38 | 20 |
| 120 | 2010 | Stafford Tax Ditch Main Bank Stabilization / Hale | 100' of bank stabilization | Scoping | \$ 41,000 | 35 | 18 |
| 121 | 2010 | Walley Lane / Glen Jones Drainage Improvements | 3000' feet of ditch reconstruction | Scoping | \$ 11,000 | 39 | 21 |
| 122 | 2010 | Woodenhawk Tax Ditch P4 Bank Stabilization / Lecates | Stabilization of TD near Sawmill Road | Scoping | \$ 15,000 | 35 | 19 |
| 123 | 2010 | Chesapeake Bay Watershed Channel and Wetland Restoration Projects | Small channel and wetland restoration projects | Scoping | \$ 105,000 | 35, 36, 37, 39, 40, 41 | 18, 19, 20, 21 |
| 124 | 2011 | Bacons Way / Shawnee Place / Bacon | Cleanout approximately 1000' of road ditch and replace 3 driveway pipes | Scoping | \$ 16,000 | 35 | 18 |
| 125 | 2011 | Murphy Lane / Helen Carter Drainage Improvements | 1000' of new ditch through woods into Redden Tax Ditch | Scoping | \$ 21,000 | 36 | 19 |
| 126 | 2011 | Oakridge Development (Rd 258) / Foley Drainage Improvements | Construct outlet for pre-stormwater infiltration pond | Scoping | \$ 126,000 | 20 | 6 |
| 127 | 2011 | S. Union Church / John Falk Drainage Improvements | 3000' of storm drain | Scoping | \$ 160,000 | 35 | 18, 19 |
| 128 | 2011 | Scotland Rd / Sabatrie Singh Drainage Improvements | 1000' of Storm Drain along Scotland Rd. | Scoping | \$ 63,000 | 40 | 21 |
| 129 | 2011 | Shawnee Rd / Donald Bolton Drainage Improvements | 4000' of ditch reconstruction , 700' of storm drain and 300' of new ditch | Scoping | \$ 60,000 | 35 | 18 |
| 130 | 2011 | Woods Drive / Carolyn Ludwig Drainage Improvements | Plan, design and construct drainage system in development. | Scoping | \$ 210,000 | 14 | 6 |
| 131 | 2012 | Governor Stockley Rd / McCray Drainage Improvements | Reconstruct 1500' of ditch acres of Ag Field | Scoping | \$ 21,000 | 41 | 19 |
| 132 | 2010 | Morgan Branch Road / Davenport Drainage Improvements | Reconstruct approx. 1000' of channel outlet | Scoping | \$ 30,000 | 39 | 21 |
| 133 | 2013 | Bayview Rd / Simmons | Tide Gate | Scoping | \$ 11,000 | 14 | 18 |
| 134 | 2013 | Deer Forrest Rd / Price Drainage Improvements | 1700' of pipe and catch basins | Scoping | \$ 525,000 | 35 | 19 |
| 135 | 2013 | Elliott-Evans TD/ Evans Bank Stabilization | 700' of Bank Stabilization/Stream Restoration on lower end of main | Scoping | \$ 210,000 | 40 | 21 |
| 136 | 2013 | Line Rd / Lee Drainage Improvements | Ag Drainage | Scoping | \$ 53,000 | 40 | 21 |
| 137 | 2013 | North Oak Grove Rd / Willin Drainage Improvements | Reconstruct approximately 5,000 feet of existing Agricultural Drainage Ditch | Scoping | \$ 28,000 | 39 | 19 |
| 138 | 2013 | Shawnee Rd / Cummings Drainage Improvements | Culvert under Shawnee Rd and tie into Young-Patterson T.D. | Scoping | \$ 27,000 | 35 | 18 |
| 139 | 2013 | Town of Bridgeville / Mill Street Drainage Improvements | Installation of new catch basin and 200' feet of storm drain. | Scoping | \$ 35,000 | 35 | 19 |
| 140 | 2013 | Town of Millsboro / West State Street Drainage Improvements | Provide Drainage outlet to Millsboro Little League with storm drain from little league to Millsboro Pond | Scoping | \$ 265,000 | 41 | 20 |
| 141 | 2014 | Town of Millsboro / Wilson Hwy Drainage Improvements | Approx. 500' of storm drain replacement along Wilson Hwy. | Scoping | \$ 360,000 | 41 | 20 |

Prioritized Active Resource Conservation and Development Projects

Sussex County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|---|--|---------|----------------------|-------------------------|---------------------|
| 142 | 2014 | Town of Oceanview / Atlantic Ave. Drainage Improvements | Improvements to SWMP outlet along Atlantic Ave. (S026) | Scoping | \$ 65,000 | 38 | 20 |
| 143 | 2014 | Beaverdam Rd / Hollymount Rd | Approx. 2000' of ditch regrading and piping. Addition of cross road pipes under road. (Barnes) | Scoping | \$ 52,000 | 20 | 6 |
| 144 | 2014 | Burbage Rd / Mark Brown Drainage Improvements | Approx. 1000' of open ditch. | Scoping | \$ 13,000 | 38 | 20 |
| 145 | 2014 | Evans Real Estate Drainage Improvements | Approx. 60' of pipe and CB | Scoping | \$ 20,000 | 38 | 20 |
| 146 | 2014 | Murray Estates Drainage Improvements | Repair and replacement of existing SWM infrastructure. | Scoping | \$ 32,500 | 38 | 20 |
| 147 | 2014 | Vines Creek / Cathell Drainage Improvements | Clearing and snagging trees along Vines Creek. | Scoping | \$ 32,500 | 41 | 20 |
| 148 | 2014 | Plantation Park / Silver Woods Public Ditch | Dip out of approx. 5,300 lf of ditch | Scoping | \$ 106,000 | 38 | 20 |
| 149 | 2014 | City of Seaford / Virginia Ave (S639) Drainage Improvements | Stormwater management system upgrades with wetland and water quality | Scoping | \$ 75,000 | 39 | 21 |
| 150 | 2014 | Yacht Basin Rd / Ellis Drainage Improvements | Dip out and reconstruction of approx. 1800ft of public ditch | Scoping | \$ 36,000 | 38 | 20 |
| 151 | 2014 | Chapel Branch Prong / Lare | Dip out of approximately 7,300ft of prong. | Scoping | \$ 73,000 | 39 | 19 |
| 152 | 2014 | Poplar Grove / Forest Rd Drainage Improvements | Stormwater management system upgrades to subdivision and Forest Rd (S292). | Scoping | \$ 315,000 | 20 | 6 |
| 153 | 2014 | Brasures Branch TD / Rickards Bank Stabilization | Bank stabilization of tax ditch | Scoping | \$ 35,000 | 38 | 20 |
| 154 | 2015 | Anchorage Canal Drainage Area Highway Wetpond Stormwater Retrofit | Stormwater Retrofit to Existing Wetponds. | Scoping | \$ 750,000 | 38 | 20 |
| 155 | 2015 | Anderson Corner Rd / Glove Drainage Improvements | Dip out of approximately 500 LF of ditch and removal of large vegetation. | Scoping | \$ 6,500 | 20 | 19 |
| 156 | 2015 | Branchview / Niblett | Repair of 1200' of existing CMP stormdrain in Branchview Development | Scoping | \$ 60,000 | 39 | 20 |
| 157 | 2015 | Bunting Road - Buckalew Drainage Improvements | Install 1,500' of drainage from low area out to Pepper Creek. | Scoping | \$ 100,000 | 41 | 20 |
| 158 | 2015 | Club House Rd / Hutson Drainage Improvements | Creation of ditch in backyards to outlet residential low spot to Derrickson Canal Tax Ditch. | Scoping | \$ 3,500 | 38 | 20 |
| 159 | 2015 | Ellendale Tax Ditch/Beach Hwy Rt.16 / Wyatt Drainage Improvements | Drainage improvements to Ellendale Tax Ditch. | Scoping | \$ 25,000 | 36 | 18 |
| 160 | 2015 | Hunter Drive / McGinnis Drainage Improvements | Drainage Improvements to failed infiltration pond | Scoping | \$ 36,000 | 20 | 6 |
| 161 | 2015 | Little Bay Tax Ditch Restoration | Approximately 100 feet of bank stabilization and creation of a floodplain along Prong 1. | Scoping | \$ 35,000 | 38 | 20 |
| 162 | 2015 | Mallard Lakes Drainage Improvements | Drainage Improvements to community of Mallard Lakes | Scoping | \$ 200,000 | 38 | 20 |
| 163 | 2015 | McColley Street/Stevens Drainage Improvements | Drainage Improvements to the residences between McColley, Gilcrest and Marshall Streets | Scoping | \$ 2,500 | 36 | 18 |
| 164 | 2015 | Peddler's Village - DelDOT Drainage Improvements | Drainage Improvements to existing infrastructure. | Scoping | \$ 50,000 | 14 | 6 |
| 165 | 2015 | Overbrook Shores/Moore Drainage Improvements | Install catch basins and culverts under the driveways with an outfall at the marina. | Scoping | \$ 34,000 | 20 | 6 |
| 166 | 2015 | Sherwood Forest/Jackson / Dawson | Stormwater Management Pond Retrofit and conveyance from strip lots along Rt. 24.Potentially include in Long Neck Study. | Scoping | \$ 30,000 | 37 | 19 |
| 167 | 2016 | Crazy Ln & 5th St - Stinson Drainage Improvements | Drainage improvements to Bay Vista subdivision. | Scoping | \$ 20,000 | 14 | 6 |
| 168 | 2016 | Highland Acres Drainage Improvements | Drainage Improvements to Highland Acres subdivision. | Scoping | \$ 50,000 | 20 | 6 |
| 169 | 2016 | Sea Aire Village - Kings Creek Drainage Improvements | Drainage Improvements within Sea Aire Village and connection of blind ditch to outlet. | Scoping | \$ 50,000 | 14 | 6 |
| 170 | 2016 | Swedes & Bayard Streets - Dewey Beach - Yorgiadis Drainage Improvements | Drainage Improvements to outlet drainage from intersection and residential lots. | Scoping | \$ 25,000 | 14 | 6 |
| 171 | 2014 | Longneck / Christina Hall Drainage Improvement | Install approx. 250' of open drainage to SWMP. Potentially include in Long Neck Study | Scoping | \$ 9,750 | 37 | 19 |
| 172 | 2015 | Ward Cordrey TD P3 Drainage Improvements | Re-install pipes and dip-out approximately 1650 LF of channel to provide positive outfall to Prong 3 of tax ditch. | Scoping | \$ 40,000 | 40 | 21 |
| 173 | 2018 | Gravel Hill Rd / Kershaw | Approx. 1200' of open ditch to improve drainage & relieve flooding on her property and out buildings; catch basin nearby. (S2017-70) | Scoping | \$ 12,000 | 36 | 19 |
| 174 | 2018 | King George III Street / McFadden | Re-grading and new swales; possible pipe installation. Development adjacent to IRHS (S2017-124) | Scoping | \$ 25,000 | 41 | 20 |
| 175 | 2018 | Manchester Manor / Navarro | Drainage Improvements within the Manchester Manor Subdivision S 2017-83 | Scoping | \$ 100,000 | | |
| 176 | 2018 | Pepper Creek TD Sub Prong 3 of 1 Relocation | Sub Prong 3 of Prong 1 needs to be relocated and dipped out. A portion of the prong was filled in as part of the Savannah Square Shopping Center project and the ditch Rain Garden with connection into City of Seaford drainage | Scoping | \$ 25,000 | 41 | 20 |
| 177 | 2018 | Sussex Avenue / Allen St. /Dunn | | Scoping | \$ 20,000 | 39 | 21 |
| 178 | 2018 | Woodland Road / Massey | 1,000 feet of new ditch to connect to DelDOT drainage | Scoping | \$ 18,000 | 39 | 21 |
| 179 | 2019 | Bethasda Road / Gaskins | 800 feet of storm drain to provide an outlet for properties | Scoping | \$100,000 | 41 | 20 |

Prioritized Active Resource Conservation and Development Projects

Sussex County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|------|---|---|---------|----------------------|-------------------------|---------------------|
| 180 | 2019 | Chapel Branch Road / Davis | 2,000 feet of new ditch in through agricultural lands | Scoping | \$20,000 | 39 | 19 |
| 181 | 2019 | Dennis Lane / Pocomoke Tax Ditch Main Bank | Stabilization of areas upstream and downstream of | Scoping | \$75,000 | 41 | 21 |
| 182 | 2019 | Holly Branch Tax Ditch / Dunn | Piping approximately 850' of Holly Branch Tax Ditch along Horsey Church Road (S510) | Scoping | \$455,000 | 40 | 21 |
| 183 | 2019 | Indian Beach Drainage Improvements | reconstruction of tidal ditches that provide an outlet to | Scoping | \$50,000 | 14 | 5 |
| 184 | 2019 | Kent Avenue / Middlesex Beach Drainage Improvements | Drainage improvements in the community and the outlet for community along Kent Avenue to the canal. | Scoping | \$150,000 | 38 | 20 |
| 185 | 2019 | Neals School Road / Jester Drainage Improvements | Reconstruction of approximately 850 feet of existing ditch near the intersection of Neals School Road and Hill Road | Scoping | \$7,500 | 39 | 19 |
| 186 | 2019 | Pear Tree Rd / Cooper | Reconstruction of about 2,000 feet of ditch through | Scoping | \$40,000 | 41 | 21 |
| 187 | 2019 | Route 54 / James Branch Tax Ditch / McKelvey Drainage Improvements | Improvements to Prong 1 of Jame branch Tax Ditch to improve the outlet for Rt. 54 | Scoping | \$40,000 | 40 | 21 |
| 188 | 2019 | Savannah Ditch Drainage Improvements | Reconstruction of over 5 miles of channels in the Savannah ditch watershed. Provides drainag outlet to | Scoping | \$500,000 | 36, 37, 20 | 19, 5 |
| 189 | 2019 | Sea Country Estates / Suter/ Barton Drainage | Reconstruction of approximately 4,000 of exsting ditch | Scoping | \$75,000 | 38 | 20 |
| 190 | 2019 | Walnut Street / Town of Frankford / Garcia | Reconstruction of 1,000 feet of ditch North of Walnut | Scoping | \$30,000 | 41 | 20 |
| 191 | 2015 | Unity Branch/Holly Lake Campground Watershed Study | Drainage studies and improvements in the Unity Branch watershed upstream of Rt. 24. | Scoping | \$ 100,000 | 20, 37 | 6, 19 |
| 192 | 2011 | Mirey Branch / Wan Yu Bank Stabilization | Approximately 150 linear feet of bank stabilization need on the right side of Mirey Branch and nearby roadway. | Scoping | \$ 32,000 | 40 | 21 |
| 193 | 2010 | Inland bays Atlantic Ocean Watershed Channel and Wetland Restoration Projects | Small channel and wetland restoration projects | Scoping | \$ 105,000 | 14, 20, 37, 38, 40, 41 | 6, 19, 20, 21 |
| 194 | 2010 | Delaware Bay Watershed Channel and Wetland Restoration Projects | Small channel and wetland restoration projects | Scoping | \$ 105,000 | 14, 20, 35, 36, 37 | 6, 18, 19 |
| 195 | 2011 | Atlanta Devonshire Development / Tveekrem Drainage Improvement | 1000' of new ditch in the development | Scoping | \$ 21,000 | 39 | 21 |
| 196 | 2009 | Norman Eskridge Highway / Lowes | Cleanout outlet ditch of Del DOT storm drain | Scoping | \$ 70,000 | 39 | 21 |
| 197 | 2014 | Angola Rd / Maletti Drainage Improvements | Drainage improvements through Angola By the Bay Subdivision south of Angola Rd (S277). DelDOT has taken | Scoping | \$ 650,000 | 14 | 6 |
| 198 | 2014 | Bay Colony Marina Sluice Replacement | Dilapidated Sluice | Scoping | \$ 260,000 | 38 | 20 |
| 199 | 2004 | Concord Pond Road / Jenkins | 1500' of new ditch | Scoping | \$ 35,000 | 35 | 19 |
| 200 | 2005 | Sunset Branch T.D. Prong 1 Pipe | Install approximately 150' of pipe with inlet protection in | Scoping | \$ 21,000 | 41 | 21 |
| 201 | 2003 | Jones Mill Branch | Stream Restoration | Scoping | \$ 126,000 | 35 | 19 |
| 202 | 2004 | Collins Russell Rt 16 Milton | Infiltration system | Scoping | \$ 7,000 | 20, 36 | 19 |
| 203 | 2004 | Sr.1 / Sea Colony | Outlet drainage for SR 1 in Bethany Beach | Scoping | \$ 215,000 | 38 | 20 |
| 204 | 2010 | Town of Bethany North Pennsylvania Avenue Storm Drain | Restoration and reconstruction of storm drain on North Pennsylvania Avenue | Scoping | \$ 2,500,000 | 38 | 20 |
| 205 | 2005 | Bay City Mobile Home Park Drainage Study | Drainage Study for community | Scoping | \$ 42,000 | 37 | 19 |
| 206 | 2014 | Lakeview Rd / Donna Lanham Bank | Approx. 200' of bank stabilization east of bridge. | Scoping | \$ 52,000 | 41 | 21 |
| 207 | 2012 | Revel Road / DelDOT Drainage Improvements | 500' of new ditch and culvert under road | Scoping | \$ 100,000 | 41 | 20, 21 |
| 208 | 2004 | Joe Dailey New Rd Lewes | 24" x 1500' of pipe with catch basins | Scoping | \$ 25,000 | 20 | 6 |
| 209 | 2014 | Rt. 30 Whitesville Rd / Philips Drainage Improvements | Replacement of failing CB south of Whitesville Rd (S064). | Scoping | \$ 6,500 | 40 | 21 |
| 210 | 2006 | Mayer Branch Public Ditch | Channel Reconstruction of Mayer Branch where it outlets to maryland | Scoping | \$ 210,000 | 40 | 21 |
| 211 | 2012 | Dewey Beach Drainage Study | Drainage study | Scoping | \$ 35,000 | 14 | 6 |
| 212 | 2007 | Route 9 / Britt Drainage Improvements | 1,000 feet of Channel Reconstruction | Scoping | \$ 14,000 | 40 | 19 |
| 213 | 2007 | Cotton Patch Hills Drainage Improvements | Construction of 500' of storm drain to provide an outlet for Cotton Patch Hills and SR 1 | Scoping | \$ 75,000 | 38 | 20 |
| 214 | 2007 | Cool Spring Road / Swift Drainage | Reconstruct approximately 2,500' of an existing ditch that | Scoping | \$ 21,000 | 37 | 18 |
| 215 | 2007 | Patty Cannon Estates drainage improvements | Provide outlet for existing residential development | Scoping | \$ 70,000 | 40 | 21 |
| 216 | 2008 | Rt 13A / Skateworld | 500 feet of Storm Drain | Scoping | \$ 82,000 | 39 | 21 |
| 217 | 2017 | Dartmouth Drive Congestion Relief Project / | Stormdrain Improvements for the relief route between | Scoping | \$ 25,000 | 14 | 6 |
| 218 | 2007 | Deep Hole Tax Ditch Maintenance Dipout | Maintain approx. 3 miles of tax ditch | Scoping | \$ 115,000 | 38 | 20 |
| 219 | 2008 | Meadow Branch Tax Ditch Maintenance Dipout | Dipout of Tax Ditch 24 miles | Scoping | \$ 275,000 | 40 | 21 |
| 220 | 2008 | Marshyhope Tax Ditch Maintenance Dipout | Dipout of Tax Ditch 13 miles | Scoping | \$ 140,000 | 35, 30 | 16, 19 |

Prioritized Active Resource Conservation and Development Projects

Sussex County

| Rank | Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|---|------|--|--|-----------|----------------------|-------------------------|---------------------|
| 221 | 2013 | Falling Point Rd / Witmer Drainage Improvements | Replacement of 120' feet of 24" stormdrain and removal of sediment from lagoon | Scoping | \$ 42,000 | 38 | 20 |
| 222 | 2011 | Sand Hill Rd / Thelam Folke Drainage Improvements | 6000' of ditch reconstruction | Scoping | \$ 26,000 | 36 | 19 |
| 223 | 2005 | Cart Branch Main / Alan Pongratz | Bank Stabilization | Scoping | \$ 35,000 | 35 | 18 |
| 224 | 2005 | Rt. 24 (Millsboro) / Kathy McGinnis | 1500' pipe, catch basins | Scoping | \$ 70,000 | 41 | 20 |
| 225 | 2012 | Donovan Rd / Mifflin TD / DelDOT Drainage Improvements | Extend Mifflin TD 1500' to Donovan Road | Scoping | \$ 25,000 | 37 | 19 |
| 226 | 2014 | Clogg Drive & Thorogoods Rd (S333) Drainage Improvements | Dip out of approximately 1,800ft of channel. | Scoping | \$ 21,000 | 41 | 20 |
| 227 | 2014 | Munchy Branch Rd/Griffith Drainage Improvements | Approx. 1300' of pipe and ditch regrading. | Scoping | \$ 80,000 | 14 | 6 |
| 228 | 2011 | Marks Lane / Sally Marks Drainage Improvements | 5,280' of storm drain | Scoping | \$ 525,000 | 37 | 19 |
| 229 | 2010 | Doddstown Rd / Rich | Approximately 0.75 miles of Storm Drain and Open Ditch | Scoping | \$ 275,000 | 20 | 19 |
| 230 | 2005 | Road 442 / Jay Challman | 4400' cleanout, min. clearing project includes Rd. 74 Ciampo project | Scoping | \$ 135,000 | 40 | 21 |
| 231 | 2015 | Bay Colony - Cripple Creek Drainage Improvements | Drainage Improvements to structures within the Bay Colony and Cripple Creek subdivisions. | Scoping | \$ 550,000 | 38 | 20 |
| 232 | 2014 | Town of Oceanview / Caroline St. Drainage Improvements | Approx. 2,000 of drainage improvements. | Complete? | \$ 39,000 | 38 | 20 |
| 233 | 2008 | River Rd / Clark Drainage Improvements | 1500' of New Ditch, 12 Driveway Pipes | Scoping | \$ 35,000 | 39 | 21 |
| 234 | 2011 | Neptune Rd / Luther Warren Drainage Improvements | 600' of Storm Drain to tie DelDOT drainage into Redden Wood Development Stormwater System | Scoping | \$ 80,000 | 36 | 19 |
| 235 | 2010 | Webb Farm Road (594) / Rose | Clean out approx. 900 ft. of ag. ditch | Scoping | \$ 7,000 | 35 | 18 |
| 236 | 2002 | Columbia Ave. (Rehoboth), Surf Ave. / Phase III | Extend the drainage system on surf Avenue up Columbia Avenue to the intersection at First Street | Scoping | \$ 145,000 | 14 | 6 |
| 237 | 2004 | Town of Georgetown | Drainage Projects within in the town of Georgetown | Scoping | \$ 75,000 | 37 | 19 |
| 238 | 2007 | Rehoboth Beach / Stockley Street | Ocean block of Stockley to King Charles | Scoping | \$ 975,000 | 14 | 6 |
| SUBTOTAL - Sussex County Active Projects | | | | | \$ 35,251,750 | | |

2008 Final Report

of the Joint Sunset Committee



The Conservation Districts

New Castle, Kent and Sussex with Information about
the Division of Soil and Water Conservation DNREC

A Report to the Governor
and the
General Assembly of the State of Delaware

May 2008

Conservation Districts and the Division of Soil and Water Conservation

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2008 Final Recommendations for the Conservation Districts and the Division of Soil and Water Conservation

The Joint Sunset Committee recommends continuance of the Conservation Districts, but only upon its meeting certain conditions or making certain modifications as identified below.

A. The Joint Sunset Committee recommends the following statutory changes:

1. Statute refers to Levy Court of Sussex County –the correct reference should be Sussex County Council. (*7 Del. C. § 3900 et al.*)

B. The Joint Sunset Committee recommends the following:

New Castle Conservation District /Kent Conservation District/ Sussex Conservation District

1. Provide post retirement health benefits.
2. Continue to study the issue of lines and grades with the ultimate goal to make recommendations for best practices in each of the 3 counties as well as to make to recommendations regarding ongoing resident improvement of grading on their property
3. The Districts continue the oversight of retention ponds and continue to provide educational workshops regarding stormwater pond maintenance. These workshops should provide general information about reason for the ponds, maintenance and where to go for technical assistance.
4. Improve the Conservation Districts' website to be more user friendly in terms of terminology used and informative/educational to those who are not familiar with the Conservation Districts.
5. Provide more public awareness and encouragement of voting in Board of Supervisor elections. This could be accomplished on the updated website.

Kent Conservation District

6. Provide the Joint Sunset Committee with copy of the policy for use of equipment "off premises."
7. Provide the Joint Sunset Committee with specifications for a Depreciation module as recommended by the auditor in the FY'06 audit.
8. Provide the Joint Sunset Committee with a standard accounting and operating procedures manual as recommended by the auditor in the FY'06 audit.
9. Complete a Personnel Policy Manual and provide the Joint Sunset Committee with a copy of that manual.

Sussex Conservation District

10. The District reports back to Joint Sunset Committee with progress with regard to office space to accommodate the entire Sussex Conservation District staff.
11. The District uses alternative resources such as engineers employed by the state of Delaware, and different departments to assist in their stormwater program needs.

Division of Soil and Water Conservation

12. DNREC fines be increased; that DNREC have the ability to "stop work" on a site; and that DNREC update stormwater regulations. The Division of Soil and Water must report back to the Joint Sunset Committee on the progress of each of these recommendations.

C. The Joint Sunset Committee shall:

1. Send a letter from the Joint Sunset Committee to Sussex County Council regarding the Planning and Zoning Board's review time and request that they investigate the 16 month period it take to review plans.

D. The Joint Sunset Committee requests the following action:

1. The Clean Water Advisory Council look at the equity or the need for additional funding [for the Conservation Districts] and report back to the Joint Sunset Committee in January of 2009.
2. The Division of Soil and Water Conservation report back to the Joint Sunset Committee with recommendations on how to tighten up the process with regard to Certified Construction Reviewers.

Laws and Policies

Background

The Division of Soil and Water Conservation (DSWC) provided the following information regarding the history of conservation districts:

In 1937, President Roosevelt wrote the governors of all the states recommending legislation that would allow local landowners to form soil conservation districts. The movement caught on across the country with district-enabling legislation passed in every state. This legislation was passed in Delaware in 1943. Today, the country is blanketed with nearly 3,000 conservation districts.¹

According to the Delaware Archives, New Castle members of the House of Representatives sponsored three separate attempts to pass legislation authorizing the formation of soil conservation districts. The first attempt died in committee. The second attempt was vetoed by Governor Bacon after farm organizations objected to regulatory authority included in the act. The third attempt in 1943, a bill sponsored by Representative E. R. Pleasanton of Port Penn was signed into law by Governor Bacon on April 2, 1943.

The Soil Conservation District Act created the State Soil Conservation Commission for the purpose of determining the need for conservation districts in the State and to provide guidance in their functioning after formation. After its members were appointed by the Governor and the Commission was organized, the County Agricultural Agent in each county set about the business of explaining the purposes of a Soil Conservation District and the method of forming one in each of the three counties.

The procedures specified in the Act required a petition signed by not less than twenty-five landowners, a public hearing and a study of the area by the Commission to determine whether a soil conservation district was necessary and administratively feasible.

After the study and the determination that a district was feasible a referendum was held in each county. After the favorable referendum the County Agent was notified by the Commission of the necessity for a Board of Soil District supervisors, four of whom were to be landowners resident within the district and elected by the majority vote of landowners voting under Commission rules.

To arrange for continuity of the Board, the four elected supervisors were assigned initial terms of one, two, three or four years thus providing for a four year term after the initial period. A supervisor could succeed himself in office as long as he remained qualified. The Board also had two ex officio members: the Chairman of the Levy Court and the County Agricultural Agent. The County Agent was Secretary of the Board but had no voting privileges.

Authority and Philosophy

Each Conservation District is responsible for providing local leadership for soil conservation, particularly erosion control and drainage. The District's broad authority under the basic Act (Chapter 39, Title 7, Delaware Code) has provided a vehicle for other groups or agencies to achieve public purposes in the soil and water resources field. It is significant that each time that the Conservation District's operation's have

¹ Division JSC Initial Questionnaire, pgs. 57-58

been examined in response to requests for new or clarified authority that the District has been strengthened or given new authority as an organization close to the landowners.

The Conservation Districts' long range program directs attention to the concerns stated formally by the public in response to questionnaires and at meetings. However, more importantly it addresses those concerns expressed by landowners and others in the Districts' daily contacts in the business of solving conservation problems and in responding to the needs of people and agencies for resource information and protection.

In carrying out the soil and water conservation programs throughout the State, it should be mentioned that the role of each Districts' Board is not highly visible. The Board serves as a catalyst, a coordinator, a sounding board, a sponsor and a host of other functions for the myriad of conservation and resource agencies concerned with soil, water and plant resources.

The enabling legislation has been amended several times throughout the years. The changes include: allowing for a designated member of county government to serve in lieu of the Levy Court President; allowing up to two non-farm residents to be appointed to serve by the DNREC Secretary; the specification that the supervisors come from specified areas rather than at-large; and that all landowners may vote in an election, not just those with three acres or more outside the city or town limits.²

New Castle Conservation District provided the following information regarding its history from a summary paper that was prepared in 1984 as part of a legislative briefing:³

New Castle Conservation District was third to be organized in Delaware though New Castle County played a leading role in early soil conservation. For example, the Christina Soil Conservation Demonstration project area was initiated on November 17, 1937. A 28,000 acre area of severely eroding soil in the Piedmont section of the Christina River watershed was selected by the USDA, Soil Conservation Service for special attention. Later an additional 15,000 acres was added to the project.

...

The terms "Tax Ditch" or "Company Ditch" were initially used locally to identify ditches constructed or maintained by groups such as the marsh company organized under the incorporation laws of the Delaware colony. Almost every volume of Delaware law contains some reference to specific marsh companies, drainage corporations, drainage laws or drainage incorporation laws. This is one root of the District.

Joint Sunset Committee Review History

The Joint Sunset Committee's (JSC) Review History reveals that none of the three Conservation Districts nor the Division of Soil and Water Conservation has been reviewed by the JSC.

² New Castle Conservation District JSC Initial Questionnaire, pgs. 3-5

³ New Castle Conservation District JSC Initial Questionnaire, pgs. 3-5

Powers and Duties

Below are the powers and duties of the Conservation Districts as prescribed by statute:⁴

A soil and water conservation district organized under this chapter shall constitute a governmental subdivision of this State, and such district, and the board of supervisors thereof, shall have authority to exercise the following powers, in addition to others granted in other sections of this chapter, subject to the responsibility of the Department of Natural Resources and Environmental Control for the administration and direction of the programs of the districts:

(1) To develop comprehensive plans for, and carry out, preventive and control measures and works of improvement for the prevention of erosion, floodwater and sediment damages, and the conservation, development and utilization of land and water resources, including the disposal of water and removal of sediment from waterways, lakes, ponds or other bodies of water, within the district;

(2) To conduct, in cooperation with the Department of Natural Resources and Environmental Control surveys, investigations and research relating to the prevention of erosion, floodwater and sediment damages, and the conservation, protection, development and utilization of land and water resources, including the disposal of water, and removal of sediment from waterways, lakes, ponds or other bodies of water;

(3) To cooperate or enter into agreements with, and, within the limits of appropriations or other funds duly made available to it by law, to provide aid to any agency, governmental or otherwise, or any landowner within the district, in carrying out the program of the district, subject to such conditions as the board may deem necessary to carry out the purposes of this chapter;

(4)(a) To make available, on such terms as the board shall prescribe, to any landowners within the district, through existing agencies if agreements with them seem feasible, or by such other means as the board shall prescribe, such services, materials and equipment as will assist such landowners to carry on operations for any of the purposes of this chapter;

(b) To make available on request, and on such terms as the Board shall prescribe, to any cooperator who is a resident of the State and who owns land in a neighboring state, services, materials and equipment for the benefit of such cooperator's land in the neighboring state;

(5) To construct, improve, operate and maintain such structures as may be necessary or convenient for the performance of any of the operations authorized in this chapter;

(6) To obtain options upon and acquire by purchase, exchange, lease, gift, grant, bequest, devise or otherwise, any property, real or personal, or rights or interests therein; to maintain, administer and improve any properties acquired; to receive income from such properties and expend such income in carrying out the purposes and provisions of this chapter; and to sell, lease or otherwise dispose of any of its real or personal property or interests therein, in furtherance of the purposes of the district;

(7) To accept the cooperation of, and financial, technical and material assistance from, the United States or any of its agencies, or from this State or any of its agencies

⁴ 7 Del. C. § 3908

or subdivisions, or from any other source, for use in carrying out the purposes of the district;

(8) To sue and be sued in the name of the district; to make and execute contracts and other legal instruments, necessary or convenient to the exercise of its powers, with any federal, state or local agency, or with any person; and to receive and expend funds; and

(9) To promote the conservation, protection, development and utilization of land and water resources through various informational and educational activities as the Board may deem necessary in the furtherance of its duties under this chapter.

Additionally, statute provides that any 2 or more soil and water conservation districts “may cooperate with one another or with the State or any agency or subdivision thereof in the exercise of all powers conferred upon such districts or any or all duties prescribed for such districts” by statute.⁵

Audits

NCCD

The New Castle Conservation District provided the following information with regard to audits:⁶

NCCD engages an independent auditor to conduct an audit of the district’s financial statements annually. This audit is conducted in accordance with auditing standards generally accepted in the United States. The audit for 2007 is delayed due to DelDOT’s audit (described below). The District Board and staff are subject to financial control procedures to assure internal review and approval of all purchases. The District’s Personnel Policy includes an “Ethics” section.

An audit was conducted by an external accounting firm for DelDOT to evaluate the District’s overhead charges. NCCD provided the following information with regard to that audit:⁷

The .. audit resulted in a revision of the billing methods allowed by DelDOT. In accordance with the Brooks Act, DelDOT reviewed the CPA's work papers and found them to be sufficient to accept the prepared overhead report. This results in an approved billing rate of 91.78%, that shall be valid from July 1, 2007 until June 30, 2008, when the District’s December 31, 2007, overhead will be due. This rate is subject to adjustment upon receipt of additional information.

This audit also provides that for all years that work is performed under cost plus fixed fee contracts with DelDOT, the District is required to submit an indirect cost (overhead) audit report prepared, in accordance with the Federal Acquisition Regulations, subpart 31.2, prepared by an independent CPA firm or cognizant government agency. The District will be required for all future years to pick up the cost of a completed indirect cost audit by an independent CPA of our choice. The terms of the agreement will determine the appropriate rate to be utilized for negotiation and billing.

As of June 2007 the NCCD is complying with the new DelDOT billing procedure.

⁵ 7 Del. C. § 3909

⁶ New Castle Conservation District, edits Draft Report, pg. 6

⁷ New Castle Conservation District JSC Additional Questionnaire, pg. 1

KCD

The KCD indicated that the fiscal portion of the KCD's operation is audited by an external auditing firm at the end of each fiscal year. As a result of the FY'06 audit, the KCD received the following recommendations with regard to strengthening internal controls and operating efficiency:⁸

- Bank Reconciliations

It is recommended that the responsible employee review the bank reconciliations for accuracy and completeness on a monthly basis.

As a result of this recommendation the responsible employee does review the bank reconciliations for accuracy and completeness on a monthly basis.

- Personal Use of Equipment

Management has authorized, on limited occasions, that the District's equipment may be used personally by employees. The District does not have a written policy regarding off premises use or personal use of District property.

It is recommended that there be policies and procedures established in writing regarding personal use of the District's equipment, including sensitive assets such as laptop computers. If "off premises" use is approved, a log should be maintained to track the asset removed, date removed, date returned, and responsible person.

At the Board of Supervisors meeting on December 17, 2007, the District Coordinator reported that no formal action had been taken on this recommendation. However; informally, as a result of this recommendation, no personal use of equipment has been authorized nor has occurred since this recommendation was received.

- Depreciation

As the quantity and dollar amount of property and equipment increase, it becomes more difficult to maintain accountability and record depreciation. Management may want to consider utilizing a formal depreciation software package. Depreciation is currently maintained on an electronic spreadsheet. It is recommended that the Peachtree depreciation module be used.

At the Board of Supervisors meeting on December 17, 2007, the District Accountant reported that specifications for a Depreciation module have been requested from the Sage Software, SB, Inc., the makers of the Peachtree Premium Accounting software the District currently uses. To date (December 20, 2007), no response has been received. This recommendation is still a work in progress.

- Accounting Manual

It is recommended that management establish a standard accounting and operating procedures manual outlining policies to be followed.

At the Board of Supervisors meeting on December 17, 2007, the District Coordinator and District Accountant reported that some notes have been prepared on a number of the accounting procedures as a prelude to writing a standard accounting and operating procedures manual as recommended. However, to date (December 20, 2007), there has not been ample time to focus specifically on the manual and prepare it in full. It is still a work in progress.

- Tax Ditch Funds

Tax ditch funds are collected by the District from property owners to set up tax ditch associations and are administered by DNREC. There has been very little activity in the tax ditch funds payable or receivable for years. Carrying these inactive accounts on the books causes the District extra accounting expense.

⁸ Kent Conservation District Additional Questionnaire, pgs. 1-2

It is recommended that the District continue its efforts to properly resolve these accounts and further recommend an attorney be consulted to determine applicable state escheat law and procedures.

Subsequent to this recommendation the District was successful in returning all tax ditch funds referred to back to the respective tax ditches and/or owners and the accounts were closed.

Additionally, the State Auditor investigated the Harrington-Beaverdam Tax Ditch Association's operation in 2003. The Kent Conservation District was involved in this audit because a landowner within the Tax Ditch Watershed was questioning the validity of Tax Ditch funds being used for particular work performed by the Kent Conservation District's Equipment Program. The State Auditor's office concluded that the Tax Ditch Association was clear of any wrong-doing, which in turn cleared the Kent Conservation District Equipment Program as well.⁹

SCD

The Sussex Conservation District has an annual financial audit conducted by a certified public accountant firm. The following are the SCD's responses to the FY'06 recommendations:^{10/11}

- It was recommended that the SCD provide appropriate control through a written procedure for the use of credit cards, to ensure approval/documentation of expenditures, verification of receipts, and proper allocation of expenses.
As a result of the management recommendations from the auditors, SCD implemented new controls to ensure that all receipts are placed with the credit card bills. The issue was handled verbally and no written procedure was put in place. There were only a few instances that receipts weren't placed with the bill which included items that were purchased via the telephone or internet. Since implementing the new procedures, SCD hasn't experienced any problems and has all receipts. The SCD plans to have written procedures in place that address the issued of credit card receipts, approval and documentation of expenditures, and proper allocation of expenses by March 31, 2008.
- The auditors recommended that the SCD implement a conflict-of-interest policy for the members of the Board that covers conflicts with vendors or customers, accepting or making of gifts, improper use of District assets for personal use, and confidentiality of District information.
The SCD is in the process of adopting a Board of Supervisors' Handbook which includes a conflict of interest statement for Board members. The handbook basically explains in detail the fiduciary responsibilities of Board members, and addresses their roles and responsibilities and the importance of confidentiality by Board members. The handbook has been presented to the Board and is awaiting approval. The District has shared the Handbook with the other two conservation districts for their feedback before approving.
- The auditors recommended that the SCD establish an investment policy that maximizes interest income, keeps interest costs to a minimum, and formalizes a cash and investment policy including both long and short term objectives.

⁹ Kent Conservation District JSC Initial Questionnaire, pg. 18

¹⁰ Sussex Conservation District Additional Questionnaire, pg. 1

¹¹ Email from Debbie Absher dated January 29, 2008

The SCD's accounting department is in the drafting stages of an investment policy that outlines and provides guidance and limitations for investing District assets.

Administrative Procedures Act

Each of the Conservation Districts responded that they do not promulgate rules and regulations. However, the DSWC is subject to the Administrative Procedures Act and promulgates rules and regulations. The Stormwater regulations pertain specifically to all the DSWC's delegated agencies. The Sediment and Stormwater Regulations and Dam Safety Regulations are both in the process of being developed with a regulatory advisory committee and neither is at the stage of needing legal review.¹² Additionally, the DSWC promulgates rules and regulations regarding the election of members of the Conservation District boards.¹³

Freedom of Information Act

NCCD/KCD/SCD

All of the Conservation Districts indicated that meeting notices and agendas are posted at least 7 days prior to the meeting date on each District's website, the DNREC bulletin board and in each of their respective offices. The DSWC posts this information for each of the three conservation districts on the State Calendar website.¹⁴

Each District indicated that it has a FOIA policy in place and the policy is followed. All meetings, except for Executive Sessions are open to the public and only held in accordance with the provisions specified in the FOIA statute. Meeting minutes are transcribed and are available for public viewing at the Districts' office. Meeting minutes are not available on the web, but copies will be sent out if requested.

Memorandum of Understanding and Interagency Agreements

NCCD/KCD/SCD¹⁵

The oldest agreement involving the District goes back to 1945 and provides the services of the United States Department of Agriculture's Soil Conservation Service (USDA-SCS) to cooperators of the District. This agreement was modeled after the federal Standard State Soil Conservation Districts Law of 1936. The original MOU with USDA was updated and signed in 1996 to supplement the original agreement. The Supplement provided for a name change for SCS to the Natural Resources Conservation Service as well as other housekeeping changes.

NCCD

New Castle Conservation District provided the following list of MOUs:

- Cooperative Working Agreement between the USDA, Natural Resources Conservation Service and The State of Delaware and The New Castle Conservation District – *Cooperation in the Conservation of Natural Resources.*
- Memorandum of Understanding between the New Castle Conservation District and New Castle County – *Assist the County in achieving an effective conservation program.*

¹² Division of Soil and Water Conservation, JSC Initial Questionnaire, pg. 66

¹³ Division of Soil and Water Conservation, edits Draft Report, pg. 9

¹⁴ Division of Soil and Water Conservation, edits Draft Report, pg. 9

¹⁵ New Castle Conservation District JSC Additional Questionnaire, pgs. 1 - 2

- Supplemental Agreement to Memorandum of Understanding (No. 1) between the New Castle Conservation District and New Castle County – *3921 agreement for providing funding for Tax Ditches, Public Ditches and Resource Conservation Projects.* (per 7 Del Code, Ch 39)
- Supplemental Agreement to Memorandum of Understanding (No. 2) between the New Castle Conservation District and New Castle County – *Equipment Lease.*
- Supplemental Agreement to Memorandum of Understanding (No. 3) between the New Castle Conservation District and New Castle County – *Sediment and Erosion Control.*
- Supplemental Agreement to Memorandum of Understanding (No. 4) between the New Castle Conservation District and New Castle County – *Fleet Automobile.*
- Reimbursable Agreement with USDA, Farm Service Agency and Natural Resources Conservation Services for the use of the copier and copier supplies.

KCD

Kent Conservation District provided the following list:¹⁶

- Cooperative Working Agreement between the USDA, Natural Resources Conservation Service and the State of Delaware and the Kent Conservation District – *Cooperation in the Conservation of Natural Resources.*
- Agreement with DNREC-Division of Soil and Water Conservation that constitutes the basis of operations, and payments therefore, for soil conservation in the State of Delaware, mutually performed by DNREC-S&W and the District.
- Agreement with DNREC-Division of Fish and Wildlife that constitutes the basis of operations, and payments therefore, for the fisheries/wildlife program in the State of Delaware, mutually performed by DNREC-F&W and the District.
- Contribution Agreement between the Kent Conservation District and the USDA, Natural Resources Conservation Service – NRCS provides funding to accomplish a list of conservation goals.
- Project Agreements with DelDOT are formulated for specific projects as needed for the expenditure of Community Transportation Funding for the installation and implementation of drainage and/or conservation projects.
- Cooperative Agreement with U.S. Fish & Wildlife Service for wetland restoration work in the Chesapeake Bay and Delaware Bay watersheds.

SCD

Sussex Conservation District provided the following list:¹⁷

- Contribution Agreement between the Sussex Conservation District and the USDA, Natural Resources Conservation Service – NRCS will provide funding to accomplish a list of goals.
- Cooperative Agreement with U.S. Fish & Wildlife Service for work at the Prime Hook National Wildlife Refuge
- Reimbursable Agreement with USDA, Farm Service Agency for the use of the copier and copier supplies.
- Project Agreement between DNREC, Division of Soil and Water Conservation, Kent Conservation District, and the Sussex Conservation District – development of a stormwater database.

¹⁶ Kent Conservation District JSC Additional Questionnaire, pgs. 2-3

¹⁷ Sussex Conservation District JSC Initial Questionnaire, pgs. 12 - 13

- Memorandum of Agreement between DNREC, Division of Soil and Water Conservation and the Sussex Conservation District regarding the assumption of the construction responsibilities performed by the Division of Soil and Water Conservation pipe crew.
- Supplemental Project Agreement 1 Assawoman Canal Dredging Project, with the DNREC Division of Soil and Water Conservation, regarding the dredge of the Assawoman Canal.
- Supplemental Project Agreement No. 2 Assawoman Canal Dredging Project, with DNREC Division of Soil and Water Conservation regarding the dredging of the Assawoman Canal.
- Memorandum of Agreement between the Sussex Conservation District and the DNREC Division of Soil and Water Conservation regarding Nonpoint Source Pollution funding for the conservation planners. FY'07 & FY'08
- Memorandum of Agreement between the Sussex Conservation District and the DNREC Division of Soil and Water Conservation regarding Nonpoint Source Pollution funding for vegetative shoreline stabilization projects.
- Memorandum of Agreement between the Sussex Conservation District and the DNREC Division of Soil and Water Conservation regarding Nonpoint Source Pollution funding for cost-share for cover crops and other best management practices. FY'07 & FY'08
- Project Agreements with DelDOT are formulated for specific projects as needed for the expenditure of Community Transportation Funding for the installation and implementation of drainage and/or conservation projects.¹⁸
- Project Agreement between the Sussex Conservation District, DNREC Division of Soil and Water Conservation, and the Duke Jobs Tax Ditch regarding a maintenance accessway reestablishment/demonstration in the Chesapeake Bay Watershed.

Executive Orders

The following Executive Orders affect the three Conservation Districts:¹⁹

- Executive Order # 61 – Regarding Green Infrastructure
This Executive Order mandates that the Secretary of DNREC do a number of things, including improving coordination of conservation partners. The Conservation Districts are a conservation partner and works closely with DNREC staff to implement these types of projects. Specifically, the Conservation Districts do much of the actual earth-moving for these projects.
- Executive Order #62 - Established a Task Force On Surface Water Management
The Conservation Districts of the State were represented on this Task Force and played a major role in helping to formulate the 26 recommendations that came out of this task force.
- Executive Order # 87 - Established the State Employees' Charitable Campaign
This Executive Order established the State Employees' Charitable Campaign. The Delaware Envirothon, and the Delaware Association of Conservation Districts program.

¹⁸ Sussex Conservation District, edits Draft Report, pg. 11

¹⁹ Kent Conservation District Additional Questionnaire, pg. 3

- Federal Executive Order – Cooperative Conservation
The purpose of this Executive Order is to ensure that the Departments of the Interior, Agriculture, Commerce, and Defense and the Environmental Protection Agency implement laws relating to the environment and natural resources in a manner that promotes cooperative conservation, with an emphasis on appropriate inclusion of local participation in Federal decision-making, in accordance with their respective agency missions, policies, and regulations. The conservation districts participate in the USDA-NRCS Locally Led Conservation Program and the State Technical Committee providing recommendations on technical and financial assistance programs.
- Executive Order #103 – Declaring a drought watch. This Executive Order requested that the citizens and businesses of the State observe voluntary water conservation measures to reduce water use (October, 2007)²⁰

The following Executive Orders impacted the New Castle Conservation District:²¹

- Executive Order #32 - Mandatory Water Conservation Measures. This Executive Order imposed mandatory water use restrictions in northern New Castle County. (August 2002)
- Executive Order #37 - Terminating Drought Warning . This Executive Order terminated a drought warning implemented by Executive Order No. 29. (January, 2003)

Judicial Decisions

The DSWC provided the following with regard to judicial decisions affecting the conservation districts:²²

...the conservation districts, particularly in Kent and Sussex counties, are instrumental in maintaining tax ditches, the recent federal court ruling on the Tulloch II rule is of importance. This recent ruling lessens the amount of bureaucratic red tape the conservation districts must deal with in the way of permitting prior to beginning work on tax ditch dip-out projects.

Delaware’s conservation districts are affected by a decision made by a Chicago Federal Appellate Court regarding wetlands and Section 404 of the Clean Water Act. “In this decision the court found that the discharge of *de minimus* amounts of fill into wetlands during a construction project was not in violation of the federal Clean Water Act. This decision applies directly to District work in and near jurisdictional wetlands.”²³

²⁰ Division of Soil and Water Conservation , edits Draft Report, pg. 33

²¹ New Castle Conservation District JSC Additional Questionnaire, pg. 2

²² Division JSC Initial Questionnaire, pg. 67

²³ New Castle Conservation District JSC Initial Questionnaire, pg. 22

Federal Laws

The following federal laws apply to the DSWC and each of the conservation districts:²⁴

Federal Clean Water Act – Section 402: National Pollutant Discharge Elimination System (NPDES) governs the discharge of stormwater associated with construction activities. This Federal law impacts the delivery of stormwater services to the regulated community by all three conservation districts.

As a result of the Municipal Permit process that exists in New Castle County the New Castle Conservation District is affected by additional NPDES program responsibilities.

Federal Clean Water Act – Section 401 and 404: These sections govern the discharge of dredged or filled materials into waters of the U.S. When DSWC or the conservation districts are involved in drainage or water management projects, these laws affect some of the work that is undertaken, and in some cases permits are required. DSWC and or DNREC's Division of Water Resources may issue permits for these projects. DSWC may apply for the state and/or federal permits for many of these projects.²⁵

In New Castle County, the NCCD may be involved in securing the permits on some projects that they administer.²⁶

Performance

Mission

In the Declaration of Policy the enabling statute provides:²⁷

It is the policy of the State to provide for the preservation of the productive power of Delaware land and the optimum development and use of certain surface water resources of the State by furthering the conservation, protection, development and utilization of land and water resources, including the impoundment, and disposal of water and by preventing and controlling floodwater and sediment damages, and thereby to preserve natural resources and promote their beneficial use, control floods, prevent impairment of dams and reservoirs, assist in maintaining the navigability of rivers and harbors, preserve wildlife, provide recreation development, protect the tax base, protect public lands and highways, and protect and promote the health, safety and general welfare of the people of this State.

NCCD

New Castle Conservation District indicated that its mission “is the promotion of wise use and protection of the natural resources of New Castle County.”²⁸ The District's programs and policies are intended to assist landowners to utilize the federal and state natural resource programs that conserve the soil, water, wetland and habitat resources of the landowners of New Castle County.²⁹

²⁴ Division JSC Initial Questionnaire, pg. 66

²⁵ New castle Conservation District, edits Draft Report, page 13

²⁶ Division JSC Initial Questionnaire, pg. 66

²⁷ 7 Del. C. § 3901

²⁸ New Castle Conservation District JSC Initial Questionnaire, pg. 18

²⁹ New Castle Conservation District, edits Draft Report, pgs. 13 & 14

KCD

Kent Conservation District indicated that its mission “is to put each acre of land to the use for which it is best suited and to economically develop and improve our environment to its highest potential according to sound planning and conservation practices.”³⁰

SCD

Sussex Conservation District recently drafted an official mission statement which is, “The Sussex Conservation District’s mission is to serve Sussex County residents by providing technical guidance and financial assistance to maintain and protect, and enhance and improve the environment.”³¹

Accomplishments

NCCD

The most significant accomplishment of the NCCD is the fact that it works with many State and federal agencies, groups of landowners or advocates, and private individuals to assemble those with common interests in a particular issue, accept ideas and contributions and complete projects.³²

KCD

Kent Conservation District provided the following with regard to its most significant accomplishments:³³

The Kent Conservation District program ...is one of the best examples ...of a highly coordinated federal, state, county and individual landowner cooperation in the carrying out of well balanced (soil, water, forest, wildlife, wetland) environmental programs. The result of which are established sound environmental best management practices on private, federal, state, and county lands through a voluntary, and cost incentive program. This is accomplished by providing coordination for on site technical assistance in inventorying, planning, construction layout and inspection, certification of application according to approved standards and specifications and on site follow through for proper maintenance.

One of the most important best management practices .. is the tax ditch program that has been carried out in Kent County and the State of Delaware since the 1951 Delaware Tax Ditch Law. This community type drainage is absolutely necessary in Delaware’s urban and rural areas as an initial step in carrying out individual drainage practices which in turn allows for the proper establishment of best management practices for proper land use in over 1/3 of the State.

³⁰ Kent Conservation District JSC Initial Questionnaire, pg. 12

³¹ Sussex Conservation District, edits Draft Report, pgs. 13 & 14

³² New Castle Conservation District JSC Initial Questionnaire, pgs. 14 - 15

³³ Kent Conservation District JSC Initial Questionnaire, pg. 10

SCD

The Sussex Conservation District listed the following significant accomplishments:³⁴

- The SCD receives a tremendous amount of participation in its cost-share programs. All of the programs are voluntary. The SCD receives more applications than it can fund.
- The SCD is extremely busy reviewing plans for compliance with the state regulations relating to erosion control and stormwater management. The District has been able to keep up with the development that is taking place in Sussex County - the program has nearly tripled in size over the past ten years.
- In 2006, the Sussex District received a national award for partnership diversity for the National Association of Conservation Districts. The award was received due to SCD's unique diversity, not only in programs, partners, clientele and employees.

Challenges

NCCD/KCD/SCD

The conservation districts share the following challenges:

- **Post-Retirement Health Insurance for District Employees.** One of the biggest challenges facing all three conservation districts is how to keep adequately trained personnel. The District is a governmental subdivision of the State of Delaware, and a member of the State of Delaware's Municipal & Local Government Pension Plan, and a part of the State of Delaware's Blue Cross Blue Shield Health Insurance Package. However; District employees are not afforded the opportunity for post-retirement Health Insurance coverage through the State of Delaware. No matter how long an employee works for the District, they will never have their health insurance paid for after retirement. This offers a huge challenge to the District in terms of employee retention. This lack of retention offers many challenges including lack of historical knowledge, and loss of training dollars when fully trained employees continue to leave the District for positions solely because they offer this benefit. If the District could offer this benefit to its employees it would help ensure a stable workforce, and increase their ability to retain highly trained employees.
- **Additional Cost-Share Assistance for Landowners** – In order to meet the demand of the District's Cooperator's for Cost-Share assistance to install conservation practices, the District will have to continuously limit either the amount to each Cooperator, or the number of Cooperators it serves. Additional cost-share dollars for landowners would help make more of the needed conservation practices possible.
- **Elimination of Tax Ditch Right-of-Ways** – 2007 House Bill #189 proposed to reduce Tax Ditch Construction Right-of-Ways currently recorded in the State of Delaware's Prothonotary's Office to a limit of 95 feet from the centerline of the ditch on agricultural lands, and 50 feet from the centerline of the ditch for other non-agricultural uses. Future ditch maintenance that may require a change in construction methods due to the limitation of the right-of-ways will undoubtedly cause an increase in costs. This increased cost would in turn lessen the amount of ditches that the District will be able to financially assist with their maintenance activities. Without the District's financial assistance many tax ditches would not be

³⁴ Sussex Conservation District JSC Initial Questionnaire, pg. 8

able to perform needed maintenance, which will result in increased drainage problems throughout the county that the District in turn are tasked to investigate and attempt to find alternative solutions to. Solutions to these drainage problems may not exist without enough right-of-way or funding. These issues are currently being addressed by the Tax Ditch Right-of-Way Task Force. This task force is scheduled to provide final recommendations during the spring of 2008.³⁵

NCCD

The New Castle Conservation District faces the following challenges:³⁶

- The development of farmland into small acreage farmettes is presenting an educational challenge for good soil conserving practices. Many of these landowners have no experience with farmland or how to practice good conservation for soil and water resources. Improper management by small landowners of their resources often has a very lasting adverse effect.
- Many of the small acreage farms have a few horses for their own pleasure. They have no experience or training in how to handle the manure waste produced by their horses, how to dispose of or productively use it. The New Castle Conservation District provides information and guidance to them as requested. Many horse owners come under the Nutrient Management Law and they are unaware of the requirements. Others are not covered under the regulations but still have an adverse environmental impact on water quality. The horse population is growing in New Castle County.

KCD/SCD

Kent Conservation District and the Sussex Conservation District face the following challenges:³⁷

- **The stormwater program** has had to deal with increased development within Kent and Sussex counties. The more people that move to each of these counties, and the more homes and commercial properties that are built on Kent and Sussex County farmland, the more issues the KCD and SCD must face. These issues range from drainage and wetland issues to neighbor relations, failed stormwater facilities, pollutant discharges from construction sites, along with a myriad of other issues.
- **Stormwater Facility Maintenance** – Thousands of stormwater management facilities, predominately ponds, have been constructed over the past 18 years of the State of Delaware's Stormwater program. As the delegated agencies in Kent and Sussex counties, KCD and SCD collect fees for annual maintenance inspections of these facilities, though statute does not ensure ownership and/or responsibility for these facilities. If KCD or SCD find the facilities in need of maintenance there is no guarantee there will be a responsible person or entity to ensure it gets completed. Ownership of the facilities is retained by the developer and when the development is built out, the developer leaves the scene. The ownership is supposed to fall to homeowner associations, but there is no statute on the state or county level requiring a homeowner association to form. As a result, maintenance is negligent and results in stormwater facility failure or greatly diminished effectiveness. This is a

³⁵ Division of Soil and Water Conservation , edits Draft Report, pg. 17

³⁶ New Castle Conservation District JSC Initial Questionnaire, pg. 18

³⁷ Sussex Conservation District JSC Initial Questionnaire, pg. 9

continuing need and could prove a need for great expenditures of money, expertise and manpower.

SCD

Sussex Conservation District faces the following challenges:³⁸

- **Lack of office space.** The stormwater program has nearly tripled in 10 years time, placing a strain on the existing building. The SCD is investigating a new building large enough to house all of the SCD employees and the USDA partners located in the USDA Agricultural Service Center.

Opportunities for Improvement

NCCD

The New Castle Conservation District indicated the following as areas for improvement:³⁹

Due to the long-term development impacts on New Castle County's urban/suburban watersheds, more attention and funding is needed to restore and enhance stream corridors through ecological stream restoration design principles. More landowners are also seeing the value and requesting that stream stabilization projects be done using ecological restoration methods.

Historically there were numerous mill ponds constructed during the late eighteenth century and in the nineteenth century. The mill ponds were constructed by low head dams placed across small streams and use[d] to operate mills and other needs of the agricultural industry. These dams served to capture sediment that would have normally been carried on downstream. This captured sediment filled the natural broad flood plains creating new elevated flood plains. Sometimes the flood plains ended up with three to twelve feet of sediment. The need for these mill dams diminished when electricity began to power the farms and grist mills. Many of the ponds created originally as mill ponds have been maintained or reconstructed as recreation and fishing ponds. Many were allowed to deteriorate or were removed by the owners and the resulting morphological impact on the stream channel and flood plain have produced diminished flood plain flood water adaptation and exaggerated erosion and sedimentation problems. Also, in the flood plain areas, vegetation has developed on the excessive fill, primarily topsoil, and the entire natural water runoff regimen has been semi-permanently altered. The need for good conservation is to recognize these situations and handle them with full knowledge of future impacts on any actions planned. Each case must be examined individually and with whole watershed impact evaluated. A watershed analysis is needed for major restoration efforts and funding on a watershed basis to look at major water management problems.

Reconstruction and Enhancement of Storm Ponds

Several hundred storm ponds were constructed during the building boom in New Castle County during the 1980s. Many of these ponds had no provisions or directions for maintenance. The ownership was retained by the developer and when the development was built out, the developer left the scene. The ownership fell to homeowner associations who had no idea of what was needed or required to make the pond serve the

³⁸ Sussex Conservation District JSC Initial Questionnaire, pg. 9

³⁹ New Castle Conservation District JSC Initial Questionnaire, pgs. 15-17

intended purpose. As a result, pond maintenance was negligent and resulted in storm pond failure or greatly diminished its effectiveness. During the floods in the early years of the 21st Century, it became apparent that extensive maintenance was critical to the flooding issue in the County. This is a continuing need and will be a need for great expenditures of money, expertise and manpower.

Habitat Restoration

Open space makes up a significant percentage of land-use in many New Castle County subdivisions. Much of this is former agricultural fields and/or forested fringe areas that can quickly be taken over by invasive species or are kept in a mowed lawn condition. These are areas that should be managed for habitat restoration to link them together or to the existing natural riparian corridors adjacent to the community. Several programs and entities exist to provide some assistance, but additional funding and program support is needed to meet the future needs.

Invasive Species Management

Invasive Species management is becoming a necessity and a more integral part of most habitat restoration projects. While the Delaware Invasive Species Council has a state-wide management plan, little state funding exists to provide adequate support for an overall coordinator to manage invasive species removal projects and to have the funds and manpower to implement such efforts. Coordination is needed among the various state agencies and private entities engaged in invasive species control and removal. Noxious invasive weeds need to be identified and corresponding laws or regulations need to be adopted and enforced.

Stormwater Utility

A stable funding and maintenance mechanism is required to facilitate the long term stormwater infrastructure needs in New Castle County. One method [that] is being considered to address that need is through the establishment of a stormwater utility. This process, closely following the historic Delaware Tax Ditch Law, will provide for owners to pay for the modifications to the water management and drainage infrastructure and address the water management, flooding and drainage needs in cooperation with state and county governments.

Urban Water Management

The current issues of stormwater management, flooding, and water quality requirements under federal and state laws require some innovative thinking when it comes to water management. There are several techniques, both new and old, that need further review and demonstration projects to determine their feasible use in New Castle County. Limitations such as clay and impacted soils, small lot sizes, etc. will determine which course of action to take. Some of the new innovative methods that can be used to disconnect water from entering the storm sewer systems and thus entering local streams are:

- The use of rain barrels under downspouts to collect the first flush of rainfall from roofs of houses.
- The installation of dry wells in yards to collect water and let it slowly percolate back into the soil.
- The use of cisterns to hold larger amounts of water to be used for lawn and garden irrigation purposes. A homeowner in the Newark area has installed a 500 gallon cistern under the rear deck. The roof gutters drain into the cistern and there is a pump to use the water in the yard for irrigation.

- The installation of rain gardens to hold surface water and slowly percolate down through the soil horizon. This is a form of bio-infiltration. There are various low and high tech versions of this technique that could be demonstrated. Special soil mixes have been developed to facilitate water retention and percolation and sub-surface tile drains could be included in the design. The rain gardens also include the use of native moisture tolerant plants. There are many outstanding publications now in print dealing with this practice. DNREC – Division of Water Resources has hired an urban planner who has begun the implementation of rain gardens in Kent and Sussex counties. This service is not provided to New Castle County owners.
- Hooking household rain gutters directly to the storm sewer system should only be practiced after alternatives that recharge ground water have been employed. New Castle County currently has ordinances in place to eliminate the practice of allowing rain gutters or sump pumps to discharge into the County sanitary sewer system. A program needs to be developed that encourages practices for ground water recharge.

The point of these practices is again to try to reduce the amount of water entering a stream directly or by being connected to the storm sewer system in the street, thus reducing the flow of stormwater to area watercourses. A few projects have been completed by various entities in New Castle County but not many are on private residential lots.

KCD

The Kent Conservation District indicated the following as an area for improvement:⁴⁰

Personnel Policy Manual – A complete personnel policy manual has been in draft form since 1994. The purpose for the delay has been the inability of the District and State of Delaware staff to come to agreement on how the District’s staff working in/around/and for State of Delaware staff will be addressed. In the meantime, policies for employee benefits, i.e. sick and annual leave, have been approved by the Board of Supervisors and made available to District employees. It would greatly benefit the employees of the Kent Conservation District to have a complete Personnel Policy Manual that is applicable to all employees, regardless of their immediate supervisor or location throughout the state.

KCD/SCD

Kent and Sussex Conservation Districts listed the following as areas for improvement:⁴¹

Additional Cost-Share Assistance for Landowners – The current levels of Cost-Share dollars made available to landowners throughout the Districts do not meet the demand. As Kent and Sussex Counties become more populated, and we as a society learn more about the human impact on the environment, more landowners are tasked with installing conservation practices on their lands. Meeting the demand for cost-share dollars would have a direct positive impact on the environment in which we live.

Stable Funding For Nutrient Management Planners – The State of Delaware’s Nutrient Management Law, Chapter 2247, section (j) states that the State shall make nutrient consultants available through the conservation districts to provide free nutrient

⁴⁰ Kent Conservation District JSC Initial Questionnaire, pgs. 10-11

⁴¹ Sussex Conservation District JSC Initial Questionnaire, pgs. 8 - 9

management plans assistance to anyone requesting such assistance, however, the State does not offer stable funding for these positions. The Districts' Nutrient Management Planners are funded by grants through DNREC's Section 319 Non-Point Source Pollution Program and the State's General Fund. The Kent District planners also receive funding from the USDA-Natural Resources Conservation Service. These funding sources are being cut nationally every year, and the fear of this happening limits the number of quality candidates the Districts have to choose from. People are often too apprehensive of the "soft money" positions to apply for them. Stable state funding for these positions would help the Districts recruit and maintain good employees.

Coordination of Services with other Agencies

NCCD

New Castle Conservation District provided the following with regard to coordination of services with other agencies:⁴²

The District coordinates responsibilities for drainage issues with New Castle County and the Delaware Department of Transportation (DelDOT). New Castle County handles drainage issues with new developments up to a year after completion. DelDOT handles drainage issues within their rights-of-ways. The District, when requested and funds are provided, handles drainage issues on private landowners no longer under the new development category. The District routinely handles issues after the problem is affected by DelDOT work but is on privately owned land. Cooperative projects between all three agencies take place on a regular basis. The New Castle County Executive or a designated representative is a member of the NCCD Board of Supervisors. The NCCD's Project/Urban Committee includes representatives from New Castle County and DelDOT.

The District works with [its] Federal partners at the USDA – Natural Resources Conservation Service and the Farm Service Agency to assist in the implementation of various conservation projects on private landowners and conservation programs under the Farm Bill. A formal agreement between the District and NRCS dates back to the federal law commonly referred to as "districts enabling law." Under this 1936 Law, USDA will provide technical assistance to cooperators with local conservation districts for the purposes of soil and water conservation. This same law provides the services of the Natural Resources Conservation Service in effect today...

The District works with DNREC to provide assistance for the implementation of various conservation projects such as flood abatement, drainage, wetland creation, and habitat restoration. Often federal programs or the State Conservation Cost-Share program provides financial assistance for the District to assist landowners.

The District provides assistance to communities for open space restoration projects that may not fit the eligibility requirements of existing programs offered under the DSWC's Coastal Zone Management (CZM) program or the state urban forestry program or as a way to supplement a community's grant requests for assistance from those programs. One example is the community of Meadowdale where CZM

⁴² New Castle Conservation District JSC Initial Questionnaire, pgs. 18-20

program funds and District Cost-Share funds were used to facilitate a riparian corridor enhancement project.

The District is one of the sponsors of the First State Resource Conservation and Development Council, Inc., a non-profit council under the oversight of USDA-NRCS. The Council takes on natural and human resource projects state-wide – looking for issues and niche projects not being directly addressed by current programs or which can be supplemented by the Council.

The District is a local authorized recipient of funds from the Federal Emergency Management Administration to assist owners in flood proofing their structures against further flooding. FEMA provides financial assistance to mitigate future flood claims for flood damages.

The District has cooperated with the US Army Corps of Engineers in several projects dealing with sunken vessels and flooding problems. The District has served as the local sponsor for technical review and financial cost sharing.

The District has been able to utilize funds from the US Environmental Protection Agency to assist owners in conservation problems and develop remediation plans to promote good conservation on the land.

The District regularly cooperates with the Delaware Department of Agriculture in joint efforts assisting farmers and woodland owners with various joint interests.

The close cooperation with the University of Delaware Cooperative Extension Service, is on-going and effective in producing good conservation with farmer and non-farmer owners.

New Castle County is a close partner with the New Castle Conservation District. Many projects are jointly funded between the County and other interests. The County provides funding as required under Chapter 39 of Title 7 for Tax and Public Ditches as well as other projects throughout the year.

In 2005 the State allocated substantial funding to New Castle County to reconstruct failing stormwater ponds in New Castle County with the assistance of the New Castle Conservation District. This was intended to be a \$10 million infusion for this purpose over a three year span, however because of budget limitations, the state allocation was reduced for FY 08 and will extend the program for additional fiscal years. The New Castle Conservation District assisted with about 60 percent of these retrofits and is expected to continue this role for several years. The District is also cooperating with DNREC and the County in innovative methods for handling storm water that will reduce future maintenance expense.

New Castle County Code refers to the District in their Unified Development Code (UDC) as TAC (Technical Advisory Committee) and RPATAC (Resource Protection Area Technical Advisory Committee) member. This is to provide technical assistance in reviewing development plans. In the UDC §12.01.003, the District is listed as assistance for flooding problems. The District is routinely included in the

County's Capital Budget and Operating Budget for financial assistance to District programs and projects.

In summary, the District cooperates with many other agencies that are interested in having local sponsorship and coordination to serve landowners and promote good conservation.

KCD

Kent Conservation District provided the following with regard to coordination of services with other agencies:⁴³

The Kent Conservation District is charged under state law with the responsibility to protect and enhance the soil and water resources of the State. It has been given broad authority, the most significant of which is to enlist the aid of state and federal agencies.

Districts were conceived as local bodies to bridge the gap between the landowner and the federal agency charged with protecting the nation's soil resources from erosion – the Natural Resources Conservation Service of the United States Department of Agriculture. The NRCS is a professional organization administering a number of federal soil conservation programs, some through the districts. The team of professionals reach the landowner through district memorandums of understanding with the USDA and the NRCS. A working relationship has developed that is mutually effective. The presence of USDA-NRCS in Delaware was a result of an initial request by the Conservation Districts.

Much of the Districts' effectiveness is due [to the] ability to work with local, state, and federal agencies to solve local environmental problems. As [previously] discussed, Kent Conservation District enters into agreements (memorandums of understanding) with cooperating agencies and organizations that outline the obligations of each party and the assistance available. Kent Conservation District operations are supported by federal, state and local governments and private individuals. In addition to the USDA-NRCS, DNREC also provides technical leadership to Kent Conservation District.

Additional cooperating agencies include:

- The University of Delaware's Cooperative Extension Service
- The USDA Farm Service Agency
- The Delaware Department of Agriculture (DDA)
- The United States Fish & Wildlife Service
- The First State Resource Conservation and Development Council
- EPA Chesapeake Bay Program
- Delaware Nutrient Management Commission
- National Association of Conservation Districts

⁴³ Kent Conservation District JSC Initial Questionnaire, pg. 12

SCD

Sussex Conservation District provided the following with regard to coordination of services with other agencies:⁴⁴

The relationship between the SCD and NRCS began in the 1940s with the inception of the conservation districts. The NRCS provides technical supervision in efforts to protect and enhance our natural resources and improve water quality. NRCS manages several programs to protect natural resources, and the conservation district helps deliver these programs to the farming community. The success of these programs falls directly on the shoulders of both agencies and the working relationship that is in place ensures that these programs are delivered with great success.

Another agency that the SCD has a MOU is the Delaware Department of Natural Resources and Environmental Control (DNREC). There are agreements with several of the divisions within DNREC, including the DSWC, Nonpoint Source Program, and the Division of Water Resources. DNREC enters into these agreements with the conservation district because of the District's ability to work at the local level, with many organizations and government agencies. The SCD is very effective in coordinating efforts between more than one agency. For example, SCD has brought together representatives from the state, federal, and county government agencies with great success. This too is a long standing relationship. Also, the DSWC - District Operations provides guidance and leadership on many issues that face the district.

Following is a list of cooperating agencies that the SCD works closely with to meet its goals of improved and enhanced water quality and protection of natural resources:

- USDA - Natural Resources Conservation Service
- USDA - Farm Service Agency
- U.S. Fish and Wildlife Service
- DNREC - Division of Soil and Water Conservation
- DNREC - Division of Water Resources
- Delaware Department of Agriculture
- University of Delaware Cooperative Extension Service
- Sussex County Council
- Center for Inland Bays
- EPA – Chesapeake Bay Program
- Delaware Nutrient Management Commission
- National Association of Conservation Districts

The Role of the Division of Soil and Water Conservation⁴⁵

The DSWC is very diversified and many of its programs and functions do not involve the conservation districts. Of the four sections in the DSWC, the District Operations Section is naturally the most tightly bonded with the conservation districts. This section assumes the administrative oversight role for the Department, so interaction with and providing guidance to the conservation districts is in and of itself one of the primary objectives of this section.

⁴⁴ Sussex Conservation District email dated January 23, 2008

⁴⁵ Division JSC Initial Questionnaire, pgs. 58-59

The DSWC Director and the District Operations Section provide administrative overview for the conservation districts through the authority vested with the DNREC Secretary. In practice, DNREC approves conservation district budgets, authorizes budget adjustments, appoints Board members, and gives overall direction to the conservation districts. However, the districts are free to develop their own programs, provided they support the purposes spelled out in statute. The District Operations Environmental Program Administrator or designee attends all conservation district Board meetings to assist the Board members and ensure that all Board actions are enacted properly.

The District Operations Section also administers several programs that support the conservation districts.

Delaware Association of Conservation Districts and the National Association of Conservation Districts

Kent Conservation District's website provided the following information:⁴⁶

Delaware's district supervisors have a statewide organization known as the Delaware Association of Conservation Districts (DACD). DACD is a voluntary, non-profit alliance, providing a forum for discussion and coordination among the districts as they work to ensure the wise use and treatment of renewable natural resources.

The 3,000 conservation districts across the United States belong to the National Association of Conservation Districts (NACD). This organization's primary goal is the conservation, orderly development, and the judicious use of the nation's resources.

Both of these organizations make the effort of conservation districts more effective by providing a vehicle through which the conservation districts can band together to promote their causes at the state and national levels.

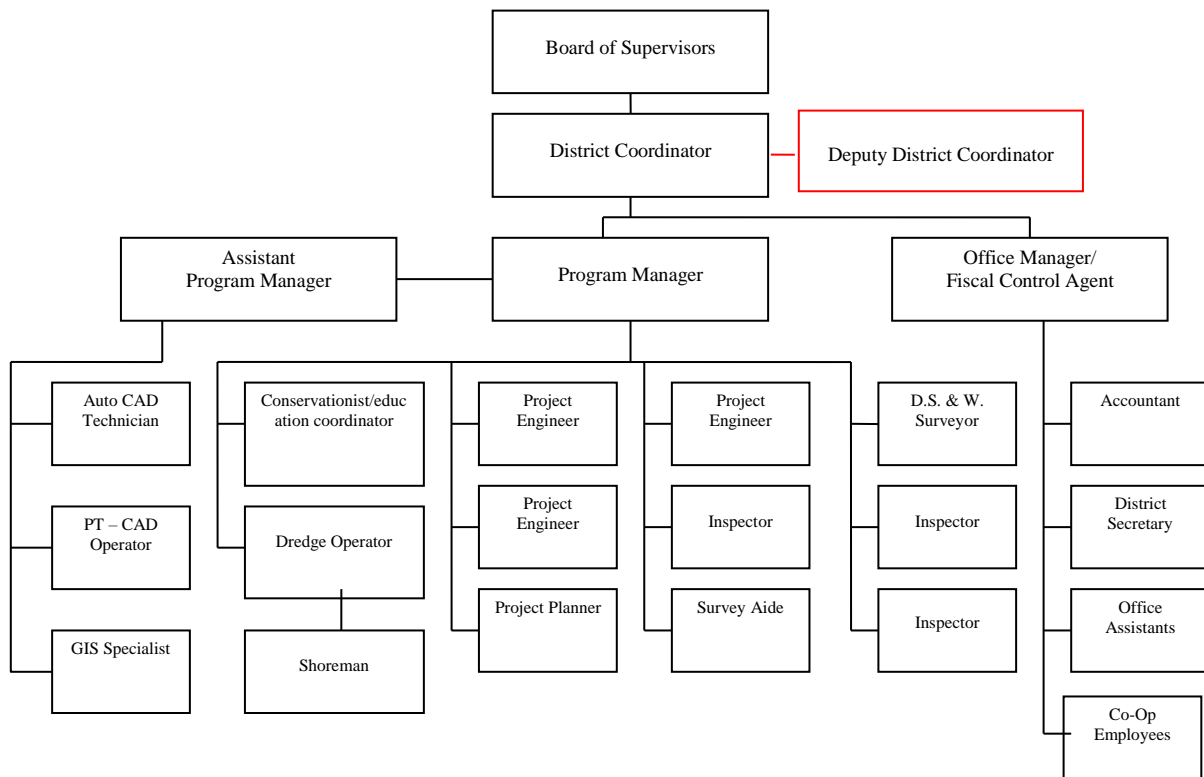
The New Castle Conservation District Staff

The New Castle Conservation District currently has 22 employees. These employees are not State merit employees but rather employees of the New Castle Conservation District.⁴⁷ All staff work for the Board of Supervisors, however no staff members are specifically assigned to assist the Board. The District Secretary prepares the board packet for the monthly Board meetings and makes appointments for Board members as needed.

⁴⁶ <http://kentcd.org/aboutus.htm>

⁴⁷ New Castle Conservation District JSC Initial Questionnaire, pgs. 24 - 25

New Castle Conservation District Organizational Chart



ADMINISTRATION

- **District Coordinator** – Manager of the Conservation District;
- **Deputy District Coordinator** – Assists and advises District Coordinator;
- **Office Manager/Fiscal Agent** – Responsible for fiscal administration, personnel, employee benefits, contract administration, and facilities management;
- **Accountant** - Responsible for all accounting functions, payroll, cash management, and State and federal tax reports;
- **District Secretary** – Provides administrative support for staff, maintains district website and program databases, serves as initial point of contact with public; and
- **Office Assistants** (part-time) – Provides supplemental clerical and administrative support during high volume periods.

CONSERVATION PROGRAM

- **Program Manager** – Manages all engineering assistance for planning, design and construction of projects;
- **Assistant Program Manager** – Provides engineering & technical assistance for landowner and community conservation projects;
- **Project Engineer** – Provides engineering services and contract administration on community and landowner conservation projects;
- **Project Planner** – Coordinates project inspection and provides technical assistance to landowners;
- **Conservationist/Education Coordinator** – Provides assistance for district education and outreach programs and assists with tax ditch and urban conservation projects;
- **Inspector** – Performs inspection for construction of conservation projects;
- **Surveyor** – Provides survey services for conservation projects;
- **Survey Aide** – Provides field assistance to Surveyor;

- **AutoCAD Technician** – Drafts technical plans and construction details for conservation projects;
- **CAD (Computer Aided Design) Operator** (part-time) – drafts technical plans for conservation projects; and
- **Geographic Information Specialist (GIS)** – vacant. This position provides assistance for locating all projects and location details for problem areas to determine better long range conservation assistance needs.

DREDGE PROGRAM

- **Dredge Operator** - operates and maintains dredge and related equipment to remove accumulated sediment from Delaware’s lakes, rivers, ponds, harbors, and other waters of the State;
- **Shoreman** – Assists Dredge Operator as required including installing and maintaining pipeline from dredge to dredge spoil disposal sites.

The New Castle Conservation District indicated that staff is recruited through advertisements and referrals. Staff is eligible for and offered many professional training courses in specific technical fields. DNREC courses are also available to staff.⁴⁸

When asked whether the effectiveness of the Conservation District is hampered by a lack of staff assistance, the District stated that it has the ability to outsource to cover peak workload periods.⁴⁹

The Kent Conservation District Staff

The Kent Conservation District currently has 71 employees, none of which are State merit employees, but are employed by the Kent Conservation District. These employees are not considered employees of the State, County, any municipality or any other agency or private entity.⁵⁰ All staff work for the Board of Supervisors, however no staff members are specifically assigned to assist the Board.⁵¹

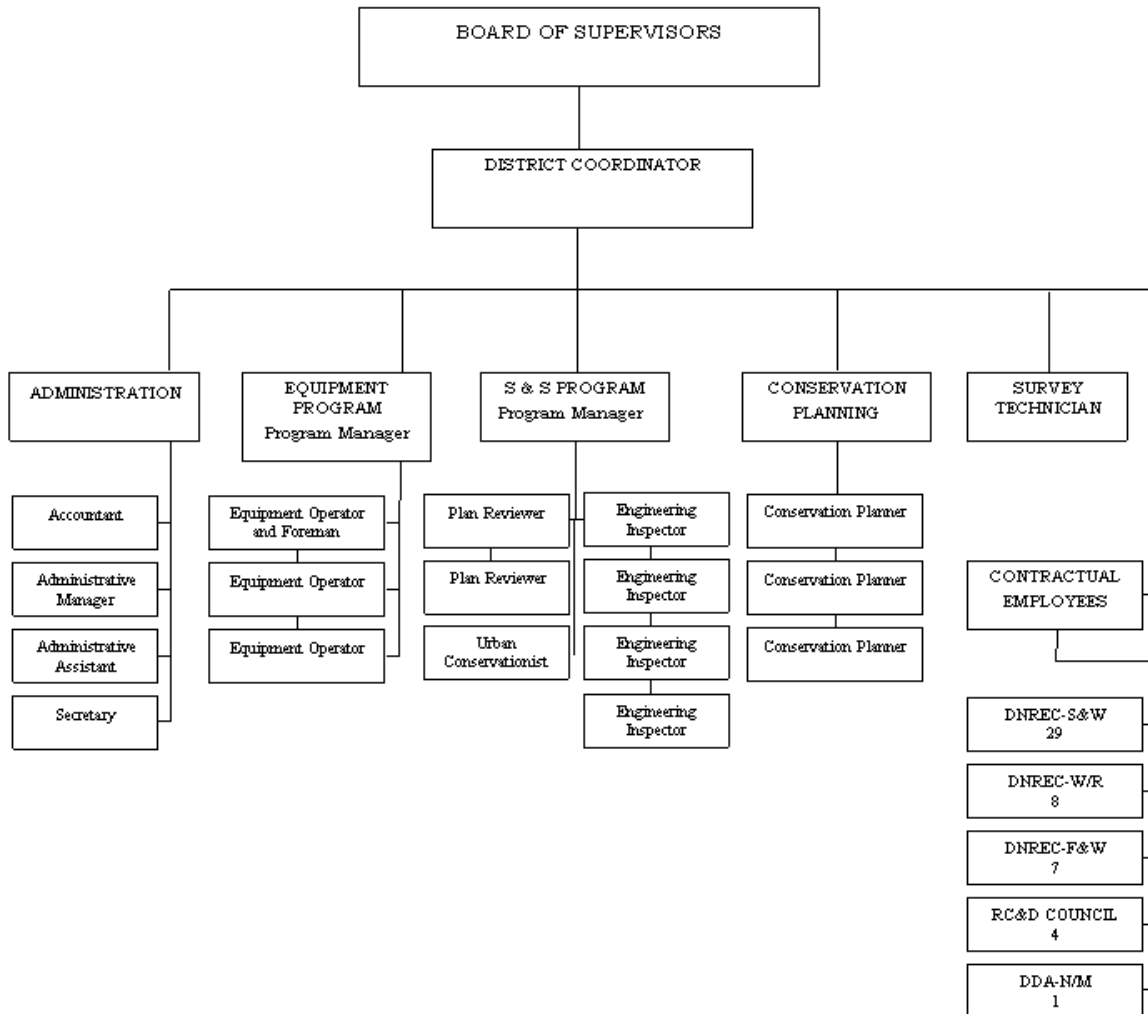
⁴⁸ New Castle Conservation District JSC Initial Questionnaire, pgs. 24 - 25

⁴⁹ New Castle Conservation District JSC Initial Questionnaire, pgs. 24 - 25

⁵⁰ Kent Conservation District JSC Additional Questions, pg. 5

⁵¹ Kent Conservation District JSC Initial Questionnaire, pg. 21

Kent Conservation District Organizational Chart



ADMINISTRATION PROGRAM

- **District Coordinator** - Oversees all programs of the Kent Conservation District.
- **District Accountant** - Manages all of the fiscal activities of the Kent Conservation District.
- **Administrative Manager** - Provides administrative support to the District Coordinator.
- **Receptionist** - Office support for all Kent Conservation District programs.

AG CONSERVATION PROGRAM

- **Conservation Planners** - In-Field; Assists landowners in developing Conservation Plans.

DRAINAGE & TAX DITCH PROGRAM

- **Survey Technician** - In-Field; Plans and coordinates construction of conservation projects.

EQUIPMENT PROGRAM

- **Equipment Program Manager** - In-Field; Supervises the construction and installation of conservation projects.
- **Equipment Operator** - In-Field; Constructs and installs conservation projects.

SEDIMENT & STORMWATER PROGRAM

- **Program Manager/Stormwater Engineer** - Oversees all activities of the KCD Sediment & Stormwater Program.
- **S&S Program Administrative Assistant** - Office support for the Sediment & Stormwater Program.
- **S&S Engineer** - Reviews submitted engineering plans for Sediment & Stormwater compliance.
- **S&S Plan Reviewer** - Reviews submitted engineering plans for Sediment & Stormwater compliance.
- **Engineering Inspector** - In-Field; Inspects construction activities for Sediment & Stormwater compliance.
- **Urban Conservationist** - Assists Homeowners Associations in Kent County in developing Conservation Plans.

CONTRACTUAL EMPLOYEE PROGRAM

- **Engineering/Planning/Surveying Technician II** - Support for Shoreline and Waterway Management Section; surveying, tracking, planning.
- **Environmental Scientist III** - Oversees State Beach Preservation Act compliance for construction activities along the Coast.
- **Planner II** - Drafts engineered plans for conservation projects.
- **Engineering/Planning/Surveying Technician IV** - In-Field; Plans and inspects construction of conservation projects.
- **Environmental Control Technician III** - Collects fish health data in-field, and tracks and analyzes it in the lab.
- **Environmental Scientist I** - In-Field; Inspects State construction activities for Sediment & Stormwater compliance.
- **Operations Support Specialist** - Office support for the Division of Soil & Water.
- **Environmental Scientist** - Analyzes water quality data collected in-field, and assists in development of regulations.
- **Environmental Scientist IV** - Plans and implements shoreline management projects.
- **Environmental Scientist I** - Data collection and other support for the Avian Influenza Surveillance Program.
- **Environmental Scientist II** - Support for all Fish & Wildlife Landowner Incentive Program activities.
- **Administrative Specialist III** - Office support for the Watershed Assessment Section.
- **Zoologist** - Studies animal and insect life throughout the state to determine health and population figures.
- **Environmental Scientist III** - Studies plant life throughout the state to determine health and population figures.

- **Environmental Scientist II** - Studies shorebird and aquatic life throughout the state to determine health and population figures.
- **Ecologist** - Studies animal and plant life within selected watersheds to determine health and population figures.
- **Senior Application Support Specialist** - Develops and maintains computer maps of conservation projects.
- **Civil Engineer V** - Drafts and reviews engineering plans for conservation projects.
- **Laborer/Truck Driver** - In-Field; Constructs and installs conservation projects.
- **Laborer** - In-Field; Constructs and installs conservation projects.
- **Foreman** - In-Field; Supervises the construction and installation of conservation projects.
- **Housing Programs Director** - Oversees the entire Resource Conservation & Development Council's Emergency Home Repair Program.
- **Office Assistant/Volunteer Coordinator** - Office support for the Resource Conservation & Development Council's Emergency Home Repair Program.
- **Field Coordinator I** - Plans and manages Emergency Home Repairs.
- **Carpenter** - Supervises and assists construction of Emergency Home Repairs.
- **Engineering/Planning/Surveying Technician I** - CAD support for the computer mapping of conservation projects.
- **Engineering/Planning/Surveying Technician II** - In-Field; Surveys land for the installation of conservation projects.
- **Engineering/Planning/Surveying Technician II** - In-Field; Plans and inspects construction of conservation projects.
- **Engineering/Planning/Surveying Technician III** - In-Field; Supervises surveying of land for the installation of conservation projects.
- **Engineering/Planning/Surveying Technician III** - In-Field; Plans and inspects construction of conservation projects.
- **Engineer I** - Engineers designs of conservation projects.
- **Administrative Specialist I** - Office support for the State's Drainage Program.
- **Environmental Control Technician I** - Support for Holding Tank Program; Performs annual inspections and maintains records.
- **Sand Bypass Operations Manager** - Manages all in-field activities of the Beach Replenishment Program.
- **CREP Coordinator** - Plans and coordinates Conservation Reserve Enhancement Program.
- **Clerical** - Office Support for the State's Nutrient Management Program.
- **Environmental Scientist I** - Support for Wetland Assessment Section; Collects, compiles, and analyzes data from wetlands.
- **Environmental Scientist I** - Assists in; Development of Pollution Control Strategies, Implementation of Tributary Action Teams.
- **Environmental Scientist II** - Support for Wetland Assessment Section; Process permits in accordance with state regulations.
- **Environmental Planner I** - Provides outreach activities for; Tributary Action Teams, Implementation of Wetlands goals.
- **Environmental Planner** - Assists Homeowners Associations statewide in managing open space.

The Kent Conservation District indicated that staff is recruited through open advertising in local and state newspapers, postings in appropriate locations, and word of mouth.

Interviews of potential candidates are conducted by Kent Conservation District staff, as well as staff representing the office in which the position is located.

District staff is eligible for and offered many training opportunities both through cooperating agencies and in the private sector. The State of Delaware, the University of Delaware, the USDA Natural Resources Conservation Service, and the U.S. Fish and Wildlife Service are just a brief listing of some of the agencies that in the past have offered training to Kent Conservation District staff.⁵²

When asked whether the effectiveness of the Conservation District is hampered by a lack of staff assistance, the Kent Conservation District provided the following response:⁵³

... the District Sediment and Stormwater Program can be hampered by a lack of staff. The volume of plan submission at times exceeds the ability of the District Stormwater Staff to get plans turned around within a 30-day time frame, which is the goal of the program.

The two main reasons the District has not remedied the situation by hiring additional staff are:

1. Additional staff would require the District to increase its fees, which receive a significant amount of criticism as they are now. The fees have been increased on a regular basis since the programs inception in 1990, and are at a level now the District Board feels the market can handle.
2. The position the District needs to remedy the plan turnaround issue is that of Engineer. Unfortunately, in terms of salary, the District cannot compete with private industry. Again, in order to do so would require an increase in fees beyond what the District Board feels appropriate for the market.

The Kent Conservation District indicated that in an effort to address this issue, the District “keeps a constant search for retired engineers looking for part-time work. This is an avenue that has proven very valuable in the past.”

The Kent Conservation District does have a Personnel Policy Manual that has been in draft form since 1994, and has undergone various revisions. As explained in the “Opportunity for Improvement” section of this Report, the reason the manual has not been officially approved is due to the “inability of the District and State of Delaware staff to come to [an] agreement on how the District’s staff working in/around/and for State of Delaware staff will be addressed. In the meantime, policies for employee benefits, i.e. sick and annual leave, have been approved by the Board of Supervisors and made available to District employees.”⁵⁴

The Sussex Conservation District Staff

The Sussex Conservation District has 30 employees that are Conservation District employees and are not subject to the state merit rules. There are 26 full time and 4 part time employees.⁵⁵

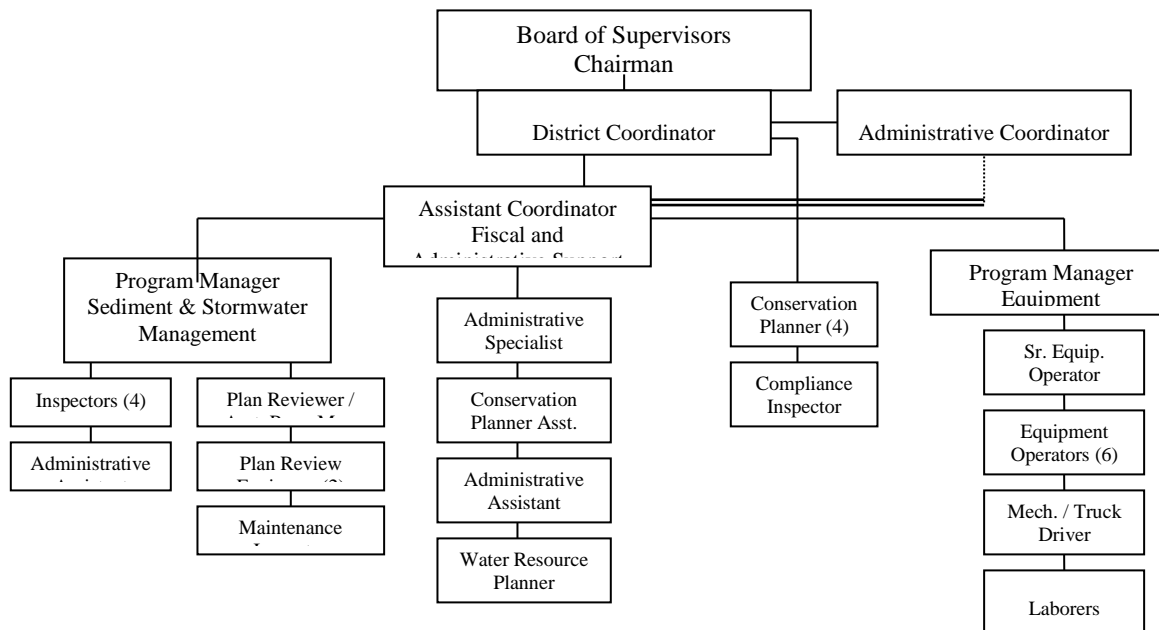
⁵² Kent Conservation District JSC Initial Questionnaire, pgs. 20 & 21

⁵³ Kent Conservation District JSC Initial Questionnaire, pg. 21

⁵⁴ Kent Conservation District JSC Initial Questionnaire, pgs. 10 & 11

⁵⁵ Sussex Conservation Additional Questionnaire, pg. 4

Sussex Conservation District Organizational Chart



The Sussex Conservation District indicated that staff is recruited by posting the position in local papers and The Guide. Job announcements are also posted on the District's website.⁵⁶

Each new employee undergoes a brief orientation session explaining policies, guidelines, site visits, etc. District staff is eligible for and offered many training opportunities both through cooperating agencies and in the private sector. The State of Delaware, the University of Delaware, the USDA Natural Resources Conservation Service, and the U.S. Fish and Wildlife Service are just a brief listing of some of the agencies that in the past have offered training to Sussex Conservation District staff. The staff is also encouraged to receive other training to improve their skills and abilities.⁵⁷

Below is a listing and brief description of each position:⁵⁸

ADMINISTRATION

- **District Coordinator** - Manager of the Conservation District.
- **Assistant District Coordinator** – Assistant manager, also responsible for the fiscal administration, i.e., accounting.
- **Administrative Coordinator** - Administrative Asst. to the Coordinator. Responsible for cost-share program and benefits admin. i.e. health insurance.
- **Conservation Planner Assistant** - Assists Conservation Planners in nutrient management and other facets for planning, administers State Revolving Loan Fund Program, assists with reception.
- **Administrative Assistant** – General reception of the Berlin Road office. Provides administrative support to staff located at Berlin Road office.

⁵⁶ Sussex Conservation Additional Questionnaire, pg. 7

⁵⁷ Sussex Conservation District, edits Draft Report, pg. 30

⁵⁸ Sussex Conservation District Additional Questionnaire, pgs. 6-7

- **Administrative Specialist** – Assists Assistant Coordinator with accounting and billing.

AG CONSERVATION PROGRAM

- **Sr. Planner** - Performs conservation planning by providing technical assistance to landowners.
- **Conservation Planner** - Performs conservation planning by providing technical assistance to landowners.
- **Compliance Inspector** - Performs inspections on best management practices to ensure that they are being used as intended.

EQUIPMENT PROGRAM

- **Program Manager** - Manages the District's Heavy Equipment.
- **Sr. Operator** - Completes heavy equipment projects as assigned by the Equipment Manager.
- **Operator** - Completes heavy equipment projects as assigned by the Equipment Manager.
- **Mechanic/Truck Driver** - Moves equipment from site to site and performs necessary maintenance on an as needed basis.
- **Water Resource Planner** - Works closely with Tax Ditch Officers by providing technical assistance for the tax ditch organizations in Sussex County.

When asked whether the effectiveness of the Conservation District is hampered by a lack of staff assistance, the Sussex Conservation District provided the following response:⁵⁹

For the most part no. However, the stormwater program is extremely busy and could use additional staff members to provide better service to the citizens of Sussex County.

There are two reasons, funding and space.

[The District] is currently in the process of hiring a new stormwater plan review engineer to assist with the workload. The cost of an engineer is very expensive but it is necessary to have an engineer available on staff to handle any issues that may arise. Secure funding to hire this person isn't available. The stormwater program collects fees to run the program, however it must be run for perpetuity. Any fees that are collected for inspection and maintenance must be placed in a separate fund for the future.

The other reason is space. [The District] is currently investigating the possibility of a new building that would accommodate the entire district staff. There is not enough room in the current District building to hold the appropriate number of staff needed to effectively run this program.

Board of Supervisors

Statute provides that each District have a Board consisting of up to 7 Supervisors. Four elected supervisors who are farmers residing in the respective County – in New Castle two farmers shall reside in the southern portion of the County and the remaining two members shall not be farmers and shall reside in the northern portion of the County. Each Board may also include an optional supervisor who, in Kent County shall be a member of Levy Court,

⁵⁹ Sussex Conservation District JSC Initial Questionnaire, pg. 14

Sussex County a member of County Council (although statute refers to Levy Court) and in New Castle County the optional supervisor shall be the County Executive or his/her designee. Each Board shall also include 2 optional supervisors who shall not be farmers and may be appointed by the Secretary of DNREC upon request of the district involved. The vote and authority of each supervisor shall be equal except that the County Agricultural Agent shall serve as the secretary to the Board and not have a vote. The Chairperson shall be elected by the Board.

Statute provides that the term of office for each elected supervisor is 4 years and for each appointed supervisor the term is 3 years. The optional supervisor appointed by Levy Court shall hold office at the pleasure of the Board as long as the supervisor remains a member of Levy Court. The Secretary of DNREC has the authority to fill the vacancy of any elected or appointed supervisor.⁶⁰

NCCD

New Castle Conservation District has 7 Board members. Appointed members serve a 3 year term. Regular members serve a 4 year term.⁶¹

KCD

Kent Conservation District has 10 Board members. Appointed members serve a 3 year term. Elected Farm members serve a 4 year term. Associate (non-voting) members - Approved by DNREC serve a 3 year term.⁶²

The KCD Board of Supervisors includes three more members than provided for in statute. The DSWC indicated that these are Associate Members with no voting authority who were appointed to lend their particular expertise to the Board of Supervisors. The DSWC also indicated that this is common practice by conservation districts across the country and the practice is also endorsed by the National Association of Conservation Districts.⁶³

SCD

Sussex Conservation District has 8 Board members, which is one more member than prescribed by statute. Appointed members serve a three year term. Elected members serve a 4 year term.⁶⁴

Removal from Office

NCCD/KCD/SCD

Any member of the Board of Supervisors for each conservation district may be removed from office by the Department of Natural Resources and Environmental Control, upon notice and hearing for neglect of duty or misconduct.

⁶⁰ 7 Del. C. § 3906

⁶¹ New Castle Conservation District JSC Initial Questionnaire, pg. 23

⁶² Kent Conservation District JSC Initial Questionnaire, pg. 18

⁶³ Division of Soil and Water Conservation, edits Draft Report, pg. 56

⁶⁴ Sussex Conservation District JSC Initial Questionnaire, pg. 13

NCCD

New Castle Conservation District indicated that a Board member was removed as a result of personal misconduct resulting in the Board member's arrest and conviction of offenses unrelated to Board activities and NCCD programs.⁶⁵

KCD/SCD

Kent⁶⁶ and Sussex⁶⁷ Conservation Districts indicated that a Board member has never been removed.

Compensation

NCCD

Members are compensated at the rate of \$100 per Board meeting and reimbursed for expenses related to Board activities (mileage).⁶⁸

KCD

Members are on the District payroll as part time employees and receive a stipend of \$125 per meeting attended on behalf of the District.⁶⁹

SCD

Board members are on the District payroll and are compensated at the rate of \$100 per Board meeting. The Board Chair receives \$150 per meeting.⁷⁰ The treasurer receives \$25 per visit to the office once a week to sign checks. If there are special meetings, all Board members that attend receive \$50 for a meeting that is less than a half a day long, and \$100 for meetings that last all day.⁷¹

Training

NCCD/KCD/SCD

All three conservation districts indicated that Board members are offered the following training opportunities:

- National Association of Conservation Districts (NACD)
- The Delaware Association of Conservation Districts
- Miscellaneous workshops held by cooperating agencies

Board members are also provided a copy of the *Delaware Supervisors' Handbook* from the Delaware Association of Conservation Districts.

⁶⁵ New Castle Conservation District JSC Initial Questionnaire, pg. 24

⁶⁶ Kent Conservation District JSC Initial Questionnaire, pg. 19-20

⁶⁷ Sussex Conservation District JSC Initial Questionnaire, pg. 14

⁶⁸ New Castle Conservation District JSC Revised Section 4, pg. 6

⁶⁹ Kent Conservation District JSC Initial Questionnaire, pg. 20

⁷⁰ Sussex Conservation District, edits Draft Report, pg. 32

⁷¹ Sussex Conservation District JSC Initial Questionnaire, pg. 14

Board of Supervisors - New Castle Conservation District⁷²

| NAME/ADDRESS | POSITION | OCCUPATION | ORIGINAL ELECTION/ APPOINTMENT DATE | TIME REMAINING IN CURRENT TERM |
|---|--|------------------------------|-------------------------------------|--|
| Josef A. Burger Townsend, | Chair Farm Member | Retired Farmer | 7/1/1972 (Elected) | 1 year 12/31/2008 |
| Anthony Schiavi New Castle County Dept. of Special Services; Environmental Operations Division | Member County Executive's Designee | Assistant County Engineer | 1/1/2005 (Appointed) | Serves as County Executive's Designee |
| Robert Baker Odessa | Vice Chair Farm Member | Farmer | 1/1/2000 (Elected) | 4 years 12/31/2011 |
| Anna Stoops University of DE | Board Secretary | County Agricultural Agent | 12/1/2007 (Appointed) | n/a |
| Dariel C. Rakestraw Hockessin | Treasurer Non-Farm Member | Retired | 1/1/1978 (Elected) | 2 years 12/31/2009 |
| David Woodward Middletown | Appointed Member | Retired | 1/1/1995 (Appointed) | 2 years 12/31/2009 |
| Kathy Klein Wilmington | Appointed Member | Environmental Consultant | 2/1/2008 (Appointed) | 12/31/2010 |

Board of Supervisors - Kent Conservation District⁷³

| NAME/ADDRESS | POSITION | OCCUPATION | ORIGINAL ELECTION/ APPOINTMENT DATE | TIME REMAINING IN CURRENT TERM |
|-----------------------------------|-------------------------------|---|-------------------------------------|--------------------------------|
| Robert Killen Felton | Chairman Farm Member | Farmer | November 1994 (Elected) | 1 yr. 4 mos. |
| Edwin Alexander Camden-Wyoming | Vice-Chairman Farm Member | Poultry Farmer & Maintenance Staff | January 1987 (Elected) | 3 yrs. 4 mos. |
| Gordon Johnson Dover | Secretary | County Agricultural Agent | May 1996 | n/a |
| Fred Mott Dover | Treasurer Appointed Member | Retired, USDA | August 1989 (Appointed) | 3 yrs. |
| Alfred Moor III Smyrna | Farm Member | Farmer | October 1991 (Elected) | 2 yrs. 4 mos. |
| Bruce Snow Smyrna | Farm Member | Farmer | January 2004 (Elected) | 4 mos. |
| Terry Pepper Camden-Wyoming | Appointed Member | Governor's Local Government Liaison | January 1995 (Appointed) | 1 yr. |
| Eric Buckson Camden-Wyoming | Levy Court Representative | Teacher | January 2007 | n/a |
| Bruce Carlson Dover | Associate Member | Crop Consultant | October 1987 | 1 yr. |
| Barbara Reed Dover | Associate Member | Retired Teacher | December 1999 | 2 yrs 4 mos. |

⁷² New Castle Conservation JSC Additional Questionnaire, pg. 1

⁷³ Kent Conservation District JSC Initial Questionnaire, pgs. 18-19

Board of Supervisors - Sussex Conservation District⁷⁴

| NAME/ADDRESS | POSITION | OCCUPATION | ORIGINAL ELECTION/ APPOINTMENT DATE | TIME REMAINING IN CURRENT TERM |
|------------------------------------|----------------------------------|--|-------------------------------------|--------------------------------|
| William Vanderwende Bridgeville | Chairman Farm Member | Farmer | January 1, 1978 (Elected) | 2 years |
| Fred West Frankford | Vice Chairman Farm Member | Farmer | January 1, 2000 (Elected) | 4 years |
| Donald Collins, Jr. Millsboro | Treasurer Farm Member | Farmer/Developer | January 1, 2001 (Elected) | 1 year |
| Dale Ockels Milton | Member Farm Member | Farmer | January 1, 2007 (Elected) | 3 years |
| William McGowan Georgetown | Secretary | County Agricultural Agent | April 30, 1991 | n/a |
| Ronald Breeding Seaford | Appointed Member | Special Assistant Nemours Health & Prevention Services. | July 1, 1999 (Appointed) | 2.5 years |
| Dean Belt Lewes | Appointed Member | Retired, Coop. Ext. | November 22, 1991 (Appointed) | 2.5 years |
| Finley Jones Greenwood | County Council Representative | Self-Employed | January 1, 1997 | n/a |

Programs

Urban Water Management Program

This is part of the Water Management cost-share category. Urban water management is a large part of NCCD's program, and to a lesser degree part of KCD's operations. At this time it plays a minor role at SCD.⁷⁵

NCCD

DSWC assists the NCCD with urban water management by occasionally assisting to facilitate coordination with the EPA or the Army Corps of Engineers. Additionally, DSWC provides one full-time State employee, and an Engineering Technician IV to perform drainage investigations and construction surveys for water management projects.⁷⁶

Additional information about the New Castle Conservation District projects:⁷⁷

One of the larger projects worked on is the Little Mill Creek flooding problem in which the NCCD, in cooperation with DNREC, New Castle County, the Town of Elsmere and a special committee created by State law, applied to the US Army Corps of Engineers for assistance under their Small Watershed Program. The special committee, "Little Mill Flood Abatement Committee" was formed in 1990 and helped steer the effort to construct a floodway through Elsmere to alleviate the severe flooding that has been historically devastating to residents.

⁷⁴ Sussex Conservation District JSC Additional Questionnaire, pg. 4

⁷⁵ Division JSC Additional Questionnaire, pgs. 2 - 3

⁷⁶ Division JSC Additional Questionnaire, pgs. 2 - 3

⁷⁷ New Castle Conservation District JSC Initial Questionnaire, pgs. 7- 8

Another effort lead by the NCCD was the Shellpot Creek Flood Abatement Study which was carried out in cooperation with the Shellpot Flood Abatement Committee which was created by State Law. This Study was carried out with extensive public involvement and dealt with the entire Shellpot watershed.

The Shellpot Creek Flood Abatement Study area included the entire area draining surface water runoff to Shellpot Creek and its tributaries. The Shellpot Creek Watershed is composed of three principal subwatersheds:1) Shellpot Creek, 2) Matson Run and 3) Turkey Run.

Another effort lead by the NCCD was the Naaman’s Creek Flood Abatement Study. A committee was created by legislature to oversee and direct the investigations and evaluations of flooding in the Naaman’s Creek Watershed. A final report was prepared in December 1999 and NCCD is still implementing recommended projects as funding is provided.

Other studies dealing with Urban Water Management include Mill Creek, Perkins Run and Back Creek watersheds.

KCD/SCD

DSWC assists KCD and SCD with urban water management by occasionally assisting to facilitate coordination with the EPA or the Army Corps of Engineers.^{78/79}

Conservation Cost-Share

The DSWC distributes conservation cost-share funding to each of the conservation districts in Delaware on an annual basis. These funds originate annually from the Bond Bill. A portion of these funds are considered general cost-share funds and may be used for any conservation practices which support the purposes of 7 Del. C. Chapter 39. The remaining conservation cost-share funds are to be used for nutrient management. The table below summarizes FY07 cost-share appropriations.

| Conservation Cost-Share | | | | |
|--------------------------|------------------|------------------|--------------------|--------------------|
| | NCCD | KCD | SCD | Total |
| Nutrient Management | \$170,000 | \$365,000 | \$745,000 | \$1,280,000 |
| General Cost-Share | \$500,000 | \$500,000 | \$500,000 | \$1,500,000 |
| Failed Ag Waste Systems* | | | | \$150,000 |
| Special Initiatives * | | | | \$275,000 |
| TOTAL | \$670,000 | \$865,000 | \$1,245,000 | \$3,205,000 |

*Cost-share funding for failed agricultural waste systems and special initiatives (as determined by DNREC) are held by the DSWC until specific projects have been identified.

When cost-share funding is issued to each conservation district, the Board for each district approves a cost-share budget and authorizes appropriations for a number of cost-share

⁷⁸ Division JSC Additional Questionnaire, pgs. 2 - 3

⁷⁹ Division JSC Additional Questionnaire, pgs. 2 - 3

categories. Examples of cost-share categories are agricultural and animal waste systems, water management practices, covercrop, and erosion and sediment control practices. These cost-share budgets are then sent to DSWC for final approval by the DSWC Director.⁸⁰

NCCD

The NCCD participates with landowners to address specific conservation problems. The NCCD completes projects for long term benefit for the resource being protected. The landowner handles the contract administration with their selected contractor.⁸¹

KCD/SCD

The KCD assists landowners with the installation and/or completion of conservation practices.⁸² In Sussex County, applicants are ranked by conservation planners, as more requests are received than money is available.⁸³

Agricultural Nonpoint Source Pollution State Revolving Loan Fund (AgNPS Fund)

The AgNPS Fund provides a source of low-interest loans to landowners seeking funds to install conservation practices that will reduce nonpoint source pollution. Currently there is up to \$400,000 committed to this fund annually. If cost-share is being used for these practices, AgNPS funds can be used for the remaining balance not covered by cost-share dollars. Thus, the conservation districts usually identify the need for AgNPS funding to help a landowner install a practice. The conservation districts then determine the eligibility of the applicant to participate in the program. The district assists the landowner with completing the application. The application is then sent to the poultry integrator or dairy cooperative for approval. Following this step, the application is sent to the DSWC for final approval. Upon approving the practice, the DSWC sends an approval letter to the landowner and the conservation district.

After the practice has been installed, the landowner provides invoice(s) to the conservation district. The district then inspects the completed project, and upon approval, forwards the invoice(s) to the DSWC. The DSWC then records all information, approves the payment for the practice, and sends the paperwork to the Financial Assistance Branch of the Division of Water Resources for processing and payment.⁸⁴

NCCD

Qualified New Castle Conservation District farm cooperators are eligible to participate in the AgNPS Fund program. There are no NCCD farm cooperators currently participating in this program.⁸⁵

KCD/SCD

The KCD and SCD's involvement with this program is limited to assisting cooperating landowners in ensuring that they qualify for the program, and assisting them through the application process. The districts receive an administrative fee from DNREC's Division of Water Resources for their services.⁸⁶

⁸⁰ Division JSC Additional Questionnaire, pg. 2

⁸¹ New Castle Conservation District JSC Initial Questionnaire, pg. 8

⁸² Kent Conservation District JSC Initial Questionnaire, pgs. 7 - 8

⁸³ Sussex Conservation District JSC Initial Questionnaire, pg. 6

⁸⁴ Division JSC Additional Questionnaire, pgs. 6- 7

⁸⁵ New Castle Conservation District, edits Draft Report pg. 38

⁸⁶ Kent Conservation District, edits Draft Report, pg. 37

Conservation Reserve Enhancement Program (CREP)

This program is a partnership between DNREC and FSA (Farm Services Agency) designed to retire marginal tilled land from agriculture and devote it to one of five conservation practices for a period of 15 years. Approximately 80% of the funding for practices and land rental rates is provided by FSA with the balance provided by the State. DSWC employs a CREP Coordinator who is paid through an EPA grant. This employee is a KCD Contractual employee, meaning that DSWC contracts with KCD for employment services but DSWC provides supervision for the position. The CREP Coordinator works statewide making landowner contacts, writing contracts, and overseeing planting and project monitoring. The CREP Coordinator also processes landowner payment documentation to DSWC and FSA. Each conservation district assists the CREP Coordinator by making additional landowner contacts and assisting with processing contracts.

To date, over 6,000 acres have been enrolled in the Delaware CREP, with over \$8 million of Federal and State monies expended.⁸⁷

NCCD/KCD/SCD

The Conservation District's involvement with this program is limited to the utilization of it as a tool for the District Planners to use when assisting cooperating landowners in the development of a conservation plan for their property.^{88 89}

Debris Pit Program

This program remediates buried wood debris on residential lots that are the result of land clearing and developing projects in the 1970s and 1980s. Buried wood debris is mechanically removed, clean fill is replaced, and yards are restored. It is important to remediate these pits to mitigate the hazards posed by open sinkholes and methane production and congregation usually associated with these pits.⁹⁰ The Debris Pit Program is operated by the DSWC.

NCCD

DSWC employs three full-time NCCD contractual employees who work out of the NCCD office building in Glasgow. Funding for this program is appropriated annually through the State Bond Bill. New Castle County also contributes \$250,000 annually to the program. Employees of the program respond to constituent requests to investigate sinkholes and other evidence of buried wood debris. If a debris pit is discovered, the homeowner has three options for remediation. First, they can go on a waiting list to have the state fix the problem free of charge. Second, they can fix the problem themselves and, provided the work meets program standards and has been inspected by NCCD staff, may be eligible for reimbursement of up to \$10,000. Finally, the owner can have the problem fixed immediately if he/she is willing to provide 25% of the cost of remediation. The balance of this cost-share (75%) originates from State funding and is issued by NCCD.⁹¹

⁸⁷ Division JSC Initial Questionnaire, pg. 62

⁸⁸ New Castle Conservation District Additional Questionnaire, pg. 6

⁸⁹ Kent Conservation District JSC Initial Questionnaire, pg. 8

⁹⁰ Division JSC Initial Questionnaire, pgs. 62-63

⁹¹ Division of Soil and Water Conservation, edits Draft Report, pg. 39

KCD/SCD

The majority of the debris pits discovered to date are in New Castle County, as such KCD and SCD currently do not offer a cost-share program for this practice. However, as debris pits in the lower two counties mature and sinkholes start to develop, it is anticipated that these two conservation districts will get involved with this program.⁹² In the meantime, the State Program is offered state-wide.

Drainage Program

The drainage program in Delaware is effective due to a strong partnership between the DSWC and the conservation districts. Each conservation district's interaction with the DSWC is different, but inextricably linked. The DSWC hosts a drainage help line that is designed to receive all drainage complaints or concerns from the public.

The DSWC creates an "assistance list" and puts projects on the 21st Century Fund list to await funding. The DSWC then receives and allocates 21st Century funding for a variety of drainage projects. In New Castle County, 21st Century funds are allocated in one lump sum via a purchase order to the conservation district. The district then invoices DSWC for payment on a job by job basis. In Kent and Sussex counties, 21st Century funds are allocated on a job by job basis. Matching funds, including Community Transportation funds, are managed by the conservation districts. However, in Kent and Sussex counties, the DSWC solicits Community Transportation funds for the conservation districts.

Like the Tax Ditch program, the DSWC provides engineering assistance to the conservation districts.⁹³

NCCD

In New Castle County, the DSWC provides one full-time State employee, an Engineering Technician IV, to perform drainage investigations and construction surveys. The NCCD plays a role in project administration for New Castle County and municipal capital improvements related to drainage and water management.

The NCCD performs a large amount of contract administration for both engineering and construction of projects.

KCD

The KCD receives funding from Kent County Levy Court each year to be the lead agency in performing the initial drainage investigation following notification of a drainage complaint in Kent County. From the initial investigation, KCD determines whether the complaint needs to be addressed by a program within KCD, DSWC, DelDOT, or DDA. Many of the drainage complaints involve a new subdivision and are handled by KCD's stormwater program since KCD oversaw the stormwater management in these subdivisions as they were built. Otherwise, KCD determines the jurisdiction of the problem and coordinates concerns involving multiple agencies and interacts w/ DSWC staff in Dover.⁹⁴

⁹² Division JSC Additional Questionnaire, pgs. 3 - 4

⁹³ Division JSC Initial Questionnaire, pgs. 5- 6

⁹⁴ Kent Conservation District, edits Draft Report, pg. 39

SCD

The DSWC performs the initial drainage investigation following notification of a drainage complaint in Sussex county. However, if the drainage complaint involves a new subdivision SCD performs the initial investigation. This stands to reason since SCD districts oversaw the stormwater management in these subdivisions as they were built. SCD determines the jurisdiction of the problem and coordinates concerns involving multiple agencies and interacts w/DSWC staff in Georgetown.

KCD/SCD

KCD and SCD provide financial and technical assistance to landowners. Financial management is through conservation or State and County Matching fund cost share, tax ditch and legislative funding programs. The SCD also works with the DSWC for planning, engineering and design. The Districts act as the contractor, performing the work^{95/96}

Environment Quality Incentives Program (EQIP)

This is a federal cost-share program managed by the USDA-Natural Resources Conservation Service (NRCS). The DSWC District Operations Administrator is a member of NRCS' State Technical Committee. This group sets policy for how the EQIP Program will operate in Delaware. Other than that, DSWC has little to do with EQIP.⁹⁷

NCCD

NRCS can and does manage the EQIP workload in New Castle County.⁹⁸ This program is available to farm operators for implementation of conservation practices that address soil and water quality, forestry and wildlife habitat improvements.⁹⁹

KCD/SCD

The conservation district conservation planners in Kent and Sussex counties, in concert with NRCS staff, are largely responsible for the delivery of this program in their respective counties. In fact, NRCS staff could not manage this workload without the conservation district planners.¹⁰⁰

Equipment Program

Each of the conservation districts has an equipment program, although NCCD's program consists primarily of its dredge. The other two conservation districts have equipment programs geared more toward excavating, grading, pipe installation, and trucking. These programs perform functions like ditch dipout, spoil spreading, wetland construction. The conservation districts are largely on their own in regards to their equipment programs. However, the coordination between the DSWC's drainage and tax ditch staff and the conservation districts can lead to work on the part of the equipment programs.¹⁰¹

⁹⁵ Division JSC Initial Questionnaire, pg. 64

⁹⁶ Kent Conservation District JSC Initial Questionnaire, pg. 8

⁹⁷ Division JSC Additional Questionnaire, pg. 4

⁹⁸ Division JSC Additional Questionnaire, pg. 4

⁹⁹ New Castle Conservation District JSC Initial Questionnaire, pg. 63

¹⁰⁰ Division JSC Additional Questionnaire, pg. 4

¹⁰¹ Division JSC Additional Questionnaire, pg. 6

NCCD

The New Castle Conservation District's equipment program includes a cooperative agreement with New Castle County per the NCC-NCCD July 26, 1984 MOU. Due to the growth and urbanization of the County, joint resources, equipment, technical assistance, personnel and materials, funding and administration are needed to implement sound conservation programs and projects.¹⁰² Also, the DSWC provides \$225,000 annually to support their dredge operations.¹⁰³

KCD

Assists cooperating landowners of Kent County in implementing conservation practices with heavy equipment purchased through the Revolving Equipment Loan Fund and maintained by KCD.¹⁰⁴ KCD charges fees to landowners for the construction/installation of the conservation practices.¹⁰⁵

SCD

The program provides a service to the citizens of Sussex County by maintaining tax, public and private ditches, clearing land for agricultural purposes, stabilizing streambanks and through construction of wetlands and wildlife ponds, and replacing and repairing pipes.¹⁰⁶

Equipment Revolving Loan Fund

The State Equipment Revolving Fund Program is administered by DNREC and has been in effect for over 20 years to assist the districts with initial funding to acquire equipment for the advancement of a conservation program to assure natural resource protection. The objective of the program is to get the appropriate equipment available and have the funds provided by the State. Loans are repaid into the revolving fund, which are loaned again to purchase equipment when the initial purchased equipment is worn out or obsolete.¹⁰⁷

The Legislature has set aside \$1,900,000 in a revolving loan fund specifically to be used by the conservation districts to purchase heavy equipment for installing conservation practices. The DSWC holds the funding until a request for a loan is generated by one of the conservation districts. The loan request is then forwarded to the Governor's Soil and Water Advisory Council for approval. Upon approval, the loan is made to the conservation district with a 0% rate of interest. The loan amount is re-payable over a maximum 5 year period.¹⁰⁸

NCCD

Several pieces of equipment have been purchased by the NCCD under this program.

1. No Till Drills
2. Dredge

The NCCD has also entered into agreements with New Castle County regarding the purchase and use of other conservation equipment.¹⁰⁹

¹⁰² New Castle Conservation District JSC Initial Questionnaire, pg. 6

¹⁰³ Division JSC Additional Questionnaire, pg. 6

¹⁰⁴ Kent Conservation District JSC Initial Questionnaire, pgs. 6-7

¹⁰⁵ Kent Conservation District, edits Draft Report, pg. 41

¹⁰⁶ Sussex Conservation District JSC Initial Questionnaire, pgs. 5-6

¹⁰⁷ New Castle Conservation District JSC Initial Questionnaire, pg. 10

¹⁰⁸ Division JSC Additional Questionnaire, pg. 6

¹⁰⁹ New Castle Conservation District JSC Initial Questionnaire, pg. 10

KCD

The KCD purchases and maintains heavy equipment with an inventory of 1 excavator, 2 dozers, a backhoe, a tractor and trailer, a dump truck, pick ups, and other miscellaneous equipment.¹¹⁰

SCD

The SCD purchases equipment under the heavy equipment section of this program. On inventory there are 4 excavators, 3 dozers, two tractors and trailers, dump trucks, a shop truck, and pick-ups for the equipment manager and operators to take to the job sites.¹¹¹

Nutrient Management Program

This program operates from the Delaware Department of Agriculture under the direction of the Delaware Nutrient Management Commission (DNMC). The DSWC Director is a voting member of this commission. The Delaware Nutrient Management Law mandates that “The State will make nutrient management consultants available through the conservation districts to make free nutrient management plans assistance”.¹¹²

NCCD

New Castle Conservation District fulfills State of Delaware Nutrient Management Act responsibilities through its partnership with the USDA-Natural Resources Conservation Service (NRCS) and Kent Conservation District. The DSWC provides neither General Funds nor federal CWA 319 grant funds to NCCD for nutrient management program staff or activities.

KCD/SCD

KCD and SCD are provided additional funding by the DSWC because those two conservation districts have more farms and poultry operations that are regulated under the Delaware Nutrient Management law. KCD and SCD have hired conservation planners who are required to attain nutrient management consultant certification to satisfy the mandate. DNREC and USDA-NRCS provide funding for these positions. For instance, DSWC funded the KCD planners with \$42,800 in general funds and \$70,670 in Clean Water Act (CWA) Section 319 grant funds, while USDA-NRS provided the same amount. DSWC also provided \$137,200 in general funds and \$206,331 in CWA Section 319 funds for SCD planners during the same time frame. These conservation planners report accomplishments to both the DSWC and the DNMC.¹¹³

Sediment and Stormwater Program

The Sediment and Stormwater program was established in 1990 and Regulations were promulgated in 1991. In the law¹¹⁴ there were criteria established for delegation of each of the program elements to be delegated to local agencies and governments. The program delegation priority was given to the conservation districts and since 1991, all three conservation districts have been involved in administering the Sediment and Stormwater Law and Regulations as a delegated agency of the DSWC.¹¹⁵

¹¹⁰ Kent Conservation District, edits Draft Report, pg. 41

¹¹¹ Sussex Conservation District email January 23, 2008

¹¹² Division JSC Additional Questionnaire, pg. 4

¹¹³ Division JSC Additional Questionnaire, pg. 4

¹¹⁴ 7 *Del. C.* Chapter 40

¹¹⁵ Division JSC Initial Questionnaire, pgs. 63-64

NCCD

NCCD is involved with the State of Delaware Sediment and Stormwater Program through assistance provided to ten of the thirteen municipalities in New Castle County.

DNREC has delegated New Castle County responsibility for the Program for the unincorporated area of New Castle County. There are thirteen incorporated areas in the County and the Cities of Wilmington and Newark and the Town of Middletown. Each have been delegated responsibility for the Program in their municipal limits.

NCCD requested delegation of responsibility for the ten remaining municipalities which include New Castle City, Delaware City, Newport, Elsmere, Arden, Ardencroft, Ardentown, Townsend, Odessa and Bellefonte. These municipalities do not have adequate staff to carry out the Program and they would have to employ a private engineering firm at their expense to comply with the State mandate. NCCD assists these municipalities with this responsibility.

The program consists of evaluating plans submitted by owners desiring to disturb an area greater than 5000 square feet and evaluating the plans to assure adequate sediment and stormwater controls are planned to comply with Chapter 40 of the Delaware Code.

The NCCD then provides inspection services at the sites during construction to assure compliance with the approved plans.¹¹⁶

KCD/SCD

The Kent and Sussex Conservation Districts operate a much larger program for DNREC in their respective jurisdictions as they administer the Sediment and Stormwater Program for their entire county regions including municipalities. Their programs are also very dependent on fee revenue generated for the thousands of projects administered each year.¹¹⁷

SCD

The Sussex Conservation District has been contacted by conservation districts in three other states (New Jersey, New York and Connecticut) with regard to the operation of its Sediment and Stormwater Program.¹¹⁸

Tax Ditch Program

A tax ditch is defined as a governmental subdivision of the State.¹¹⁹ It is a watershed-based organization formed by a prescribed legal process in Superior Court. Tax Ditches are managed by a tax ditch organization as established by Superior Court. The members of this organization are the landowners affected by the tax ditch, and those members elect officers for the organization. The Delaware General Assembly enacted the 1951 Drainage Law to establish, finance, and maintain drainage organizations (tax ditches). Formation of a tax ditch can only be initiated by landowners who petition Superior Court to resolve drainage or flooding concerns.

¹¹⁶ New Castle Conservation District JSC Initial Questionnaire, pgs. 9 - 10

¹¹⁷ Division JSC Initial Questionnaire, pgs. 63-64

¹¹⁸ Sussex Conservation District, edits Draft Report, pg. 42

¹¹⁹ 7 *Del. C.* Chapter 41

Delaware has 228 individual tax ditch organizations. They range in size from 56,000 acres as in Marshyhope Creek Tax Ditch in southern Delaware, to a two-acre system in Wilmington. These organizations manage over 2,000 miles of channels and provide benefits to over 100,000 people and almost one-half of the state-maintained roads. Tax ditch channels range in size from 6 to 80 feet wide and 2 to 14 feet deep. The dimensions depend on the acreage being drained and the topography.¹²⁰

Currently, there is a legislative Right-of Way Tax Ditch Task Force to develop and submit appropriate procedures for the determination of maximum rights-of-way of tax ditch systems throughout the State of Delaware.

Both the DSWC Drainage and Stormwater Section and the conservation districts are very involved with tax ditch issues. KCD and NCCD operate very similarly, while SCD operates under a slightly different model.

KCD/NCCD

Both DSWC and the conservation districts offer technical assistance to landowners and tax ditch organizations. The DSWC frequently makes recommendations to the conservation district boards for their consideration regarding tax ditch issues. Additionally, the DSWC receives and approves requests for court ordered changes. These can occur for a number of reasons including changes in rights-of-way. Finally, the DSWC receives Section 3921 funds¹²¹ from the Legislature and subsequently disperses them to the conservation districts.

In addition to providing technical assistance, the conservation districts receive requests to change tax warrants and the Boards will either approve or disapprove these changes. The tax warrant is the percent charged to landowners each year to be used by the tax ditch organization for maintaining the ditch. The conservation districts also receive requests from the tax ditch organizations for cost-share of maintenance projects like mowing, herbicide application, dipout, and spoil spreading. In Kent County, the KCD equipment program also performs most of the major maintenance on tax ditches.

NCCD

There are 26 active tax ditches measuring approximately 55 miles in New Castle County, most of which were formed prior to development. Eleven urban/suburban tax ditches function to control their own maintenance.¹²²

KCD

In Kent County, an annual bond allocation, with an equal match from the Community Service Grant Funding through the Kent County Levy Court, allows KCD to assist 75 tax ditch associations that manage 710 miles of ditches.¹²³

¹²⁰ <http://www.swc.dnrec.delaware.gov/TaxDitches.htm>

¹²¹ 7 Del. C. §3921

¹²² New Castle Conservation District JSC Initial Questionnaire, pg. 7

¹²³ Kent Conservation District JSC Initial Questionnaire, pg. 7

SCD

In Sussex County, the DSWC provides more assistance directly to the tax ditch managers, including providing assistance with warrant, court order changes, maintenance inspections, and environmental permitting. As in Kent and New Castle Counties, the DSWC also reviews land development projects on behalf of the tax ditch managers. This is to try and prevent right-of way encroachments by new development. Additionally, the DSWC provides construction stakeout services to SCD and other contractors doing major maintenance on dipouts.

The SCD administers the State and County Matching Fund cost-share program (3921) and their equipment program does a substantial amount of major maintenance on Tax Ditches (dipouts). The SCD also has a weed wiper bar that helps with vegetative maintenance on tax ditches.

The SCD assists about 136 tax ditch associations that manage approximately 1,400 miles of tax ditches in Sussex County. The State and Sussex County provide matching funds to help cost-share with the tax ditch organizations for maintenance.¹²⁴

Education Initiatives and Awareness

NCCD

The New Castle Conservation District provides educational outreach through publications, fairs and festivals, school programs, and cooperative ventures with conservation partners.¹²⁵

- **Delaware Envirothon**

The Delaware Envirothon is sponsored by the Delaware Association of Conservation Districts (DACD). It is an Environmental Challenge for teams of high school students in the areas of aquatic ecology, soil/land use, forestry, wildlife, public speaking and special environmental topics. The program is used to instruct high school students and their team advisor in conservation methods to promote the conservation message and potential career choices to students. Currently, a New Castle Conservation District employee chairs the Delaware Envirothon Planning Committee. For more information see: www.delawareenvirothon.org

- **Newsletters and Annual Report**

The District publishes a quarterly newsletter entitled "Conservation News" and an annual report. The most recent issue or archived issues can be viewed by visiting the NCCD's web site at www.newcastleconservationdistrict.org

- **Educational Programs and Materials**

The District has a variety of educational materials that appeal to children from K through adults. There are conservation activity booklets, posters, bookmarks, etc. geared to various conservation topics. The District promotes and provides materials for the yearly observance of Soil and Water Stewardship Week, sponsored for over 50 years by the National Association of Conservation Districts. The theme for 2008 will deal with the importance of water. Other well received materials include the "Backyard Conservation" guidebook. Materials from other conservation agencies and organizations are also obtained for wider distribution such as the "Livable Delaware" plant guides.

Educational materials provided free of charge to teachers include:

¹²⁴ Sussex Conservation District JSC Initial Questionnaire, pg. 6

¹²⁵ New Castle Conservation District JSC Initial Questionnaire, pgs. 10-13

- **Non-Point Source Pollution Model**

A program can be scheduled to present the Non-Point Source Pollution model where children can learn about watersheds, where water goes, and how what we do to the land affects our water quality. The program usually lasts around 20-30 minutes. The model is used each year at the annual “Hands Across the Brandywine” program sponsored by the Friends of Wilmington Parks and is requested by schools, scouts, 4-H clubs and other groups. It is also used at the annual “Make A Splash” Watershed Festival sponsored by DNREC.

- **BIE Alliance “What in the World” Career Awareness Program**

The District is a regular participant in the Business/Industry/Education Alliance program where students have the opportunity to visit 4 different presenters for 10 minutes to learn about careers involving math, science and technology. The program is run out of the University of Delaware’s School to Work program. The District presentation provides each child with an overview of the importance of soil conservation, conservation projects, surveying, use of maps, etc.

- **Public Events**

The District exhibits at many public events around New Castle County and in Dover at special functions. Some of these include Astra-Zeneca Earth Day, AG Day at the University of Delaware, Tree Spree Fair, public forums and meetings, and other special events.

- **Cooperative Conservation Efforts**

The District’s information and education coordinator serves on the education committees/public awareness committees of the White Clay Creek Wild and Scenic River Management Committee, the Delaware Community Forestry Council, and the Trees for Wilmington program through the Delaware Center for Horticulture.

The Conservation District’s federal partners at the USDA-Natural Resources Conservation Service participate in many agricultural oriented field workshops such as pasture walks, conservation best management practices and field days. These are geared to the farm community and are usually organized by the University of Delaware Cooperative Extension.

- **Conservation Tours**

Conservation tours are made available to groups and elected public officials to learn about conservation projects and programs affecting their areas of interest or district. These are offered on an as needed and requested basis.

- **Awards and Recognition**

The District recognizes an outstanding Cooperator with the annual Cooperator of the Year award. Nominees are provided to DNREC and the Governor’s office for the annual Governor’s Conservation Awards. Awards are given out to deserving recipients in the area of Agricultural Conservation and Urban Conservation.

KCD

Kent Conservation District staff serves on the planning committees and provides volunteers for the following programs:¹²⁶

- **Delaware Envirothon**
- **Make-a-Splash Water Festival**
- **Science, Math and Technology Alliance’s ‘What in the World’ career awareness programs** throughout the school year. The programs are designed to educate elementary and middle school students about the use of science, math and technology in various careers. The KCD’s focus is on the use of these skills in conservation efforts.
- **In-class presentations** on topics such as soils, water quality, conservation efforts, etc.
- **Sponsors a conservation-themed poster contest** for all school-aged students.
- **State Fair Display** - planning committee and staffs the state fair display.
- **Stormwater maintenance workshops**

SCD

The SCD has several Education Initiative and Awareness programs.¹²⁷

- **Delaware Envirothon:** The SCD staff assist on the planning committee, as well as volunteer at the state competition every year.
- **Education Display:** The District also takes an educational display to various events throughout the year. Some of the events that the SCD attended were Autumn at Abbott’s Mill, Earth Day Eco Walk, State Fair, River Fest, Coast Day, as well as others.
- **Soil and Water Stewardship Program:** The SCD also participates in the Soil and Water Stewardship program sponsored by NACD and local conservation districts.
- **Educational materials** are distributed to local churches, libraries, and schools to promote this important program.
- **Newsletter** – The SCD publishes a quarterly newsletter (Crossroads), and distributes it to a mailing list of 3,000.
- **Stormwater Maintenance Workshops** – Presentations and workshops are given several times a year to homeowners associations and civic organizations throughout the county.

Fiscal

NCCD

The New Castle Conservation District determines needs and priorities based on services and assistance provided in prior years, including anticipated needs. Projects are based on customer requests and priority is based on funding availability.¹²⁸

Revenue by Fiscal Year

| | Source(s) of Funds | Amount |
|------------------|---------------------------|---------------|
| FY 08 (budgeted) | Federal Funds | \$ 1,381,369 |
| | State Funds | 4,883,676 |
| | County Funds | 225,000 |
| | Private Funds | 460,456 |

¹²⁶ Kent Conservation District JSC Initial Questionnaire, pg. 9

¹²⁷ Sussex Conservation District JSC Initial Questionnaire, pgs. 7-8

¹²⁸ New Castle Conservation District JSC Revised Section 6, pg. 1

| | | |
|-------|-------------------------|---------------------|
| | Office Rental Income | 110,000 |
| | Equipment Rental Income | 45,000 |
| | No Till Income | 6,000 |
| | Storm Water Review Fees | 2,500 |
| | TOTAL | \$7,114,001 |
| FY 07 | Federal Funds | \$ 1,173 |
| | State Funds | 11,263,095 |
| | County Funds | 1,123,643 |
| | Private Funds | 117,181 |
| | Office Rental Income | 105,276 |
| | Equipment Rental Income | 45,000 |
| | No Till Income | 5,301 |
| | Storm Water Review Fees | 7,140 |
| | TOTAL | \$12,667,809 |
| FY 06 | Federal Funds | \$ 138,727 |
| | State Funds | 7,750,803 |
| | County Funds | 1,900,899 |
| | Private Funds | 10,551 |
| | Office Rental Income | 91,039 |
| | Equipment Rental Income | 45,000 |
| | No Till Income | 7,565 |
| | Storm Water Review Fees | 1,250 |
| | TOTAL | \$9,945,834 |

Total Expenditures by Fiscal Year¹²⁹

NCCD – Expenditures by Fiscal Year (detail provided as requested by JSC on 2/27/08)

| Fiscal Year | Source(s) | Amount \$\$ |
|------------------------|----------------------------|--------------------|
| FY 08(budgeted) | Salaries & Wages | 1,400,000 |
| | Payroll Taxes | 112,000 |
| | General & Admin | 13,000 |
| | Construction Payments | 4,258,770 |
| | Depreciation | 165,000 |
| | Employee Benefits | 205,000 |
| | Pension | 92,000 |
| | Equipment Rentals | 10,100 |
| | Transportation | 1,251 |
| | Insurance | 115,000 |
| | Interest Expense | 24,000 |
| | Office Supplies & Postage | 17,000 |
| | Meetings, Travel | 21,000 |
| | Training/Tuition Employees | 8,000 |
| | Supervisors | 10,000 |
| | Utilities | 45,000 |
| | Repairs & Maint. Bldg | 50,000 |
| | Repairs & Maint. Vehicles | 6,000 |
| Misc Expenses | 39,000 | |
| Office Equipment | 4,000 | |
| | TOTAL:\$6,596,121 | |

¹²⁹ New Castle Conservation District JSC Additional Questionnaire, pg. 8

| Fiscal Year | Source(s) | Amount \$\$ |
|----------------------|----------------------------|-------------------------------|
| FY 07(actual) | Salaries & Wages | 1,390,913.51 |
| | Payroll Taxes | 111,605.74 |
| | General & Admin | 13,342.88 |
| | Construction Payments | 9,592,440.46 |
| | Depreciation | 164,861.16 |
| | Employee Benefits | 202,564.78 |
| | Pension | 91,648.16 |
| | Equipment Rentals | 10,079.66 |
| | Transportation | 1,586.67 |
| | Insurance | 115,255.70 |
| | Interest Expense | 27,251.26 |
| | Office Supplies & Postage | 17,709.27 |
| | Meetings, Travel | 23,266.27 |
| | Training/Tuition Employees | 8,484.75 |
| | Supervisors | 9,600.00 |
| | Utilities | 37,405.67 |
| | Repairs & Maint. Bldg | 59,990.83 |
| | Repairs & Maint. Vehicles | 14,010.06 |
| | Misc Expenses | 31,165.32 |
| Office Equipment | 4,213.85 | |
| | | TOTAL: \$11,927,396.00 |
| Fiscal Year | Source(s) | Amount \$\$ |
| FY 06(actual) | Salaries & Wages | 1,501,739.40 |
| | Payroll Taxes | 112,963.80 |
| | General & Admin | 18,035.21 |
| | Construction Payments | 8,396,536.29 |
| | Depreciation | 166,217.76 |
| | Employee Benefits | 212,437.53 |
| | Pension | 85,089.17 |
| | Equipment Rentals | 11,601.25 |
| | Transportation | 1,285.39 |
| | Insurance | 119,718.22 |
| | Interest Expense | 23,938.88 |
| | Office Supplies & Postage | 27,915.53 |
| | Meetings, Travel | 20,985.63 |
| | Training/Tuition Employees | 2,166.64 |
| | Supervisors | 8,900 |
| | Utilities | 39,476.57 |
| | Repairs & Maint. Bldg | 61,085.01 |
| | Repairs & Maint. Vehicles | 12,397.18 |
| | Misc Expenses | 15,151.28 |
| Office Equipment | 3,598.03 | |
| | | TOTAL:\$10,841,238.77 |

FY'07 Fees collected by the New Castle Conservation District¹³⁰

| Description of Fee | Current Fee \$ | Number of Persons/Entities Paying Fee | Fee Revenue | Where the Fee Revenue is Deposited |
|---|-----------------------------------|---------------------------------------|-------------|------------------------------------|
| E & S Fees | \$80.00/acre with a \$250 Minimum | 6 | \$ 7,200 | E & S Fund |
| Tech Assistance for retrieving archival aerial photos for consultants | \$50.00 per visit | 75 | 3,750 | General Fund |

When asked whether there were any external factors that have impacted NCCD's revenue and expenditures, NCCD responded, "In Fiscal Years 2006, 2007 and proposed for 2008, the New Castle County Storm Water Pond Restoration (New Castle County Program) has provided additional County funding to the district to aid the County in carrying out their restoration program. In fiscal years 2007 and 2008, the NCCD applied for FEMA Grant Programs to aid in funding flood mitigation practices."¹³¹

KCD

The Kent Conservation District determines budgetary needs and priorities by comparing program goals to funding proposed. The District receives funding for several programs including; cost-share, tax ditches and urban drainage. The budgeting of the funding is prioritized based on size of practice or problem, location of practice or problem and environmental impact of practice or problem.¹³²

Revenue by Fiscal Year

| | Source(s) of Funds | Amount |
|-------------------------|---------------------------|------------------|
| FY 08 (budgeted) | Federal | \$ 103,000 |
| | State | 2,800,000 |
| | County | 95,000 |
| | Private | 100,000 |
| | Pass-Through Grants | 0 |
| | Equipment Charges | 410,000 |
| | Erosion & Sediment Chgs | 670,000 |
| | Interest | 150,000 |
| | Gain/Loss on Sale | 0 |
| | Other | 333,800 |
| | TOTAL: \$4,661,800 | |
| FY 07 (actual) | Federal | \$ 100,870 |
| | State | 2,748,365 |
| | County | 97,696 |
| | Private | 105,298 |
| | Pass-Through Grants | Waiting on Audit |

¹³⁰ New Castle Conservation District JSC Additional Questionnaire, pg. 8

¹³¹ New Castle Conservation District JSC Additional Questionnaire, pg. 9

¹³² Kent Conservation District JSC Initial Questionnaire, pg. 22

| | | |
|-----------------------|-------------------------|---------------------------|
| | Equipment Charges | 418,894 |
| | Erosion & Sediment Fees | 738,400 |
| | Admin Overhead Chgs | 320,823 |
| | Interest | 147,641 |
| | Gain/Loss on Sale | 2,708 |
| | Other | 18,910 |
| | | TOTAL: \$4,699,605 |
| FY 06 (actual) | Federal | \$ 81,315 |
| | State | 2,973,335 |
| | County | 87,782 |
| | Private | 86,512 |
| | Pass-Through Grants | 902,718 |
| | Equipment Charges | 574,810 |
| | Erosion & Sediment Fees | 578,948 |
| | Admin Overhead Chgs | 332,833 |
| | Interest | 91,777 |
| | Gain/Loss on Sale | 12,362 |
| | Other | 18,347 |
| | | TOTAL: \$5,740,739 |

Total Expenditures by Fiscal Year

| Fiscal Year | Source(s) | Amount \$\$ |
|------------------------|-----------------------|---------------------------|
| FY 08(budgeted) | Salaries & Wages | \$ 2,731,000 |
| | Payroll Taxes | 224,000 |
| | General & Admin | 73,700 |
| | Cost-Share Payments | 0 |
| | Depreciation | 145,000 |
| | Employee Benefits | 704,200 |
| | Equip Rentals | 5,000 |
| | Fuel Expense | 55,500 |
| | Insurance | 49,500 |
| | Materials | 77,000 |
| | Meeting, Travel & Edu | 40,100 |
| | Other | 46,500 |
| | Rent | 82,030 |
| | Repairs & Maint | 38,000 |
| | Section 3921 Match | 0 |
| Subcontracting | 240,000 | |
| | | TOTAL: \$4,511,530 |
| FY 07(actual) | Salaries & Wages | \$ 2,660,156 |
| | Payroll Taxes | 217,160 |
| | General & Admin | 58,166 |
| | Cost-Share Payments | Waiting on Audit |
| | Depreciation | 140,953 |
| | Employee Benefits | 676,259 |
| | Equip Rentals | 0 |
| | Fuel Expense | 47,087 |
| | Insurance | 45,646 |
| | Materials | 50,847 |
| | Meeting, Travel & Edu | 38,454 |
| | Other | 41,680 |

| | | |
|----------------------|-----------------------|---------------------------|
| | Rent | 80,067 |
| | Repairs & Maint | 25,279 |
| | Section 3921 Matching | Waiting on Audit |
| | Subcontracting | 212,270 |
| | | TOTAL: \$4,294,024 |
| FY 06(actual) | Salaries & Wages | \$ 2,608,559 |
| | Payroll Taxes | 205,921 |
| | General & Admin | 274,556 |
| | Cost-Share Payments | 1,056,159 |
| | Depreciation | 137,156 |
| | Employee Benefits | 608,597 |
| | Equip Rentals | 20,361 |
| | Fuel Expense | 56,698 |
| | Insurance | 99,211 |
| | Materials | 91,665 |
| | Meeting, Travel& Edu | 20,943 |
| | Other | 59,209 |
| | Rent | 61,451 |
| | Repairs & Maint | 35,371 |
| | Section 3921 Matching | 162,939 |
| | Subcontracting | 295,502 |
| | | TOTAL: \$5,794,298 |

FY 08 Budgeted Expenditures by Line Item

| Line Item | Amount of Expenditures |
|-----------------------|-------------------------------|
| Salaries & Wages | \$ 2,731,000 |
| Payroll Taxes | 224,000 |
| Employee Benefits | 704,200 |
| General & Admin | 73,700 |
| Rent | 82,030 |
| Meeting, Travel & Edu | 40,100 |
| Depreciation | 145,000 |
| Repairs & Maint | 38,000 |
| Insurance | 49,500 |
| Fuel Expense | 55,500 |
| Subcontractor | 240,000 |
| Materials | 77,000 |
| Equipment Rental | 5,000 |
| Tools | 5,000 |
| Other | 41,500 |
| | TOTAL: \$ 4,511,530 |

FY'07 Fees collected by the Kent Conservation District¹³³

| Description of Fee | Current Fee \$\$ | Number of Persons or Entities Paying Fee | Fee Revenue \$\$ | Where the Fee Revenue is Deposited (i.e., general fund, special fund) |
|---------------------------|-----------------------------|---|-----------------------------|--|
| General Permit | \$ 50.00 | 563 | \$ 28,150 | General Funds |
| Trailer Permit | 25.00 | 45 | 1,125 | General Funds |
| Comm Permit | 500.00 | 11 | 5,500 | General Funds |
| Temp Permit | 75.00 | 155 | 11,625 | General Funds |
| Temp Permit | 150.00 | 166 | 24,900 | General Funds |
| Review Fees | | 130 | 189,000 | General Funds |
| Const Fee | | 101 | 447,350 | General Funds |
| Maintenance Fee | | 37 | 29,750 | General Funds |
| Utility Fee | 200.00 | 5 | 1,000 | General Funds |
| Lien Fee | 30.00 | 28 | 840 | General Funds |
| Mortality Fee | 25.00 | 172 | 4,300 | General Funds |
| Mortality Fee | 35.00 | 1 | 35 | General Funds |
| Mortality Fee | 40.00 | 1 | 40 | General Funds |

When asked whether there have been any external factors that have impacted the KCD's revenue and/or expenditures, KCD responded, "... Construction on the Jackson Tax Ditch positively impacted the revenue of our equipment program. The growth spurt in Kent County has positively impacted the revenue of our Sediment & Stormwater program."¹³⁴

SCD

SCD determines needs and priorities based on services and assistance provided in prior years, including anticipated needs based on the current economical conditions, existing conservation practices, and the availability of governmental grants. SCD's fiscal year ends December 31.

Revenue by Fiscal Year

| | Source(s) of Funds | Amount |
|------------------|--------------------------------|--------------------|
| FY 07 (budgeted) | Contract Income | \$508,400 |
| | Equipment Income | 907,000 |
| | Pipe Sales | 52,000 |
| | Stormwater Fees | 1,320,000 |
| | Administrative Overhead Income | 512,400 |
| | Maps and Rent | 15,000 |
| | Miscellaneous | 3,000 |
| | TOTAL | \$3,380,800 |
| FY 06 (actual) | Contract Income | \$685,862 |
| | Equipment Income | 507,074 |
| | Pipe Sales | 41,065 |
| | Stormwater Fees | 1,257,778 |
| | Administrative Overhead Income | 432,113 |
| | Maps and Rent | 12,785 |
| | Miscellaneous | 0 |
| | TOTAL | \$2,936,677 |

¹³³ Kent Conservation District JSC Initial Questionnaire, pg. 23

¹³⁴ Kent Conservation District JSC Initial Questionnaire, pg. 25

| | | |
|----------------|--------------------------------|--------------------|
| FY 05 (actual) | Contract Income | 387,138 |
| | Equipment Income | 563,461 |
| | Pipe Sales | 48,255 |
| | Stormwater Fees | 1,165,424 |
| | Administrative Overhead Income | 430,873 |
| | Maps and Rent | 15,743 |
| | Miscellaneous | 184 |
| TOTAL | | \$2,611,078 |

Total Expenditures by Fiscal Year

| Fiscal Year | Source(s) | Amount \$\$ |
|-------------------------|---------------------|--------------------|
| FY 08 (budgeted) | Cost of Sales | 223,700 |
| | Salaries/Wages | 1,492,900 |
| | OEC | 157,500 |
| | Pension | 80,100 |
| | Supplies | 76,100 |
| | Insurance | 49,500 |
| | Vehicle Exp./Ins. | 76,000 |
| | Repairs – Bldg. | 35,300 |
| | Repairs – Equipment | 23,700 |
| | Depreciation | 160,200 |
| | Utilities/Phones | 31,100 |
| | Travel | 22,500 |
| | Equipment Fuel | 65,700 |
| | Training/Dev. | 18,600 |
| | Rent | 35,200 |
| | Prof. Fees/Dues | 52,700 |
| | Public Relations | 35,500 |
| Pass through Grants | 1,500,000 | |
| Supervisors | 11,000 | |
| TOTAL | | \$4,147,300 |
| FY 07 (actual) | Cost of Sales | 199,124 |
| | Salaries/Wages | 1,37,115 |
| | OEC | 138,018 |
| | Pension | 74,841 |
| | Supplies | 66,874 |
| | Insurance | 38,978 |
| | Vehicle Exp./Ins. | 70,231 |
| | Repairs – Bldg. | 26,939 |
| | Repairs – Equipment | 27,276 |
| | Depreciation | 151,801 |
| | Utilities/Phones | 27,338 |
| | Travel | 13,295 |
| | Equipment Fuel | 58,459 |
| | Training/Dev. | 8,739 |
| | Rent | 48,604 |
| | Prof. Fees/Dues | 84,369 |
| | Public Relations | 23,566 |
| Pass through Grants | 1,948,666 | |
| Supervisors | 12,451 | |
| TOTAL | | \$4,391,684 |

| | | |
|----------------------|---------------------|--------------------|
| FY 06(actual) | Cost of Sales | \$193,896 |
| | Salaries/Wages | 1,255,368 |
| | OEC | 113,315 |
| | Pension | 63,521 |
| | Supplies | 59,106 |
| | Insurance | 33,178 |
| | Vehicle Exp./Ins. | 53,728 |
| | Repairs – Bldg. | 14,420 |
| | Repairs – Equipment | 24,080 |
| | Depreciation | 112,854 |
| | Utilities/Phones | 23,433 |
| | Travel | 9,765 |
| | Equipment Fuel | 41,462 |
| | Training/Dev. | 3,284 |
| | Rent | 24,619 |
| | Prof. Fees/Dues | 71,148 |
| | Public Relations | 17,693 |
| | Pass through Grants | 1,486,392 |
| | Supervisors | 6,981 |
| | TOTAL | \$3,608,243 |

FY 08 Budgeted Expenditures by Line Item

| Line Item | Amount of Expenditures |
|----------------------|-------------------------------|
| Cost of Sales | \$ 223,700 |
| Salaries/Wages | 1,492,900 |
| OEC | 157,500 |
| Pension | 80,100 |
| Supplies | 76,100 |
| Insurance | 49,500 |
| Vehicles Exp./Inc. | 76,000 |
| Repairs – Bldg. | 35,300 |
| Repairs- Equipment | 23,700 |
| Depreciation | 160,200 |
| Utilities/Phones | 31,100 |
| Travel | 22,500 |
| Equipment Fuel | 65,700 |
| Training/Development | 18,600 |
| Rent | 35,200 |
| Prof. Fees/Dues | 52,700 |
| Public Relations | 35,500 |
| Pass Through Grants | 1,500,000 |
| Supervisors | 11,000 |
| TOTAL | \$ 4,147,300 |

SCD has three fees, review fee, construction inspection fee, and maintenance inspection fee for the stormwater management program.

FY 07 Fees collected by the Sussex Conservation District:¹³⁵

| Description of Fee | Current Fee \$\$ | Number of Persons or Entities Paying Fee | Fee Revenue \$\$ | Where the Fee Revenue is Deposited (i.e., general fund, special fund) |
|---------------------------|-------------------------|---|-------------------------|--|
| Review Fees | \$364,380 | 252 | \$ 268,576 | General Fund |
| Construction Inspection | 719,537 | 138 | 530,464 | Special Fund |
| Maintenance Inspection | 109,653 | 98 | 80,960 | Special Fund |

¹³⁵ Email – dated Jan. 9, 2008



Division of Watershed Stewardship

Division Director
302-739-9921
Terry L. Deputy

Watershed Assessment and Management Section
Env. Program Administrator
302-739-9939
Steve Williams

Shoreline and Waterway Management Section
Env. Program Administrator
302-739-9921
Michael Powell

Conservation Programs Section
Env. Program Administrator
302-729-9921
Robert Palmer

Watershed Assessment Branch
Env. Program Manager II
302-739-9939
Brad Smith

Watershed Protection Branch
Env. Program Manager II
302-739-9939
Mark Biddle

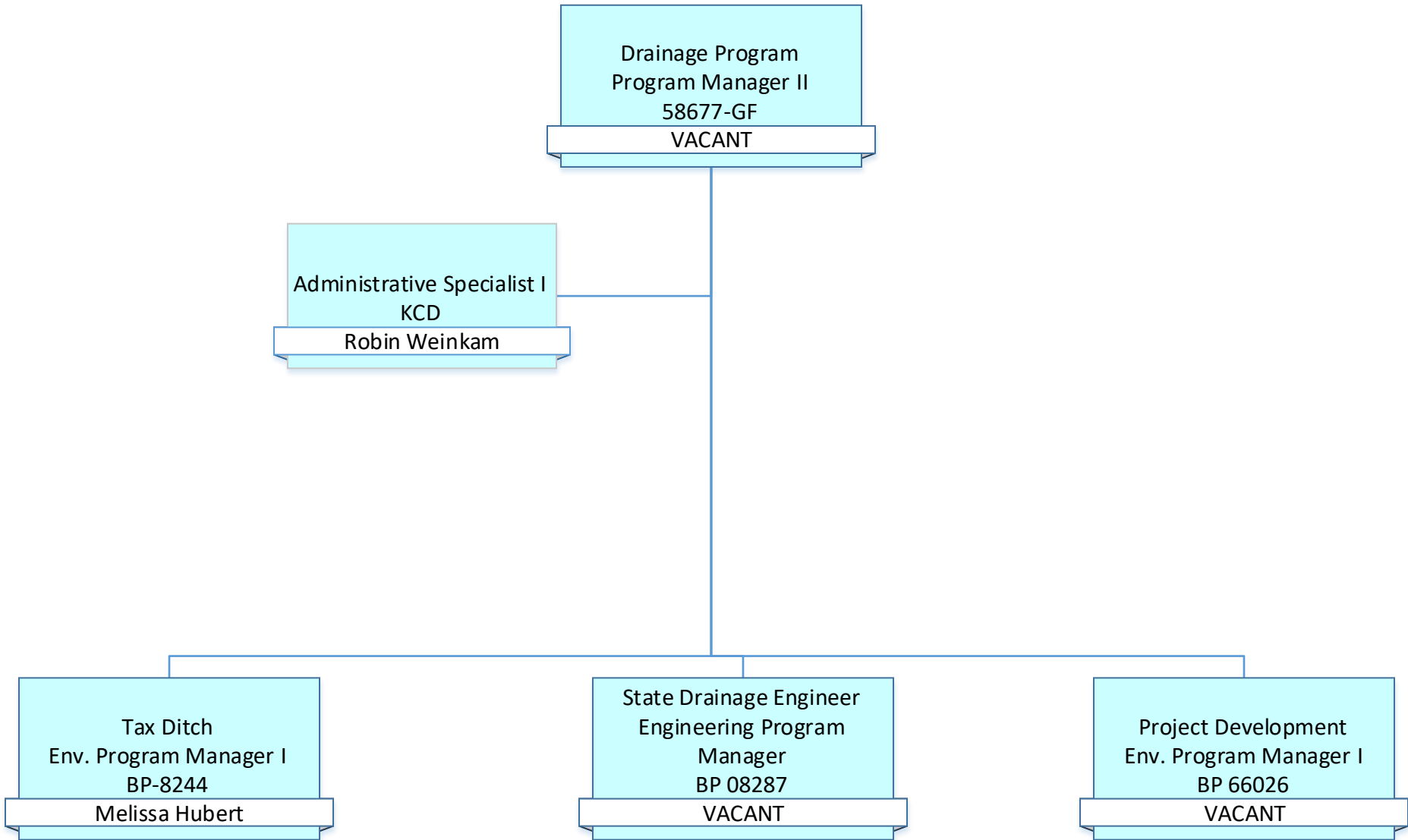
Field Operations and Construction Branch
Env. Program Manager II
302-855-9921
Jesse Hayden

Resource Protection and Hazard Mitigation Branch
Env. Program Manager II
302-855-9921
VACANT

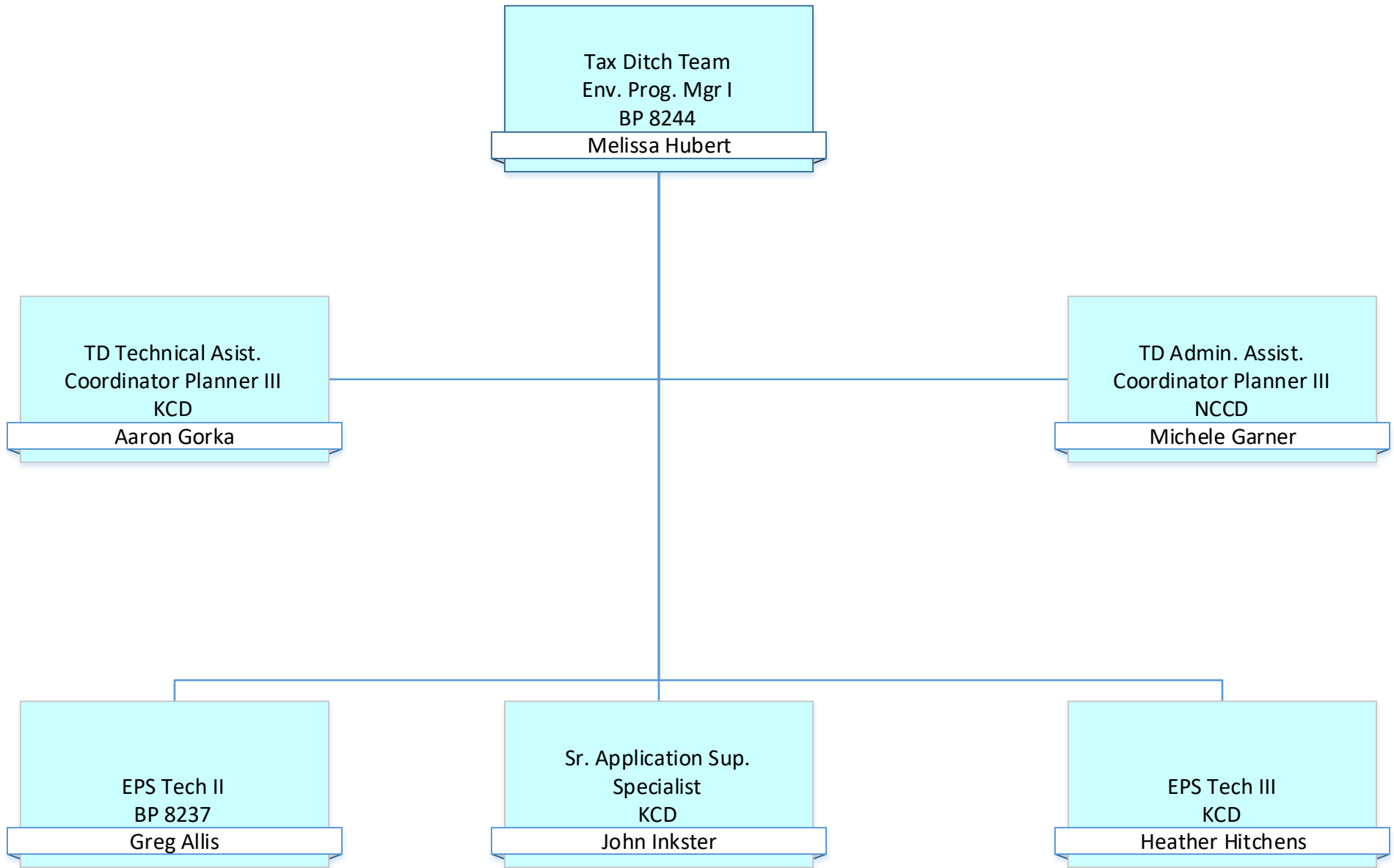
Drainage Program
Env. Program Manager II
302-739-9921
Brooks Cahall

Sediment and Stormwater Program
Env. Program Manager II
302-739-9921
Jamie Rutherford

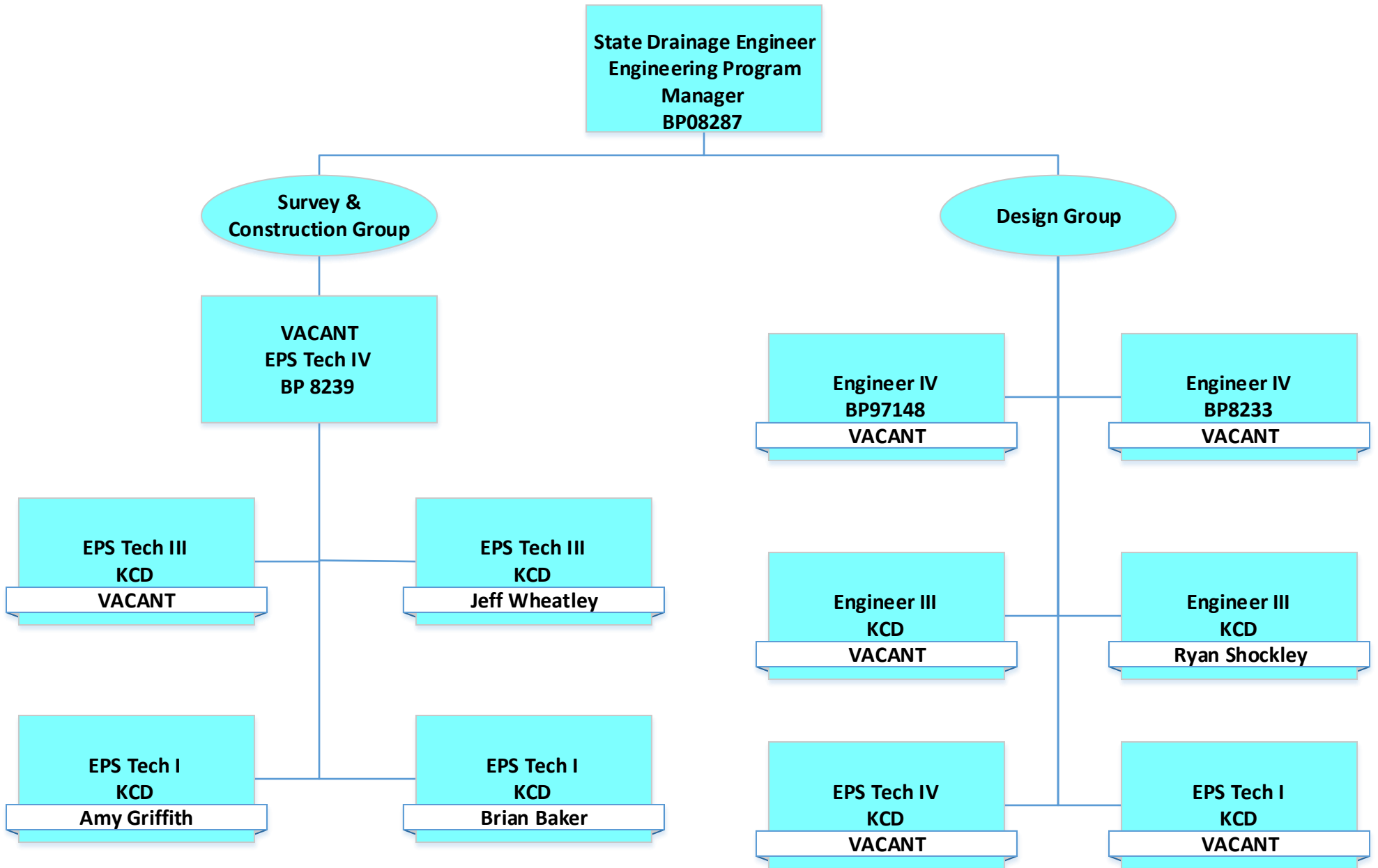
Non-Pont Source Program
Env. Program Manager II
302-739-9922
Marcia Fox



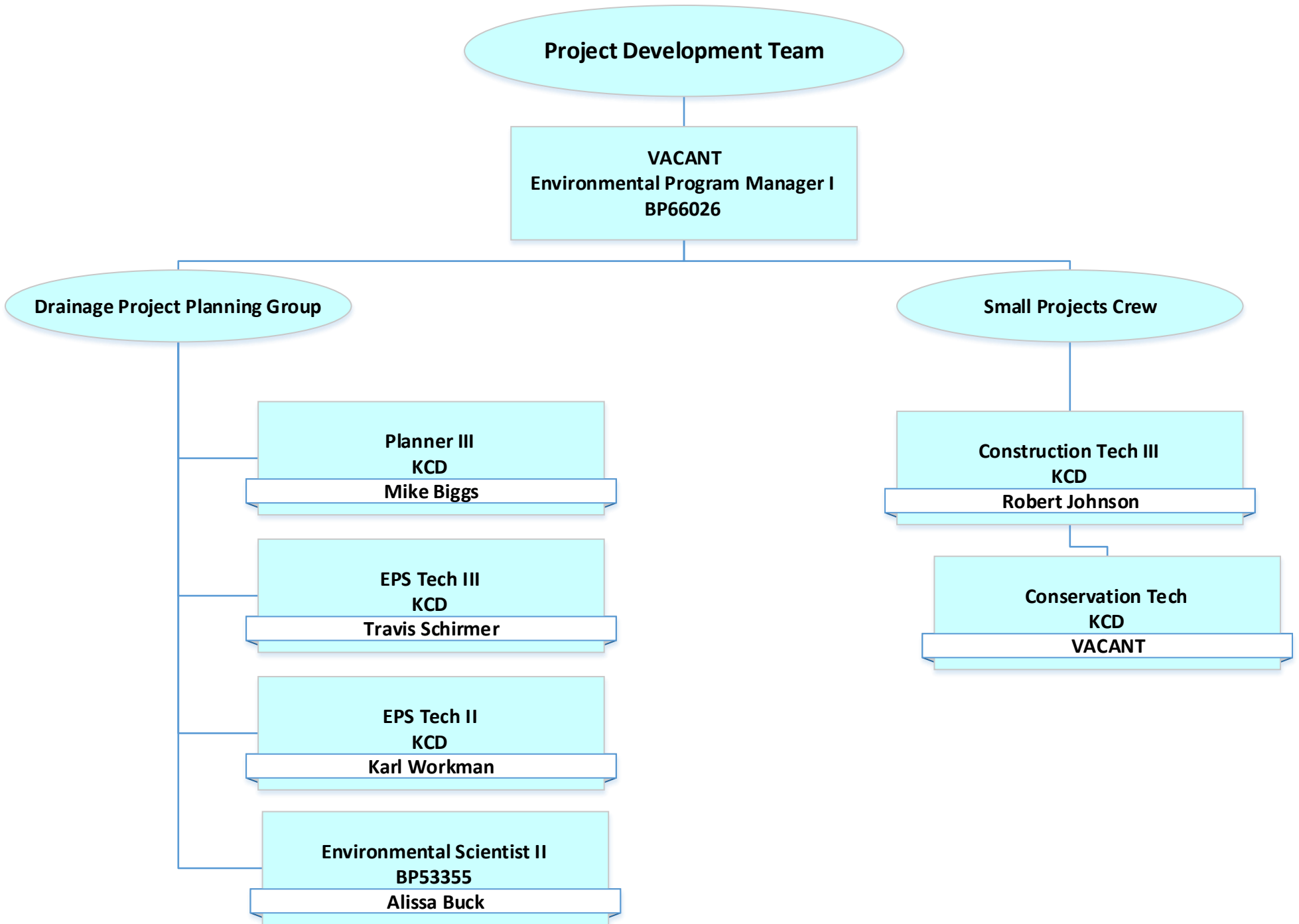
Watershed Stewardship
Tax Ditch Team



Watershed Stewardship
Drainage Engineering Team



Watershed Stewardship Drainage
Project Development Team



Appendix G
RC&D 21st Century Fund Expenditure Report

21st CENTURY DRAINAGE EXPENDITURE REPORT BY FISCAL YEAR BY COUNTY
ALL BALANCES REPORTED ARE ACCURATE AS OF 6/10/2019

| | NEW CASTLE | KENT | SUSSEX | TOTAL |
|---------------------------------------|-------------------|------------------|-------------------|-------------------|
| ALLOCATIONS | | | | |
| Allocated - FY1996-FY2009 | 44,552,468 | 6,503,823 | 11,311,984 | 62,368,276 |
| Allocated FY2016 | 1,350,458 | 427,730 | 1,221,812 | 3,000,000 |
| Allocated FY2017 | 1,795,962 | 533,784 | 1,483,054 | 3,812,800 |
| Allocated FY2019 | 1,890,000 | 756,000 | 1,554,000 | 4,200,000 |
| Total Allocated | 49,588,888 | 8,221,337 | 15,570,850 | 73,381,076 |
| EXPENDITURES | | | | |
| Expended FY1996 - FY2000 ¹ | 8,915,505 | 459,453 | 2,794,700 | 12,169,659 |
| Expended FY2001 | 2,828,048 | 1,002,740 | 1,034,838 | 4,865,626 |
| Expended FY2002 | 2,032,709 | 368,542 | 1,073,955 | 3,475,206 |
| Expended FY2003 | 2,294,881 | 408,426 | 657,955 | 3,361,262 |
| Expended FY2004 | 3,822,121 | 289,670 | 516,528 | 4,628,319 |
| Expended FY2005 | 3,351,504 | 199,982 | 521,912 | 4,073,397 |
| Expended FY2006 | 3,424,161 | 257,838 | 94,697 | 3,776,696 |
| Expended FY2007 | 6,103,468 | 150,146 | 219,644 | 6,473,257 |
| Expended FY2008 | 2,866,457 | 177,040 | 360,432 | 3,403,928 |
| Expended FY2009 | 1,523,193 | 51,199 | 424,434 | 1,998,825 |
| Expended FY2010 | 356,680 | 97,795 | 359,653 | 814,128 |
| Expended FY2011 | 1,958,028 | 279,399 | 199,291 | 2,436,717 |
| Expended FY2012 | 705,171 | 223,112 | 108,293 | 1,036,576 |
| Expended FY2013 | 747,352 | 342,501 | 690,257 | 1,780,111 |
| Expended FY2014 | 527,924 | 421,171 | 282,913 | 1,232,008 |
| Expended FY2015 | 1,309,287 | 563,513 | 586,974 | 2,459,775 |
| Expended FY2016 | 1,448,683 | 568,644 | 1,187,668 | 3,204,996 |
| Expended FY2017 | 1,315,066 | 460,894 | 541,334 | 2,317,294 |
| Expended FY2018 | 1,364,087 | 256,508 | 716,598 | 2,337,193 |
| Expended FY2019 | 838,392 | 326,556 | 1,529,364 | 2,694,312 |
| Total Expended | 47,732,715 | 6,905,130 | 13,901,440 | 68,539,286 |
| Allocated Unexpended Balance | 1,856,173 | 1,316,207 | 1,669,410 | 4,841,790 |
| Allocated Open Encumbrances | 1,856,173 | 326,556 | 580,555 | 2,763,283 |
| Allocated Unencumbered Balance | 0 | 989,651 | 1,088,855 | 2,078,506 |

¹ Not tracked by fiscal year by county for first 5 years



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF WATERSHED STEWARDSHIP
89 Kings Highway
DOVER, DELAWARE 19901

OFFICE OF THE
DIRECTOR

PHONE: (302) 739-9921
FAX: (302) 739-6724

MEMORANDUM

TO: Secretary Shawn M. Garvin

THRU: Terry L. Deputy, Director *TL*

FROM: Robert R. Palmer, Administrator *RP*

SUBJECT: State and County Matching Funds (3921 Funds)

DATE: August 28, 2019

Funding in the amount of \$225,000, as required by 7 Del. C. § 3921, is annually provided to the Department for distribution to New Castle, Kent and Sussex Conservation Districts. This equates to \$75,000 for use in in each County for the purpose to pay or assist in paying all costs including personnel required for planning, construction, installation and maintenance of tax ditches, public group ditches, highway ditches and resource conservation projects in Sussex, Kent and New Castle Counties. This funding is matched by the County government and then used as part of a Cost Share program that further leverages the funding by requiring matching funds from the tax ditch organization or landowners using the funding.

7 Del. C. § 3923 states: *"The money appropriated pursuant to § 3921 of this title shall be used by the Division of Watershed Stewardship to pay or assist in paying all costs including personnel required for planning, construction, installation and maintenance of tax ditches, public group ditches, highway ditches and resource conservation projects in Sussex, Kent and New Castle Counties, which tax ditches shall be organized under Chapter 41 of this title; Article 2, Chapter 65, and Article 1, Chapter 105 of the 1935 Revised Code of Delaware; and which public group ditches shall be ditches providing water management and drainage for groups of landowners and for landowners and portions of state highways and for which necessary construction permits, easements or rights-of-way for construction and maintenance operations shall have been acquired by this State or by Sussex, Kent or New Castle County, and which highway ditches shall be ditches maintained by the public on state or county-owned easements or rights-of-way adjacent to the roads of Sussex, Kent or New Castle County, and which resource conservation projects shall be defined in applications or project plans submitted to the Secretary of the United States Department of Agriculture for Watershed Planning or Resource*


Delaware's good nature depends on you!

Conservation and Development assistance. The money appropriated shall be paid from time to time by the State Treasurer and the governments of Sussex, Kent and New Castle Counties to the Division of Watershed Stewardship, or to the Sussex Conservation District, the Kent Conservation District, or the New Castle Conservation District, or directly to the contractors and suppliers furnishing work, labor, services and materials for such projects or to landowners for rights-of-way or easements, or shall be paid or otherwise made available to other state agencies for work, labor, services and materials for certain portions of such projects as shall be determined by the Division and upon certification by the Division that such payments are proper and for the purposes authorized by this section”

Since this funding is stipulated by State of Delaware statute the funding should not be delayed. More importantly this funding is desperately needed to allow the Conservation Districts to assist Tax Ditch Organizations and other landowners in maintaining drainage infrastructure and alleviating drainage problems.

The importance of the 3921 funds are to assure the implementation of agriculture best management practices (BMPs) essential to provide environmental protection in specific areas of Delaware watersheds including the geographic areas the drain to the Chesapeake Bay, Delaware Bay and/or the Inland Bays.

Approved _____ Disapproved _____



Shawn M. Garvin
Secretary

9/4/19
Date

Attachment



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF WATERSHED STEWARDSHIP
89 Kings Highway
DOVER, DELAWARE 19901

OFFICE OF THE
DIRECTOR

PHONE: (302) 739-9921
FAX: (302) 739-6724

MEMORANDUM

TO: Secretary Shawn M. Garvin
THRU: Terry L. Deputy, Director *TL*
FROM: Robert R. Palmer, Administrator *RRP*
SUBJECT: Conservation Cost Share Program
DATE: September 5, 2019

Using funds provided through the FY2020 Delaware Bond Bill, the Conservation Districts will manage appropriations of funding dedicated to the Tax Ditch organizations as detailed within Senate Bill 180, Section 88. The section appropriates \$500,000 to the Department of Natural Resources and Environmental Control (DNREC) for the purpose tax ditch maintenance work projects in Sussex, Kent and New Castle Counties.

Section 88 states: *"Tax Ditches. Section 1 Addendum of this Act makes an appropriation to the Department of Natural Resources and Environmental Control for Tax Ditches. Of this amount, \$500,000 shall be divided at a rate based on the total number of miles of tax ditch statewide and distributed to the three conservation districts based on the number of miles of tax ditch in each county. This funding shall be used for tax ditch maintenance work to be completed at the direction of the tax ditch organizations and/or their managers who are in compliance with 7 Del. C. c. 25."*

In accordance with the language above, the funds will be distributed to the three Conservation Districts based on the number of miles of tax ditch in each county. Funds will be distributed according to the following table:

Delaware's good nature depends on you!

| County | Tax Ditch Miles | FY2020 Bond Bill Funding |
|-------------------|-----------------|--------------------------|
| New Castle County | 57 | \$ 14,095 |
| Kent County | 751 | \$ 185,707 |
| Sussex County | 1214 | \$ 300,198 |
| Totals | 2022 | \$ 500,000 |

Since this funding is stipulated by statute the funding should not be delayed. More importantly this funding is desperately needed to allow the Conservation Districts to assist Tax Ditch Organizations and other landowners in maintaining drainage infrastructure and alleviating drainage problems.

The importance of the additional funding as appropriated through FY2020 Bond Bill, Senate Bill 180, Section 88 is a critical step to assure organizations overseeing Delaware's tax ditch systems can initiate much needed and important maintenance projects.

Approved Disapproved


 Shawn M. Garvin
 Secretary

September 10, 2019
 Date

Attachment

INTERAGENCY PROJECT AGREEMENT

NEW CASTLE COUNTY RESOURCE, CONSERVATION & DEVELOPMENT PROJECT
IMPLEMENTATION
N-FY2020-001

TWENTY-FIRST CENTURY FUND
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT
(FY20)
NEW CASTLE COUNTY, DELAWARE

THIS AGREEMENT, made this 21st day of August, 2019, BY AND BETWEEN, the Department of Natural Resources and Environmental Control, hereinafter called "The Department" and the New Castle Conservation District hereinafter called "NCCD".

WITNESSETH THAT:

WHEREAS; Senate Bill 180 of the 150th General Assembly, appropriated funds for Resource Conservation and Development Projects dedicated to improve the health of communities by addressing a variety of State-wide watershed and drainage issues consistent with the policies of the Cabinet Committee on State Planning Issues; and

WHEREAS, said appropriations provide funds for projects located in New Castle County; and

WHEREAS, House Bill 410, Section 76 of the 146th General Assembly requires that monies appropriated from the Twenty-First Century Fund have a funding match of at least 10%; and

WHEREAS, Resource Conservation and Development Projects have been approved by the Joint Legislative Committee on the Capital Improvements Program;

NOW, therefore, in consideration of the premises and of the several promises to be faithfully performed by the parties hereto as set forth, The Division and NCCD do hereby agree as follows:

- A. It is agreed that the NCCD will provide project management and construction using NCCD or contractor resources for any Twenty First Century Fund Project approved by the Joint Committee for Capital Improvement at an estimated total cost of \$2,555,556.
- B. It is agreed that this project will utilize Twenty-First Century Funds and non Twenty-First Century Funds for the required match as shown in the table below:

| Project Name | Resource Conservation and Development Funds | Funds provided by the NCCD | Description |
|--|---|----------------------------|-------------------------------------|
| Approved New Castle Resource, Conservation, and Development Projects | FY2020 \$2,300,000 | \$255,556 | Project Management and Construction |

C. The Department will:

1. Provide \$2,300,000 toward the cost of the work described in “A” and “B”.
2. Pay for the cost of said work up to \$2,300,000, directly to the NCCD on a monthly basis upon receipt of a statement for works performed or supplies purchased.
3. Provide administration and technical assistance as required.

D. NCCD will:

1. Obtain and provide \$255,556 toward the cost of construction of the projects described in item “A”.
2. Obtain and provide the necessary land rights needed for the construction of said projects.
3. Be responsible for obtaining any and all applicable permits.
4. Be responsible for complying with all relevant State and Federal laws.
5. Be responsible for undertaking, implementing and supervising all aspects related to said projects including but not limited to project planning, design, bid preparation and award, construction and inspection.
6. Arrange for final inspection of and certification that the projects meet the construction plans and specifications.
7. Keep accurate records of the expenditure of these funds and notify The Department in writing when the project is completed, such notification shall include the above stated inspections and certification documents.
8. Assure that these funds will only be on projects that have been approved by the Joint Committee for Capital Improvement.
9. Supply to The Department documentation of the required 10% match.

E. It is mutually agreed that:

- 1) Financial commitments are contingent upon the continuing availability of appropriations by the Legislature and County Government from which payment may be made. The Department or NCCD shall not be obligated if the Legislature or the County fails to appropriate funds.
- 2) The Department, nor NCCD, shall assume any responsibilities for future maintenance.
- 3) All parties hereby acknowledge that this Agreement has financial limits that cannot be exceeded except by agreement of all parties in writing.

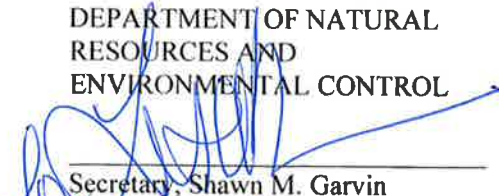
NEW CASTLE CONSERVATION
DISTRICT



District Coordinator

Date: August 20, 2019

DEPARTMENT OF NATURAL
RESOURCES AND
ENVIRONMENTAL CONTROL



Secretary, Shawn M. Garvin

Date: August 21, 2019

Department of Natural Resources and Environmental Control (DNREC) Division of Watershed Stewardship

Tax Ditch Internal Controls Advice & Audit Procedures Guide

DNREC provides administrative and technical assistance to tax ditch organizations. As a joint effort with the State of Delaware Office of Auditor of Accounts (AOA), we have developed this document to provide guidance in matters of internal controls, financial statement preparation, and audit procedures.

Tax ditch organizations are governmental subdivisions of the State of Delaware that are required by law to hold annual meetings, elect officers, keep meeting minutes, prepare financial statements, have financial statements audited, and secure bond for the secretary-treasurer. Once elected, tax ditch officers have a fiduciary responsibility to the landowners, also known as the taxables, to ensure the tax ditch functions properly and to ensure adequate safeguards are in place over tax ditch assets. A system of internal control that promotes efficiency, yet minimizes risk, is essential.

Internal Controls

As management and the fiscal stewards of the tax ditch, the managers are responsible for the creation and maintenance of a system of internal controls to ensure effective and efficient organizational operations. However, internal controls are not foolproof. Management's monitoring of and attitude towards the adherence to control procedures are critical to making controls work. Support for good controls must come from all levels of the organization without regard to title, position, or contribution to the organization. Support includes the willingness to recognize and take corrective steps when fraud, waste, or abuse is suspected or has occurred.

A well-designed system of internal controls must include written policies and procedures and good supporting documentation to ensure each control objective is met. Failure to meet control objectives constitutes a weakness in an entity's internal controls system. The three categories of objectives, as defined by COSO¹, are as follows:

- Operations objectives relate to the overall operations of the entity.
- Reporting objectives ensure that all information used and output by the entity are accurate and reliable.
- Compliance objectives relate to the entity's compliance with laws and regulations.

There are five components of internal control which include the control environment, risk assessment, control activities, information and communication, and monitoring. All of these components should be evident in each entity's system of internal controls.

- Control Environment
 - Sets the tone of the organization;
 - Provides discipline and structure;

¹ The Committee of Sponsoring Organizations of the Treadway Commission (COSO), *Internal Control – Integrated Framework* has been used as a blueprint for the private and public sectors to establish internal controls that promote efficiency, minimize risks, promote the accuracy and reliability of financial statements, and encourage compliance with laws and regulations. In addition to COSO, the tax ditch should consider the *Standards for Internal Control in the Federal Government* (known as the Green Book), issued by the United States Government Accountability Office (GAO), which may be adopted by state, local, and quasi-governmental agencies, as well as not-for-profit organizations. The Green Book can be found at <http://www.gao.gov/assets/670/665712.pdf>.

- Factors include: integrity, ethical values, competence, management's philosophy and operating style, and attention and direction provided by leadership.
- Risk Assessment
 - External and internal sources;
 - Identification and analysis of relevant risks;
 - Basis to determine how the risks should be managed.
- Control Activities
 - Policies and procedures that help ensure management directives are carried out;
 - Ensure that necessary actions are taken to address risks;
 - Includes: approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets, and segregation of duties.
- Information and communication
 - Pertinent information must be identified, captured and communicated in a form and timeframe that enable people to carry out their responsibilities;
 - Effective communication flows down, across, and up the organization.
- Monitoring
 - A process that assesses the quality of the system's performance over time;
 - Ongoing monitoring activities such as review of monthly bank reconciliations;
 - Separate evaluations such as financial audits.

No organization is immune to the potential threat of fraud. Losses due to fraud can be especially devastating to smaller companies, especially non-profits, which have limited resources and smaller revenue streams. This makes the identification, mitigation, and deterrence of fraud risk for smaller organizations crucially important to their very survival.

Any employee, no matter what level they are in an organization, that has sufficient *opportunity* coupled with real or perceived economic pressure or other *motivation* and who can *rationalize* the criminal behavior can commit fraud. Those employees organizations consider "highly trusted" undertake a high percentage of fraud schemes because of the increased opportunity inherent in the trusted employee position.

It is much easier to prevent fraud than to detect fraud. Most experts agree that the single most effective way to prevent fraud is to increase the perception that fraud will be detected if perpetrated. This decreases the fraudster's perceived opportunity that the fraud will be successful. Effectively designed and implemented controls used for the detection of fraud are a good way to decrease the fraud risk in any organization. Below are some controls that could minimize the risk of fraud which should be adopted by the tax ditch:

- All accounts (including CD's and savings accounts) shall have at least two authorized signers who are current officers.
- Require two (2) officers to sign checks or withdraw funds.
- Checks should not be pre-signed.
- The officers should see a valid invoice or receipt prior to issuing/signing a check.
- Checks should never be written to cash.
- No debit cards or credit cards shall be issued.
- No cash payments.
- No petty cash.
- Personal reimbursement may be made only with supporting documentation (i.e., a detailed receipt) within 60 days of the expense.

Financial Statement Preparation

The excerpt of Delaware Code below describes the duties of the tax ditch secretary-treasurer.

Per 7 Del. C. §4163 (2) and (3). Duties of secretary-treasurer of tax ditch.

“(2) Prepare a complete financial statement at the end of each calendar year, including therein an itemized report of all funds received, all funds expended, all funds due from taxes not yet collected and all sums due and owing by the tax ditch, and this statement and the records of the secretary-treasurer shall be audited annually by 2 qualified persons and shall become part of the permanent records of the tax ditch;

(3) Provide for the safekeeping of any funds of the Tax Ditch which are placed in his or her custody.”

The fiscal year of a tax ditch is from January 1st to December 31st. DNREC and AOA developed the financial statement form at Appendix A to assist the tax ditch in the preparation of the annual financial statement. The form shows beginning and ending balances, receipt/disbursement amounts with explanations, fixed assets belonging to the tax ditch, funds due to or owed by the tax ditch (uncollected taxes, loans, outstanding bills, etc.), and a description of any related party transactions that have occurred.

Related parties may be defined as affiliates of the tax ditch (such as a smaller tax ditch that feeds into a larger tax ditch), management of the tax ditch and members of their immediate families, other parties the tax ditch may transact with if the party has control or significant influence over the management or operating policies of the tax ditch, or a tax ditch officer that has ownership interest in a transacting party. Transactions that, because of their nature, may be indicative of the existence of related parties include: borrowing or lending on an interest-free basis or at a rate of interest significantly above or below market rates prevailing at the time of the transaction, making loans with no scheduled terms for when or how the funds will be repaid, exchanging property for similar property in a nonmonetary transaction, and services received without charge. These transactions must be disclosed on the financial statement form.

A manager and the secretary-treasurer shall sign the financial statement when completed and then submit the complete financial statement package for audit. The audited financial statement package should be presented at your annual meeting.²

Audit Procedures

Delaware Code requires that an annual financial statement be prepared by the secretary-treasurer and that this statement be audited by two qualified persons. AOA recommends auditors are:

- Not tax ditch officers
- Not signers on the bank account
- Not related to signers on the bank account
- Two persons with a financial background
(DNREC can assist with this upon request 302-855-1930)
- Accountants with the Conservation District
Kent Conservation District, Gayle Wills, 302-741-2600
New Castle Conservation District, Bonnie Weiskott, 302-832-3100
Sussex Conservation District, Dan Lee, 302-856-2105
- A Certified Public Accountant (CPA) with a private accounting firm (paid or voluntary)

² Tax ditches which meet in early January may not be able to present an audited financial statement due to not having the December bank statements on hand. In these cases, the secretary-treasurer can present an un-audited statement at the meeting.

A *Tax Ditch Audit Checklist* is included as Appendix B of this document and is to be used by the auditors to document the procedures performed. Below is a general overview of what procedures should be included in a tax ditch audit:

- 1) Review financial statement and examine financial records and supporting documents (i.e. reconciled bank statements, invoices/bills, receipts, canceled checks front and back, payment authorization for officer compensation/reimbursement such as current meeting minutes reflecting approval of compensation).
- 2) Verify all authorized signers on the accounts are current (obtain from the bank).
- 3) Verify that fixed assets are accounted for. For example, if the tax ditch owns an all-terrain vehicle, computer, printer, etc., its whereabouts are known; the item is secure; and it is available for the managers to use. Current year purchases of items costing more than \$50 that are expected to last more than one year should be included in the list of fixed assets.
- 4) Should there be any discrepancies in the record, a meeting with the managers and the auditors is recommended.
- 5) Provide an overall assessment of the audit: Pass/Pass with immaterial deficiencies/Fail. Immaterial deficiencies are defined as differences attributable to rounding or unsupported expenditures less than \$100 (single item or aggregate). Any differences above these amounts constitute a "Fail" rating.
- 6) If there is an apparent or a suspected misappropriation of funds, we recommend that the auditors contact the DNREC Division of Watershed Stewardship immediately at 302-855-1930.

A copy of the audited financial statement, including the Audit Check List, reconciled December bank statements (checking, savings, CD), and meeting minutes must be submitted to the DNREC Division of Watershed Stewardship (see address below). This will assist in meeting eligibility requirements for State and County cost share funds for maintenance activities such as mowing, cleanout, pipe replacement, etc.

DNREC, Division of Watershed Stewardship
21309 Berlin Road, Unit #6
Georgetown, DE 19947
(302) 855-1930 e-mail: michele.garner@state.de.us

Bonding of Secretary-Treasurer

Delaware Code requires that the secretary-treasurer of a tax ditch be bonded. A bond is basically an insurance policy.

Per 7 Del C. §4164. Bond of secretary-treasurer.

"The secretary-treasurer shall, before assuming the duties of his office and within 15 days after his election, furnish a bond in favor of the tax ditch, in an amount satisfactory to the ditch managers and with a surety to be approved by the ditch managers, conditioned for the faithful performance of his duties and for the payment to his successor of all tax ditch funds. If any person elected secretary-treasurer neglects or refuses to give bond as aforesaid within the time specified, his right to hold such office shall be terminated, and the ditch managers shall call a special meeting of the taxables to elect a new secretary-treasurer who shall give bond and security as provided in this section."

DNREC and AOA recommend that all tax ditch officers be bonded. The tax ditch can choose the insurance agent or bonding company preferred. DNREC maintains a list of various companies that offer bonding. Costs vary between companies and by the type of bond purchased.

- Blanket Position Bond (Government Crime Policy) – bonds each officer position.
- Fidelity Bond – bonds each officer (an application must be completed for each officer with personal information such as name, address, occupation, and, with some companies, social security number).

The managers should ensure that the bond has been renewed annually. A copy of the Bond Certificate (proof of bonding) should be kept by each officer and an additional copy sent to the DNREC Division of Watershed Stewardship.

For questions regarding any of the above information, please contact:

DNREC, Division of Watershed Stewardship
21309 Berlin Road, Unit #6
Georgetown, DE 19947
(302) 855-1930 e-mail: michele.garner@state.de.us

_____ **Tax Ditch**
January 1 through December 31, _____ Financial Statement

Account #1: (Bank name and type of account) _____ Account #: _____

Beginning Balance January 1 \$

(agrees to bank statement and ending balance of prior year Financial Statements)

Receipts:

| Date | Received from | Activity/Item | Amount |
|------|-----------------------------|-----------------------------|--------|
| | Treasury Division | Deposit of Tax Funds (Jan) | |
| | Treasury Division | Deposit of Tax Funds (July) | |
| | Treasury Division | Deposit of Tax Funds (Nov) | |
| | Interest (checking/savings) | 1/1/___ to 12/31/___ | |
| | Cost Share Funds | | |
| | | | |
| | | | |

Total Receipts \$

Disbursements:

| Date | Check # | Payment To | Activity/Item | Amount |
|------|---------|------------|---------------|--------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Total Disbursements \$

Ending Balance December 31 *(agrees to bank statement)** \$

(Beginning Balance, plus Total Receipts, less Total Disbursements should equal Ending Balance)

*Attach copy of bank statement.

_____ **Tax Ditch**
January 1 through December 31, _____ Financial Statement

Account #2: (Bank name and type of account) _____ Account #: _____

Beginning Balance January 1 \$

(agrees to bank statement and ending balance of prior year Financial Statements)

Receipts:

| Date | Received from | Activity/Item | Amount |
|------|-----------------------------|----------------------|--------|
| | Interest (checking/savings) | 1/1/___ to 12/31/___ | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Total Receipts \$

Disbursements:

| Date | Check # | Payment To | Activity/Item | Amount |
|------|---------|------------|---------------|--------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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| | | | | |

Total Disbursements \$

Ending Balance December 31 *(agrees to bank statement)** \$

(Beginning Balance, plus Total Receipts, less Total Disbursements should equal Ending Balance)

*Attach copy of bank statement.

_____ **Tax Ditch**
January 1 through December 31, _____ Financial Statement

Certificates of Deposit

| | |
|---|----|
| Account # | |
| Opened Date _____ Matures _____ | |
| Beginning Balance January 1 (<i>agrees to bank statement and ending balance of prior year Financial Statements</i>) | |
| Interest earned | |
| Ending Balance December 31 (<i>agrees to bank statement</i>)* | \$ |

| | |
|---|----|
| Account # | |
| Opened Date _____ Matures _____ | |
| Beginning Balance January 1 (<i>agrees to bank statement and ending balance of prior year Financial Statements</i>) | |
| Interest earned | |
| Ending Balance December 31 (<i>agrees to bank statement</i>)* | \$ |

*Attach copy of bank statement.

Cash Summary

| | |
|---|----------|
| Account #1 | \$ _____ |
| Account #2 | \$ _____ |
| CD #1 | \$ _____ |
| CD #2 | \$ _____ |
| Total tax ditch cash (ending balance of all accounts) | \$ _____ |

Fixed Assets: items that cost more than \$50 and have a useful life greater than one year (examples: ATV, tractor, computer, printer, etc.)

| Description | Date Acquired | Acquisition Cost | Location |
|-------------|---------------|------------------|----------|
| | | | |
| | | | |
| | | | |

Receivables/Liabilities (cost share due, uncollected taxes, loans, credit cards, bills to be paid, etc.)

| Description (include statement) | Receivable (R) or Liability (L)? | Balance as of 12/31 |
|---------------------------------|----------------------------------|---------------------|
| | | |
| | | |
| | | |
| | | |

If tax ditch has applied for cost share funds, attach approval letter(s) from the respective conservation district.

_____ **Tax Ditch**
January 1 through December 31, _____ Financial Statement

Related Party Transactions (see description in *Tax Ditch Internal Controls Advice & Audit Procedures Guide*)

| Description of Transaction and Relationship | Date | Actual Cost or Estimated Value |
|---|------|--------------------------------|
| | | |
| | | |
| | | |
| | | |

We have read the Tax Ditch Internal Controls Advice & Audit Procedures Guide and acknowledge that we have followed these procedures. We also have prepared and reviewed the records and Financial Statement of _____ Tax Ditch and believe them to be true and accurate.

| | |
|---|-------------------------------|
| _____ Secretary/Treasurer (sign above) | _____ Manager (sign above) |
| Print Name _____ | Print Name _____ |
| Contact # _____ | Contact # _____ |
| Date _____ | Date _____ |

Assemble Audit Package

- | | |
|---|---|
| _____ Complete Financial Statement. | _____ Assemble all statements for Certificates of Deposit. |
| _____ Provide prior year audited Financial Statement. | _____ Provide a list of authorized signers from each bank. |
| _____ Assemble all bank statements for the year for all accounts. | _____ Attach meeting minutes for the year. |
| _____ Provide check register or ledger. | _____ Attach cost share funds approval letter from conservation district. |
| _____ Provide all invoices and receipts. | _____ Attach <i>Expected vs. Actual Received Revenue</i> (from DNREC). |
| _____ | _____ Attach Bond Certificate. |

Tax Ditch Audit Check List

Audit of _____(year) Financial Statement of the _____ Tax Ditch

| Yes (Y), No (N), Not-applicable (N/A) | | |
|---|---|---|
| Auditor #1 | Auditor#2 | |
| | | Verify each bank statement clearly shows the tax ditch account is held in the name of the tax ditch (and is spelled correctly) and is not shown as “Trading As” (T/A), “Doing Business As” (DBA), or as a joint account. Verify the authorized signers are current officers of the tax ditch. |
| ___ Jan ___ Feb ___ Mar ___ Apr ___ May ___ June ___ July ___ Aug ___ Sept ___ Oct ___ Nov ___ Dec | ___ Jan ___ Feb ___ Mar ___ Apr ___ May ___ June ___ July ___ Aug ___ Sept ___ Oct ___ Nov ___ Dec | Examine Bank statements Jan – Dec _____ (year) for all deposits and withdrawals along with supporting documentation. See below: <ul style="list-style-type: none"> • Receipts/Deposits – check for County deposits, bank interest, cost share funds, etc. and are reflected on the Financial Statement. • Invoices/Bills – check to see that expenses are legitimate and reflected on the Financial Statement. Auditor #1 & #2 check off in box to the left as you examine each statement. Verify the December bank statement has been reconciled to the checkbook register or ledger. |
| | | <u>Certificate of Deposit (CD)</u> Look at prior year Financial Statement to make sure CDs not cashed in are still in existence and inquire if any new CDs have been purchased. Verify all CDs are reported on the Financial Statement. Agree amounts to the bank statement. |
| | | Verify all amounts on the Financial Statement add properly. Agree the ending balance per account listed in the Financial Statement to the ending balance per the bank statement. |
| | | Account Closed - Type of Account _____ Acct # _____ Verify ending balance of closed account matches the deposit into a new account or explain circumstances. Closing Balance \$ _____ Date _____ New Account Beginning Balance \$ _____ Date _____ DNREC notified Y / N (circle) County notified Y / N (circle) |
| | | <u>Fixed Assets</u> Compare to last year’s list to ensure it is complete and verify current year asset purchases have been included. |
| | | <u>Receivables/Liabilities</u> Agree amounts reported to a statement of account, loan agreement, invoice, or other source as applicable. |

We have read the Tax Ditch Internal Controls Advice & Audit Procedures Guide and acknowledge that we have followed these procedures. We have examined the records and Financial Statement of the _____ Tax Ditch and have assessed an overall rating of:

- Pass
 Pass with immaterial deficiencies
 Fail

Auditor #1 _____ Date _____

Print name & contact # _____

Auditor #2 _____ Date _____

Print name & contact # _____

Submit completed audit form and Financial Statement to DNREC, Division of Watershed Stewardship, 21309 Berlin Road, Unit #6, Georgetown, DE 19947.

Appendix L
Projects Completed in FY2019

**Completed Resource Conservation and Development Projects
21st Century Fund
New Castle County**

| Fiscal Year Approved | Project Name | Total Expended | Rep. Dist | Sen. Dist |
|---|---|-----------------------|-----------|-----------|
| Completed Projects FY2019 to date | | | | |
| 2018 | Westminster Community Bridge Repairs | \$200,000.00 | 4 | 7 |
| 2018 | Pigeon Run - 115 Pigeon Run Drive | \$53,000.00 | 5 | 13 |
| 2017 | Westwoods SWMP | \$175,000.00 | 12 | 4 |
| 2018 | Ashland Nature Center Drainage | \$93,500.00 | 12 | 4 |
| 2018 | 1005 North Bancroft Parkway | \$24,000.00 | 4 | |
| 2018 | Pennrock - 1711 Pennrock Road | \$15,000.00 | 7 | 1 |
| 2018 | Port Penn - Merchant Street | \$8,500.00 | 9 | 14 |
| 2017 | Greentree Section 2 - Appletree Court | \$48,500.00 | 10 | 1 |
| 2018 | The Woods - 122 W. Seneca Drive | \$4,800.00 | 18 | 9 |
| 2018 | Tip Top Farm - 23 Virginia Place | \$48,800.00 | 23 | 8 |
| 2018 | Sandom Tax Ditch | \$50,000.00 | 11 | 14 |
| 2018 | Sandy Brae - Highland Circle | \$24,200.00 | 25 | 10 |
| 2018 | Longmeadow - 706 Pinewood Drive | \$16,400.00 | 8 | 14 |
| 2018 | Hickory Woods - Longleaf Lane | \$9,300.00 | 15 | 12 |
| 2018 | Bentley Place - 344 Owls Nest Drive | \$24,300.00 | 27 | 12 |
| 2017 | Montchanin Road and Rockland Road | \$44,000.00 | 4 | 4 |
| 2016 | Meadow Glen - 326 Meadow Glen Drive | \$14,200.00 | 27 | 12 |
| 2015 | 798 Blackbird Station Road | \$186,000.00 | 11 | 14 |
| 2017 | Gregg Avenue Drainage | \$23,500.00 | 12 | 4 |
| 2017 | Caravel Farms - Debra Drive | \$29,000.00 | 27 | 12 |
| 2018 | 2200 Gilpin Avenue | \$10,750.00 | 4 | 1 |
| 2018 | 242 Black Diamond Road | \$128,000.00 | 11 | 14 |
| 2018 | Albertson Park - 2158 Lori Drive | \$33,350.00 | 19 | 7 |
| 2018 | Appoquin Farms - Kingfisher Court | \$25,000.00 | 9 | 14 |
| 2017 | The Oaks - Community Drainage | \$92,500.00 | 26 | 11 |
| 2018 | Varlano - 11 Dawes Drive | \$4,500.00 | 26 | 11 |
| 2016 | Carrcroft Drainage Improvements | \$210,000.00 | 1 | 1 |
| 2017 | Dunleith Community Drainage | \$200,000.00 | 16 | 2 |
| 2017 | Hockessin Hunt - Alexander Court | \$41,500.00 | 22 | 4 |
| 2018 | City of New Castle - The Strand between | \$20,000.00 | 17 | 12 |
| 2017 | Shellpot Creek - Turkey Run from Washington | \$41,500.00 | 1 | 1 |
| 2012 | Thornwood - Charles Pointe/Four Seasons | \$106,000.00 | 25 | 10 |
| Totals | 32 Projects | \$2,005,100.00 | | |
| Projects Recommended for Discontinuation | | | | |
| | | | | |

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**Completed Resource Conservation and Development Projects
21st Century Fund
Kent County**

| Fiscal Year Approved | Project Name | Total Expended | Rep. Dist | Sen. Dist |
|--|--|----------------|-----------|-----------|
| Completed Projects FY2019 to date | | | | |
| 2004 | Rt. 44 / Altemus Phase 1* | | 11 | 15 |
| 1998 | Bowers Beach, Town of* | | 33 | 16 |
| 1999 | Peach Basket Road / Rt. 12* | | 30 | 15 |
| 2013 | Hopewell Drive / Gadaingan* | | 11 | 15 |
| 2014 | Viola Phase II drainage improvements** | | 30, 34 | 15, 16 |
| 2018 | Prospect Tax Ditch Main** | | 30 | 15 & 18 |
| 2003 | Willow Grove Road / Blackwell** | | 29 | 15 |
| 2017 | Leipsic Tax Ditch Dip Out** | | 28 | 14 |
| 1999 | Bowers Beach Road / Mallek Phase II** | | 33 | 16 |
| * Construction complete waiting on final invoices | | | | |
| ** Active Construction will be complete by June 30 | | | | |
| Totals | 9 Projects | \$0.00 | | |
| Projects Recommended for Discontinuation | | | | |
| 2011 | Walnut Street, Felton / Crisco <i>issue resolved by work done as part of Town of Felton Drianage Improvements</i> | | 30 | 15 |

**Completed Resource Conservation and Development Projects
21st Century Fund
Sussex County**

| Fiscal Year Approved | Project Name | Total Expended | Rep. Dist | Sen. Dist |
|--|--|----------------|-----------|-----------|
| Completed Projects FY2019 to date | | | | |
| 2017 | Elliott-Nichols Tax Ditch Main Channel Pipe Replacements** | | 40 | 21 |
| 2006 | Highland Acres Tax Ditch Maintenance Dipout** | | 20 | 6 |
| 1997 | Johnson Development Phase II** | | 39 | 21 |
| 2012 | Silver Lake / Rehoboth, Phase 2** | | 14 | 6 |
| 1996 | Selbyville Flood Drainage Project Phase II Railroad Avenue** | | 41 | 20 |
| <i>** Active Construction wil be complete by June 30</i> | | | | |
| Totals | 5 Projects | \$0.00 | | |
| Projects Recommended for Discontinuation | | | | |
| | | | | |



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF WATERSHED STEWARDSHIP
89 Kings Highway
DOVER, DELAWARE 19901

OFFICE OF THE
DIRECTOR

PHONE: (302) 739-9921
FAX: (302) 739-6724

MEMORANDUM

TO: Secretary Shawn M. Garvin
THRU: Terry L. Deputy, Director
FROM: Robert R. Palmer, Administrator
SUBJECT: Drainage Program Realignment
DATE: August 20, 2019

Executive Summary

Via this Memo, request approval for the realignment of the Drainage Program to function as two separate and distinct operating units within the Conservation Programs Section of the Division of Watershed Stewardship (the Division). The units will be titled: 1) the Tax Ditch Program, and 2) the Public Ditch Program. The names are subject to change but for the purpose of this discussion will remain as labeled. Each program will be led by an Environmental Program Manager II (EPMII) that will report directly to the Administrator of the Conservation Programs Section. As proposed, the Tax Ditch Program will have an estimated 15 positions focused on tax ditch organization support as well as the survey and construction of related projects. The Public Ditch Program will focus on the design and planning of projects and manage the small projects crew. The Public Ditch Program will also have 14 positions.

It should be noted, both programs will have some overlapping responsibility with interactions on both RC&D and tax ditch projects. In doing so, project funding will be split proportional to the tasks and relative projects. Staff resources will continue to be funded through the General Fund (Merit employees) and the Tax Ditch and Resource Conservation and Development (RC&D) Bond Bill appropriations (District employees).

The realignment will create the immediate need for a reclassification of an existing PMI position to a PMII within the Public Ditch Program. The PMII position vacated by Brooks Cahall will be processed immediately to manage the Tax Ditch Program.

Additionally, the Debris Pit Program and the New Castle County Surveying position will transition under the management of the Tax Ditch Program.

Delaware's good nature depends on you!

History

The Delaware General Assembly enacted the 1951 Delaware Drainage Law to establish ditch companies and to resolve related financial and maintenance issues. As an outgrowth of this Law, the Division was mandated to carry out a comprehensive drainage program through Title 7, Chapter 41 of the Delaware Code. In response, the Drainage Program was established and housed within the Conservation Programs Section.

Since inception, the Drainage Program has significantly grown. The largest programmatic growth occurred as a result of a \$220 million legal settlement in the mid-1990s, the State of Delaware had an unprecedented opportunity to use one-time monies (21st Century – RC&D funds) to make critical long-term investments to meet the economic challenges of the next century. Some of this funding became earmarked to focus on the management, oversight and implementation targeted drainage projects. This led to the creation of “*Public Ditch Team*” within the Drainage Program.

The size and scope of the drainage projects considered for the RC&D fund fluctuate wildly. Current projects range from \$500 to \$4 million dollars. Annual Bond Bill appropriations also vary ranging from \$0 up to \$5 million. No appropriations were made from FY2009 to FY2016. In recent years, allocations of at least \$3 million have been invested by the General Assembly. As such, the Drainage Program has maintained a heavy reliance on Tax Ditch Bond Bill appropriations to support staff and other programmatic needs.

Current Status

The Drainage Program is currently divided into three distinct teams: Tax Ditch, Engineering, and Project Development (see attached). Functions and position numbers are summarized below:

- Tax Ditch – 6 positions focused on tax ditch organization support.
- Engineering – 12 positions split into equal groups focused on: 1) survey and construction, and 2) design of projects.
- Project Development – 7 positions focused on: 1) project planning group, and 2) the small projects crew.

Not represented above are the PMII and an Administrative Assistant I. Staffing levels currently include 27 positions (10 Merit and 17 District) of which 11 are currently vacant. In the past, as many as 35 FTE were appointed to the Drainage Program. These numbers have declined as budget conditions have demanded reductions.

Funding

Merit positions within the Drainage Program are funded through the General Fund appropriations to the Department. District positions are supported by the annual Bond Bill, Tax Ditch appropriation. The FY20 Bond Bill, Tax Ditch appropriation was \$1,148,700 and has remained unchanged for 10+ years.

Issues

Issues facing the Drainage Program are similar to those for many agency led programs. More responsibilities have evolved and budgetary constraints continue to be a challenge. Specifically, a major shift in RC&D project locations has demanded a ramp up of staff and resources to address this shift. Use of the funds is directly tied to development trends. In recent years, the development growth has shifted from its peak in New Castle County years ago to the recent boom in Sussex County. The need to solve drainage and watershed issues has, in turn, increased in the southern region of the state. As such, the Drainage Program responded by adding positions and resources. Management of RC&D projects and drainage issues in New Castle County are administered by the New Castle Conservation District and New Castle County respectively. Other issues include:

- Large staff numbers with lower than average management positions. Organizationally, the Drainage Program has 27 positions. Of these positions, there is one PMII, two PMIs and one Environmental Engineer Program Manager I (EPMI).
- High turnover of staff resulting in elevated vacancy rates. In recent years, the growth of the development community in Sussex County has created a high demand for engineering and surveying positions. As such, the Drainage Program has faced ever increasing vacancy rates.
- Although allowable, to date the Drainage Program has not billed against the RC&D Bond Bill appropriations. Instead, a greater reliance on the Tax Ditch appropriation has perpetuated. This places an undue burden on the Tax Ditch resources and removed potential funding opportunities for much needed program activities including tax ditch assessment and maintenance.
- Facing historically high rainfall events in 2018 and 2019, the Drainage Program was responsible to manage record numbers of drainage complaints. This shift of duties, combined with high vacancy rates, has drawn attention away from critical project management and oversight.
- Increased scrutiny by the Conservation Districts as well as members of the General Assembly.

Needs

To move forward and gain progress, some basic needs must be fulfilled to assure the Drainage Program is effectively and efficiently maintained:

1. Mechanism to accommodate variable workload and ever-changing staff resources. The program is made up of highly sought after engineering and surveying staff. As such, the Drainage Program faces many staff challenges.
2. Steady funding source to support RC&D projects, tax ditch and related activities.
3. Strengthened partnership with Conservation Districts.

Options

Although there are certainly many options and paths forward, I am limiting my consideration to three. These are:

1. Reclassify the vacant PMII position to an Administrative level position. The position Brooks Cahall occupied was originally an Administrator position that was cut as vacated during past budget challenges. No formal evaluation was conducted to demonstrate the efficiencies lost it just happened to be a vacancy that existed when a position needed to be cut.
2. Divide and support programs by function (Public Ditch Program and Tax Ditch Program). Contract much of our needed engineering and survey work. Evaluate and distribute current and vacant staff to accommodate needs. Anticipate no net loss of FTEs.
3. Leave as is and rehire PMII immediately.
4. Transition RC&D responsibility to Kent and Sussex Conservation Districts (the NCCD model). In doing so, the size, scope and scale of the Drainage Program would need to be evaluated and re-organized to accommodate the shift of workload.

Recommendation

If the reclassification of the PMII to an Administrator position is unlikely, I recommend consolidation of the Drainage Program from three teams to two distinct, independently operational, and separate programs. The appropriate split would be transitioned into the Public Ditch Program and a Tax Ditch Program. I am not set on the names and the realignment certainly could warrant a name change. However, as it's best to convey the path forward under familiar nomenclature, I am leaving the program names as those easily recognized.

The foundation for the Public Ditch Program will be the Project Development Team as is currently staffed and the addition of the Design Group split from the Engineering Team. Overall, I anticipate very few changes will be required for the Tax Ditch Program with the exception of the inclusion of the Survey & Construction Group as split from the Engineering Team. In so doing, the currently vacant PMI within the Project Development Team will warrant a reclassification to a PMII or potentially an Environmental Engineering PMII. The PMII vacated by Brooks Cahall will be immediately posted to serve as the manager for the Tax Ditch Program. While there will ultimately be overlap of tasks and responsibility, transition would make the broad responsibilities of what is now the Drainage Program more manageable on a day to day basis. As proposed, both PMII positions will report directly to the Administrator of the Conservation Programs Section.

Management of RC&D projects will transition from reliance on in-house resources to contracting and outsourcing the necessary activity including engineering and surveying. While this does not preclude internal staff from providing such services, this transition will simply relieve the reliance of such. Funding for the newly formed programs will be split accordingly between the Bond Bill allocation for tax ditches and RC&D. Staff will record activity to accurately support billing.

Staffing needs will be reviewed and assessed to assure adequate positions and resources are available to efficiently and effectively manage the tax and public ditch projects. For example, I would suggest a shift from multiple Design Engineers to positions that include project and budgetary oversight responsibilities as the transition will place a higher accountability on these activities. It should be noted, Engineers will continue to play a valuable role in the newly formed Tax Ditch and Public Ditch Programs and the numbers within the programs will more

than likely remain unchanged as it is advantageous for the Department to provide quality engineering oversight for many of the projects undertaken.

Additionally, I would suggest we expand the Small Projects Crew to provide for a more immediate response to small scale remedies. Addressing small concerns promptly, historically allowed the Drainage Program to keep small scale projects off the RC&D list by responding efficiently to such concerns.

To give an idea of the future responsibilities of the formed Programs, I am highlighting the activities below. Where appropriate, I highlighted the common overlapping activities:

Tax Ditch Program Tasks

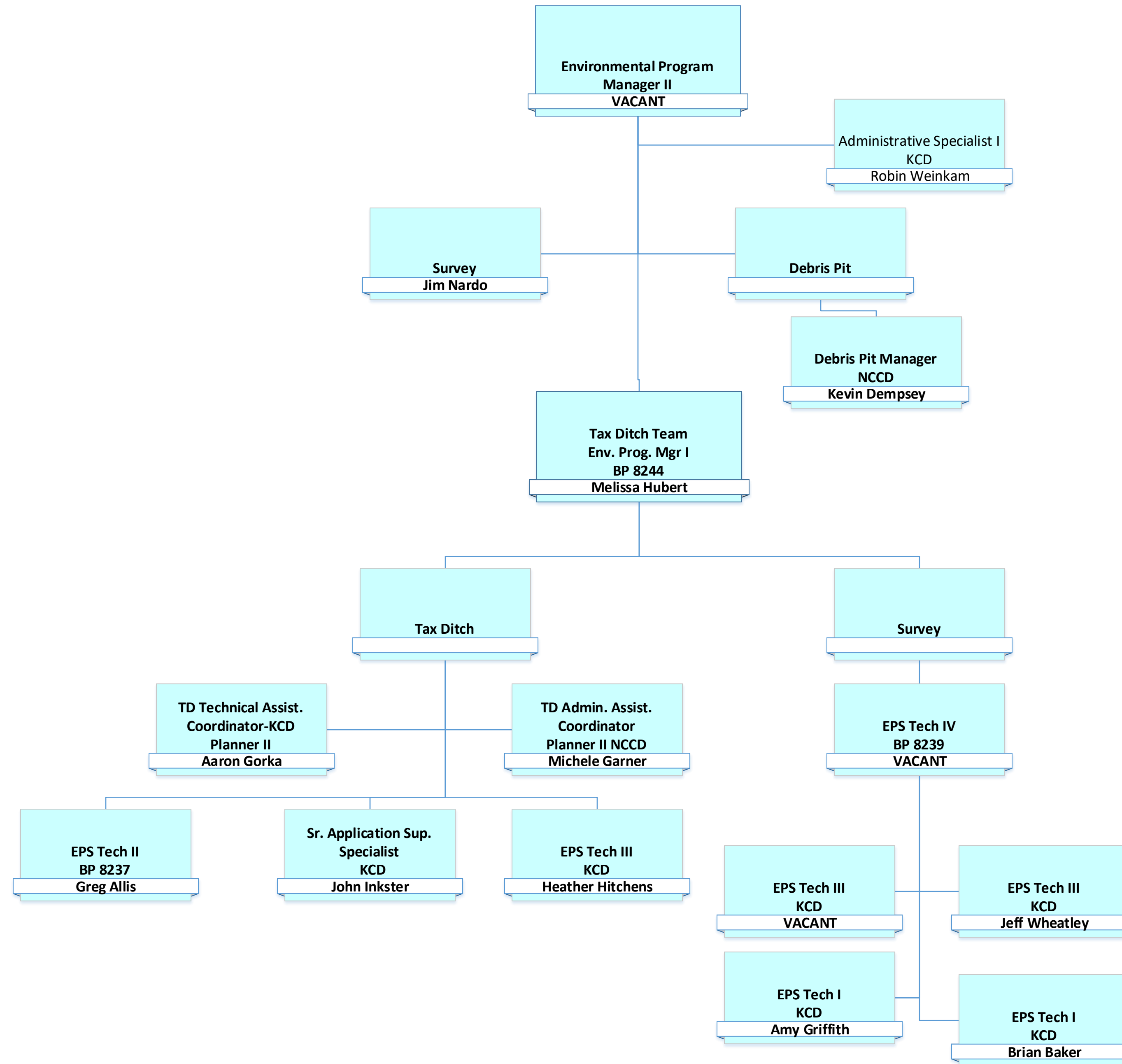
- Tax Ditch Law implementation
- Tax Ditch organization support
- Tax Ditch outreach and education
- Tax Ditch assessment and maintenance evaluations
- Statewide survey work for DNREC and District managed projects (including RC&D)
- Statewide permitting for DNREC and District managed projects (including RC&D)
- Debris pits

Public Ditch Program Tasks

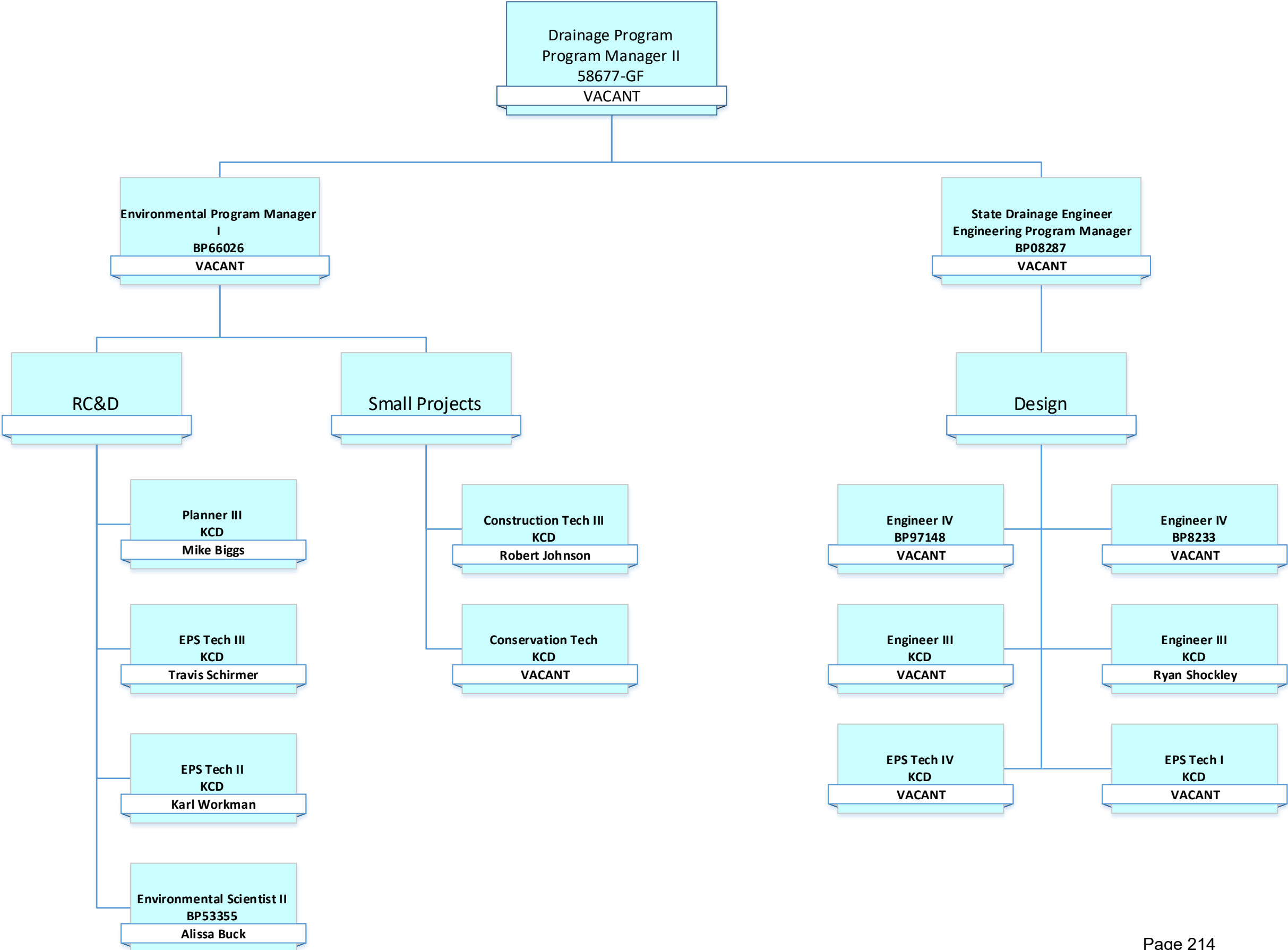
- RC&D Program
- Coordination with Districts for drainage projects
- Drainage concerns
- Project development (including Tax Ditch projects)
- Contract development and oversight (including Tax Ditch projects)
- Landowner permission (including Tax Ditch projects)
- Project oversight
- Small projects (including Tax Ditch projects)

Other notable changes will include the Debris Pit Program and the New Castle County Surveying position currently filled by Jim Nardo transitioning under the management of the Tax Ditch Program. This transition will allow more support for these single position programs.

Watershed Stewardship Drainage Tax Ditch Program



Watershed Stewardship Drainage Public Ditch Program



SYNOPSIS OF ISSUES FACING TAX DITCH ORGANIZATIONS TODAY

PREPARED BY:

Delaware Department of Natural Resources and Environmental Control
Conservation Program Section- Drainage Program

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Delaware has 234 individual tax ditch organizations. These organizations manage over 2,000 miles of channels and provide drainage benefits to 46,292 properties in Delaware and almost one-half of the State-maintained roads. The Uniform Drainage Law also known as the Tax Ditch Law was passed to create a system of watershed based organizations to maintain drainage ditches throughout the state in perpetuity. This law replaced previous “Ditch Company” legislation that created ditch companies which only lasted for 7 years. Tax Ditch organizations were primarily created to provide agricultural drainage and were designed by the Soil Conservation Service (now known as the Natural Resources Conservation Service) for this purpose. However, Delaware has changed a lot in the last 68 years and the majority of tax ditch systems (90%) are at least 35 years old. Some aspects of the tax ditch system are not functioning well in the today’s environment. This report identifies reasons the tax ditch infrastructure has become degraded and suggests potential solutions for addressing each.

Degraded and Aging Tax Ditch Infrastructure

As mentioned above over 90% of tax ditch channels were constructed prior to 1985. The recommended major maintenance or “dipout” cycle is every 15-20 years. This means that if maintained as prescribed most tax ditches have undergone major maintenance between two to four times to date. What we have observed is after multiple maintenance cycles ditches can experience significant bank stability issues. In addition, many ditches have not been maintained on the expected cycle as tax ditch managers have chosen to react to problems instead of planning for maintenance. Both scenarios contribute to the current state of tax ditches. It is also important to note that while this report provides a general characterization of the systems there are tax ditch organizations that are doing an excellent job managing their infrastructure.

There are a variety of causes that have led to the current state. This document looks at them in four major groups:

- Funding
- Operational
- Environmental
- Administrative

The Drainage Program is recommending a task force be established to investigate these causes and propose solutions that would benefit the diverse range of stakeholders. Stakeholders that should be represented on the task force include:

- Members of each caucus of the General Assembly
- Delaware’s County Conservation Districts
- Tax Ditch Officers
- Tax Ditch Commissioners
- Delaware Farm Beau
- Land Development Community
- Homeowner Associations
- Banking Commissioner
- State Auditor’s Office
- Insurance Commissioner

Cause A: Insufficient Funds for Maintenance

Tax ditch organizations across the State of Delaware do not have adequate funds to perform necessary maintenance activities. The lack of funds available to address routine needs is only compounded when issues arise that require significant funding and effort to address. Bank erosion and control of invasive species are two examples of high cost and/or high effort issues tax ditch organizations are facing. The urbanization of tax ditch watersheds and climate change are some of the drivers that cause these issues.

The Tax Ditch Law created a model where the construction cost estimate was established as the assessment base of the tax ditch. That base was then distributed to all of the properties in the watershed based on the benefit each property received. Annually, the tax ditch sets the warrant rate which is the percentage of the assessment base that will be collected each year. This warrant rate concept was established to adjust the taxes collected annually as funds are needed and as a method to adjust for inflation. Since maintenance costs are independent of the year a tax ditch is formed, older ditches require a higher warrant rate than newer ditches.

Potential Solutions

- 1. Update tax ditch assessment bases, across all tax ditches, using current year dollar values and benefit received based on current land use.**

Assessment bases assigned are based on relative benefit received by each specific property in the tax ditch watershed. The relative benefit calculations utilized today are the same and cannot be changed from the methodology used at formation for consistency and equitable distribution. However, when properties are subdivided and landuse changes so does the expectations and relative benefit of the parcel in regards to the existence of the tax ditch system and/or maintenance. There are concerns from tax ditch officers that the relative benefits established at formation do not accurately reflect the relative benefits of the parcels after landuse changes occur.

An update of tax ditch assessment bases, across all tax ditches, in the same manner would allow the relative benefits received and expectations of today's landuses/properties within tax ditch watersheds to be more accurately depicted. Geographic Information Systems (GIS) data including landuse/landcover and impervious area data that are currently available would assist this effort and allow for a consistent process. This would make explaining assessment bases and tax ditch warrants more understandable to the general public and future officers.

2. Tax Ditch officers should levy effective tax ditch warrants

A discussion of the tax ditch warrant rate is to be conducted at each tax ditch annual meeting. Adjusting the tax ditch warrant levied is a means to provide adequate funds for proposed maintenance plans and is the only way for tax ditch organizations to account for inflation. Levying appropriate and effective tax ditch warrants is essential to perform necessary maintenance activities. There is a process established by the Tax Ditch Law. However, convincing tax ditch managers that are often among the largest tax payers to raise their taxes has proven to be difficult.

3. Establish minimum ditch tax warrants to levy

While it is an expectation of tax ditch organizations to levy effective warrants, it does not always occur. Tax ditch officers and taxables are often reluctant to propose and approve increasing warrant rates due to increased taxation on themselves. Changing the law to establish a minimum warrant rate or collection amount would establish a floor that would force organizations to collect enough funds to complete at least the minimum necessary maintenance annually. Although difficult because of the varying dollar basis for assessments a minimum warrant rate could be established based on the fact that 90% of tax ditches were formed prior to 1985.

4. Increase State and County funds available for Cost Share Programs to reestablish the historical bench mark ratio of 50% Tax Ditch: 25% State: 25% County.

State and County matching funds were first passed by the General Assembly and signed by the governor in 1947. This law stated “neither State nor County funds can be expended until the landowners benefiting from such drainage raise an amount equal to both the State and County appropriations. In other words for every dollar raised by landowners, fifty cents (50¢) can be expended from State funds and fifty cents can be expended from County funds.” This was passed and implemented prior to passing of the current Tax Ditch Law in 1951. Therefore, every tax ditch was established with an understanding that State and County funds would be available to assist with maintenance because it has long been recognized that tax ditches provide benefits that extend beyond the landowners in the watershed.

Tax ditch organizations across the State rely on cost share assistance in order to perform necessary maintenance activities. Most tax ditch organizations have not been successful in levying tax ditch warrants that would allow them to save and pay for routine maintenance activities without outside funding sources. The assistance cost share funds provide varies across tax ditch organizations and Counties. Some tax ditches in Kent and Sussex County rely on cost share to perform mowing, dipout, pipe crossings, etc. while others, like the tax ditches in New Castle County are required to collect sufficient funds to perform routine maintenance with cost share only being provided when major or infrequent maintenance activities are required.

5. Develop additional options for tax ditch organizations to borrow money.

Tax Ditch organizations are able to borrow money. However, recently the DNREC Drainage Program has been working to assist a tax ditch organization in obtaining a loan they have requested and need in order to perform planned maintenance. This tax ditch organization has been trying for months to obtain the loan with more issues arising due to new bank requirements and fees that seem excessive for a \$15,000 loan. When a tax ditch organization needs a loan in order to perform routine maintenance activities, they do not have the funds to spend on expensive bank fees and/or high interest rates (as recently quoted). Alternative options need to be developed including:

- Identify new commercial lending options than those that currently exist.
- Establish eligibility guidelines for government lending options including the State Revolving Loan Fund and Rural Development Loan Programs
- Establish a Revolving loan for use by the Conservation Districts/Tax Ditches similar to the Heavy Equipment Revolving Loan fund already established.

6. Create an achievable method for tax ditches to combine/merge to allow organizations to take advantage of economies of scale.

Small tax ditch organizations have a real challenge maintaining their infrastructure because of modern costs associated with maintenance. Establishing a method including referendum requirements that would allow two organizations to merge would provide a tool for addressing this issue if the tax ditch officers and landowners so desire.

7. Create an achievable method for tax ditches to hand over their responsibilities to another agency (i.e. Municipality, Conservation District, DNREC)

The tax ditch law currently provides tax ditch organizations the ability to turn the operation of the tax ditch over to DNREC. However, the requirements set by the law make this nearly impossible to happen. When tax ditches become inactive it is generally because of lack of interest. Obtaining written consent of half the landowners, owning at least half of the land in a watershed is not achievable. Therefore, the law should be changed to an acceptable but obtainable level. One option would be at least 50% of the votes cast similar to that of a municipal or school referendum. Additionally, the law only provides DNREC as an option for taking over the responsibility of the tax ditch organizations (if desired and approved). This should be expanded to include the Conservation Districts and Municipalities especially since many Towns have grown to the point that entire tax ditch systems are within municipal boundaries.

Cause B: Operational Issues

The current maintenance needs on the majority of tax ditch systems across the State of Delaware are significant. Tax Ditch organizations are managed largely by three volunteer

officers; two managers, one is designated chairman, and a secretary-treasurer. Some larger organizations do have additional manager positions. Some tax ditches also pay their officers a small stipend. However, these volunteers struggle to meet the more sophisticated needs of the current era. The lack of annual inspections, maintenance planning, and record keeping regarding the condition of the tax ditch channels, banks, and associated rights-of-ways as a whole system may have resulted in maintenance decisions made and prioritized ineffectively.

Potential Solutions

1. Perform Annual Inspections

a. Develop and provide inspection training to tax ditch managers and chairmen.

The only requirement for an individual to hold a tax ditch officer position is to own property located within the tax ditch watershed. Currently, there is no formal training provided to individuals who become a tax ditch officer. With little to no formal training on the responsibilities of their positions and/or needs of the tax ditch organizations, it is difficult for tax ditch officers to have a clear understanding of what they are supposed to do without the DNREC Drainage Program's direct assistance. A clearer understanding of responsibilities and needs of the tax ditch organizations would result in officers being more active and confident when making tax ditch maintenance and management decisions.

b. Increase staffing at the DNREC Drainage Program and/or Conservation Districts to perform annual tax ditch inspections.

Currently, the DNREC Drainage Program staff is comprised of 6 individuals who assist the 234 tax ditch organizations as requested. Of our 6 staff members only 2 of them are field staff and even those 2 individuals have office responsibilities. The Drainage Program does not have the staff to complete tax ditch system inspections in a timely manner as they are requested now and this would only become more difficult if inspection requests were made to us by even more tax ditch organizations. The Conservation Districts each have a person responsible for working with tax ditch officers. However, the needs and therefore the responsibilities vary across the three counties. It should be noted that it is the responsibility of the Drainage Program to provide technical assistance. If each tax ditch requested assistance with inspections neither the Drainage Program nor the Conservation Partnership could meet that need at current staff levels.

c. Utilize drone technologies to increase effectiveness

The DNREC Drainage Program has been exploring the potential of utilizing drones to perform tax ditch inspections. Utilizing drones and their associated technologies may be a way to increase staff effectiveness and improve reporting and communicating existing conditions and maintenance needs for the tax ditch officers. Drones may allow the condition of inaccessible areas due to the lack of maintenance to be noted.

2. Enhance Planning and/or Establish Tax Ditch Maintenance Plans

- a. Identify and communicate responsibilities associated with culvert installation and replacement when located within tax ditch channels to both the landowner and tax ditch officers.**

Inconsistencies across tax ditch organizations with regard to the maintenance of culverts located within tax ditch channels has caused confusion amongst landowners, tax ditch officers, and even legislators. It is imperative to review and document concisely the responsibility and guidelines of culvert installation and maintenance for those located within tax ditch channels. Original formation documents of each tax ditch organization need to be reviewed and stipulations regarding culverts need to be communicated clearly to the tax ditch officers even when they change. In addition, this information must be communicated to the taxables when requesting a new crossing and or replacement of an existing crossing. Not all tax ditch officers reach out to the Drainage Program for guidance and consequently replacements are often handled on a case-by-case basis. This can be a problem if organizations are spending their limited funds on items that are not the tax ditch organizations responsibility. It may be necessary to change the Tax Ditch Law to establish a consistent standard for all tax ditch organizations. It is understood that the cost to replace these culvert can be a burden on the tax ditch and the landowner.

- b. Develop and provide maintenance planning training to tax ditch officers.**

As noted in 1a above, training is needed for tax ditch officers. Training officers on how to plan for maintenance will include understanding how to think about maintenance in 5 year intervals. Additionally, this type of training will assist in calculating an appropriate warrant rate to collect in order to perform the maintenance needs identified. It should also help to ensure tax ditch officers are holding their annual meetings at an appropriate time for their proposed warrant change to go into effect when needed.

- c. Update operation and maintenance plans for all tax ditch organizations and continue to update in 5 year intervals.**

At formation each tax ditch organization had an operation and maintenance plan (O & M Plan) developed. However, at this time these plans are outdated. This proposed solution will require all 234 tax ditch organizations to have their O & M Plan reviewed and updated based on the conditions of the tax ditch systems now. It is our recommendation to review and update the newly re-established plans on a 5 year basis.

3. Enhance and/or Establish Record Keeping Guidelines

- a. Develop a Tax Ditch Maintenance Database/GIS System**

Development of a Geographic Information System (GIS) database to summarize tax ditch maintenance performed, conditions of the tax ditch channels inspected, tax ditch drainage concerns reported, and tax ditch channel and culvert stipulations would provide data in a visual

and reportable manner to pass along to new and existing tax ditch officers. This information would be useful for tax ditch officers as they work to prioritize maintenance needs and adjust warrant collection.

b. Require reporting and/or establish guidelines for Meeting Minutes

Tax Ditch organizations are ran by volunteers with a one year term. While more often than not a tax ditch officer serves multiple terms, when the records change hands so do the record keeping techniques. There is no defined standard for record keeping except for financial reporting and having a formal audit completed. Even though required these guidelines are not always followed.

In addition, the development of the tax ditch maintenance database would require a formalized procedure for reporting these items by tax ditch officers, DNREC Drainage Program staff, and/or tax ditch hired contractors to have work completed and existing conditions accounted.

4. Removal of Tax Ditch Rights-of-Way Obstructions

a. Work with Deputy Attorney General (DAG) to define next steps if landowner is unwilling to remove obstructions.

Tax Ditches are unsure of the next step if a landowner does not willingly remove the obstructions. As neighbors they often are nervous about consequences. Working with the DAG's office to establish a protocol would provide a systematic process that would reduce uncertainty.

b. Define role of DNREC in removal of obstructions including enforcement options.

The current law does not provide DNREC a role in this process. We currently provide assistance to the tax ditch organization but there is no authority for DNREC to step in if the landowner is unwilling to remove the obstructions. Additionally, the Drainage Program believes there is a potential role for DNREC's enforcement arm to assist with compliance.

c. Work to include tax ditch rights-of-way requirements in building permits and other regulatory processes (ex. wells and septic)

The Drainage Program has had mixed results working with building permit offices and other regulated agencies in incorporating tax ditch rights-of-way into their processes. This may require language in State statute that creates consequences for building permits that are issued for construction within tax ditch rights-of-ways.

Cause C: Changing Environment

1. Changes in Landuse

A quick review of historic aerial photography will show that the biggest change to tax ditch watersheds since the 1960's is the increase in development. Although most noticeable in

southeast Sussex County all tax ditches have seen an increase in impervious area. This is not all from commercial and residential development. Increases in the size and number of poultry houses and the conversion of dirt roads are two additional examples of major changes in the still rural areas of the State. Increased runoff from changes in land use were not regulated until 1991 well after the construction of the most of the tax ditches. Even after regulations were put in place the increased volume has not been managed. These hydrologic changes have increased the importance of the tax ditch systems while also causing increased bank instability. Additionally, since tax ditches were designed for agricultural drainage they do not necessarily meet the expectations of residential property owners unfamiliar with the system.

a. Incorporate the downstream impacts into stormwater review and approval provided by the DNREC Stormwater Program and its delegated agencies.

The Tax Ditch Program is not a regulatory program and does not have jurisdiction in this area. However, section 5.3.3.1 of the Delaware Sediment and Stormwater regulations limits the increase of downstream water surface elevations to 0.05 feet. However, the Drainage Program is unsure if a downstream analysis is being performed for all projects. This solution would require a downstream analysis for all projects in tax ditch watersheds.

b. Work with land use agencies to incorporate tax ditch considerations into the planning and zoning processes.

County and municipal planning agencies have many requirements for when land is being developed. These agencies need to take tax ditch rights-of-way into consideration to conflicts with lot lines and buffers for example.

2. Climate Change

Changes in climate, whether it is an increase in frequency and intensity of storms and/or sea level rise, will increase the demands and stress on the tax ditch system. The tax ditch system is the backbone of drainage in many parts of the State and if not maintained the impacts of climate change will be magnified. Although, there are no proposed solutions to climate in this context the Drainage Program, Conservation Districts, and tax ditch organizations will be required to solve problems created by these stresses.

3. Invasive Species

Phragmites has long been an issue in many tax ditches. However, many organizations are dealing with additional invasive threats that in some cases restrict access (Japanese Knotweed) and in other cases restrict flow (Parrott Feather). All invasive species require a lot of effort to get under control.

a. Annual Inspections

Early recognition and treatment is the best and most cost effective way to manage invasive species. With training and documentation tax ditch officers could be trained to identify common invasive species during annual inspections. This would allow issues to be identified early before they become a significant problem.

b. Annual Contracts for vegetation control

An alternative to annual inspections would be annual maintenance contracts where contractors would be hired to find and treat invasive species.

Cause D: Administrative

The Tax Ditch Law requires the Division of Watershed Stewardship provide administrative assistance to the tax ditch organizations. This is becoming an increasingly challenging activity as officers are becoming difficult to retain and recruit, the banking industry enacts tighter privacy controls, and public awareness of tax ditches decrease. The outline below provides some of our Program’s ideas for tackling these issues.

1. Officer Recruitment

- a. Standardized Transition Plan
- b. Secession Planning
- c. Better Informed Public (See #3 Below)

2. Banking

- a. Work with financial institutions to understand new banking regulations and requirements
- b. Update Tax Ditch Law to require compliance and reporting
- c. Give DNREC the legal authority to act as an agent on behalf of the tax ditch for banking issues
- d. Develop Option where tax ditch organizations can hand over financial management to another entity like the Conservation Districts

3. Education of general public and taxable on Tax Ditch System

- a. Improve Tax Ditch Web Page
- b. Social Media Presence
- c. Outreach materials
- d. Change requirements for annual meeting advertisements
- e. Email list serve
- f. Outreach Events
 - i. HOA meetings
 - ii. Community Events

INTERAGENCY PROJECT AGREEMENT

TWENTY-FIRST CENTURY FUND
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT
IMPLEMENTATION
(FY20)
SUSSEX COUNTY, DELAWARE

THIS AGREEMENT, made this 6th day of September, 2019, BY AND BETWEEN, the Department of Natural Resources and Environmental Control, hereinafter called "Department" and the Sussex Conservation District hereinafter called "SCD".

WITNESSETH THAT:

WHEREAS; Senate Bill 180 of the 150th General Assembly, appropriated funds for Twenty-First Century Fund - Resource Conservation and Development (RC&D) Projects dedicated to improve the health of communities by addressing a variety of State-wide watershed and drainage issues consistent with the policies of the Cabinet Committee on State Planning Issues; and

WHEREAS, said appropriations provide funds for projects located in Sussex County; and

WHEREAS, House Bill 410, Section 76 of the 146th General Assembly requires that monies appropriated from the Twenty-First Century Fund – RC&D Project list have a funding match of at least 10%; and

WHEREAS, RC&D Projects have been approved by the Joint Legislative Committee on the Capital Improvements Program;

NOW, therefore, in consideration of the premises and of the several promises to be faithfully performed by the parties hereto as set forth, the Department and SCD do hereby agree as follows:

- A. It is agreed that the SCD will provide management and construction of projects located in Sussex County using SCD or contractor resources for any RC&D Project approved by the Joint Committee for Capital Improvement at an estimated total cost of \$444,444.
- B. It is agreed that this project will utilize RC&D Funds and non-RC&D Funds for the required match as shown in the table below:

| Project Name | RC&D Funds | Funds provided by the SCD | Description |
|--|------------------|---------------------------|-------------------------------------|
| Approved Sussex County – RC&D Projects | FY2020 \$400,000 | \$44,444 | Project Management and Construction |

C. The Department will:

1. Provide \$400,000 toward the cost of the work described in “A” and “B”.
2. Pay for the cost of said work up to \$400,000, directly to the SCD on a monthly basis upon receipt of a statement for works performed or supplies purchased.
3. Obtain and provide the necessary land rights needed for the construction of said projects.
4. Provide administration and technical assistance as required.

D. SCD will:

1. Obtain and provide \$44,444 as 10% project match toward the cost of construction of the projects described in item “A”.
2. Be responsible for obtaining any and all applicable permits.
3. Be responsible for complying with all relevant State and Federal laws.
4. When deemed necessary, unless otherwise agreed upon, utilize Department approved Professional Service Agreement for Watershed Engineering Service contractor(s).
5. Be responsible for undertaking, implementing and supervising all aspects related to RC&D projects including but not limited to project planning, design, bid preparation and award, construction and inspection.
6. Arrange for final inspection of and certification that the projects meet the construction plans and specifications.
7. Keep accurate records of the expenditure of these funds and notify the Department in writing when the project is completed, such notification shall include the above stated inspections and certification documents.
8. Assure that these funds will only be on projects that have been approved by the Joint Committee for Capital Improvement.
9. Supply to the Department documentation of the required 10% match.

E. It is mutually agreed that:

1. Financial commitments are contingent upon the continuing availability of appropriations by the Legislature and County Government from which payment may be made. The Department or SCD shall not be obligated if the Legislature or the County fails to appropriate funds.
2. The Department, nor SCD, shall assume any responsibilities for future maintenance.
3. All parties hereby acknowledge that this Agreement has financial limits that cannot be exceeded except by signed Amendment of this Agreement.

SUSSEX CONSERVATION
DISTRICT

Dan W. Baird
District Coordinator

Date: 9/3/19

DEPARTMENT OF NATURAL
RESOURCES AND
ENVIRONMENTAL CONTROL

Shawn M. Garvin
Secretary, Shawn M. Garvin

Date: September 6, 2019

JLOSC Responses

Prepared by DNREC's Division of Watershed Stewardship,
Conservation Programs Section, Drainage Program
March 6, 2020

Clarification on the RC&D Project Timeline

Kent and Sussex Counties

Process for Addition to the RC&D List

1. Drainage Program receives initial drainage concern/issue from resident/landowner/legislator.
2. Drainage Program field technician is assigned to evaluate reported drainage concern.
3. If the Drainage concern affects more than one landowner and requires coordination with multiple landowners/properties, the project is considered for the RC&D List. If the issue only affects one landowner and/or a single property, the Drainage Program staff will provide technical assistance for resolution or recommend hiring a consultant/contractor and/or contacting a partner agency for further assistance.
4. Drainage Program staff performs field visits and develops preliminary project scope, potential solution, and cost estimate for the RC&D list.
5. The Drainage Program maintains a list of proposed projects which are added to the RC&D Annual Report and presented to the Bond Bill Committee for approval.

Once Added to the RC&D List

6. Project is ranked on the RC&D List based on project priority. Criteria used to prioritize projects include the following: public safety, frequency of flooding, project status, property damage, ability to leverage other funds, and project age. The project remains on the list until it receives a high ranking and funding is secured.

Scoping Phase

7. Drainage Program and/or Conservation District obtain landowner and then complete field survey work of the project area.

Engineering/Design Phase

8. Engineering is conducted by the Drainage Program, Conservation Districts, and/or subcontractors. This stage requires time and coordination with other state agencies for review.

Permitting Phase

9. Permitting is conducted by Drainage Program, Conservation Districts, and/or subcontractors. Permit applications can be submitted when the project is 90% engineered.

Funding Phase

10. Cost estimates are secured based on design plans through Bid Process required (if applicable).
11. Requests for Community Transportation Funds (CTF) are made and commitments are received.
12. Drainage Program or Conservation Districts secure Landowner Agreements for Construction. If landowner agreements are not secured, the project does NOT move forward.
13. Bid Package completed (if applicable) or Vendor Selected.
14. Purchase Order secured by Drainage Program.

Construction Phase

15. Lead Agency coordinates construction with contractor, considering any requirements/stipulations received in any permits.
16. Project under construction and monitored during construction.
17. Final inspection required at the end of construction and any contractor issues are resolved.

Completion

18. Project monitored one year from successful final inspection and closed out.

New Castle County

Process for Addition to the RC&D List and Funding Phase

1. Project estimate is requested (via email or letter) by a State Senator or Representative.
2. NCCD visits project location, meets with landowner(s) to understand issue of concern.
3. Following this meeting(s) staff prepares a preliminary estimate letter which is reviewed by NCCD PE and District Coordinator.
4. Estimate letter is sent to Legislative member(s), their aide(s) & DeIDOT CTF program representative. Project will be added to annual "New Project List" submitted to Bond Bill Committee.
5. Member(s) and NCCD agree on funding split between CTF and RC&D Funds; the agreed funding split is shared with DeIDOT Community Transportation Fund (CTF) representative. Project must be listed on approved Resource Conservation & Development (RC&D) list of projects in order to be eligible for funding with CTF and/or RC&D funds.
6. Once 100% project funding is confirmed, DeIDOT sends project agreement to NCCD.
7. NCCD returns project agreement signed by NCCD Board Chair back to DeIDOT.
8. DeIDOT sends NCCD the "Notice to Proceed" on the CTF share of the project funds.
9. With the Notice to Proceed, project is placed in NCCD's "active project" list. NCCD is required to have DeIDOT's Notice to Proceed before NCCD can start any work on the project.

Engineering/Design Phase

10. NCCD Survey crew collects the field surveying information (slope and topography, landscape features, structures, etc.) to begin the layout and design of a project;
11. NCCD project P.E. prepares design/engineering plans which will be shared w/ affected property owners for review and approval. Plans can be modified based on landowner comments;
12. NCCD requires signed project construction easement agreements by all parties impacted by the project once there is agreement on the project design plans;
13. Construction plans & bid specifications will be prepared by NCCD based on the final design.

Vendor Selection Phase

14. Depending on estimated cost, and per State bid laws, project may be publicly advertised (twice over a 2-week period) by NCCD – a mandatory pre-bid meeting for contractors may be scheduled depending on the complexity of the project;
15. All project bids are received and opened by NCCD – bids submissions (bid bonds, etc.) are reviewed, and low bidder confirmed. Low bidder required to provide proof of insurance coverage(s) so that project can be awarded & contract between NCCD, and contractor can be signed;
16. NCCD issues Notice to Proceed to contractor/low bidder.

Construction Phase

17. Project starts subject to contractor schedule and weather.
18. NCCD will typically oversee construction and inspect project.
19. When project construction is completed by the contractor, NCCD PE will inspect project – this is NCCD’s “Semi-Final Inspection”; NCCD may require contractor to address any project construction related issues.
20. NCCD’s Final Project inspection is completed approximately 6-months after “Semi-Final Inspection”. NCCD may require contractor to return to address any project construction related issues. If project is deemed complete, NCCD notifies contractor in writing and releases final payment (5% of bid price) to contractor.
21. NCCD’s role and responsibility for project concludes.

Prioritization Process

RC&D Projects

The ranking and prioritization process for requests through RC&D are handled by DNREC’s Drainage Program and the Conservation Districts. The following factors are considered for prioritization:

- Public Safety
- Frequency of Flooding
- Project Status (level of effort or legislator influence)
- Property Damage(s)
- Ability to leverage other funds
- Age of Project (length of time on the list)

Once all factors are considered, projects are ranked by New Castle Conservation District in New Castle County and coordinated with DNREC staff and the Conservation Districts in Kent and Sussex County.

Tax Ditch Projects

The Drainage Program addresses Tax Ditch related requests on a first come, first served basis. Initial inquiries typically require a site visit to provide a landowner or tax ditch officer technical assistance. However, the following factors may also contribute to the ranking of project requests:

- Date of request
- Amount of information provided in the request
- Timeline for project completion provided by the requestor
- Availability of funds for project completion

At times drainage concerns from legislators may be given higher priority in order to provide a timely response.

Drainage Concern Submission Process

Drainage concerns are submitted in two ways: (1) a constituent call that is processed through a drainage and stormwater assistance hotline phone number or email, or (2) an inquiry from a legislator. New

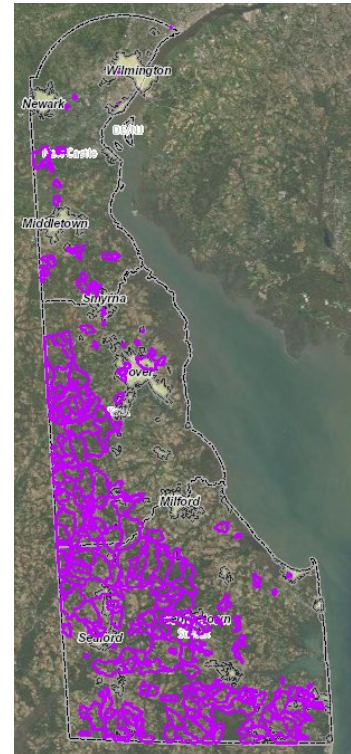
Castle County concerns are handled by the New Castle Conservation District. Kent and Sussex County inquiries are handled by the Drainage Program Manager or the DNREC Director of Community Affairs. Once information is gathered, staff conduct a site visit to determine potential causes of poor drainage. The Drainage Program or Conservation Districts work with the landowner to determine if the problem can be resolved by the landowner. If the problem cannot be resolved and all causes are explored –i.e. outside of DeIDOT right of way, outside of tax ditch organization watershed and/or tax ditch responsibility, outside of HOA responsibilities, outside of local municipality responsibilities - then DNREC can request to have the project added to the RC&D list.

Tax Ditches by County

A total of 234 tax ditches exist within the State of Delaware, making up over 2,000 linear miles of ditches throughout the state (see map). Of those tax ditches, 78 are in Kent County, 26 in New Castle County, and 137 in Sussex County, as shown in the table below. However, seven (7) tax ditches have watershed boundaries in two counties – Kent and Sussex.

| County | Number of Tax Ditches |
|------------|-----------------------|
| New Castle | 26 |
| Kent | 78* |
| Sussex | 137* |

**Seven ditches reside within two counties – Kent and Sussex.*



Citizens can use a web-based mapping application on their computer or smartphone. The map can be searched by street address or tax map number or tax ditch name to determine whether a property is located within a tax ditch watershed. The application illustrates approximate locations of tax ditch channels and their associated rights-of-ways for maintenance access and activities which may affect their property. <https://de.gov/taxditchmap>.

It should be noted that in addition to the 2,000+ miles of tax ditches throughout Delaware, there are also privately managed ditches that were created to address drainage problems. The privately managed ditches throughout the state are not a part of a Tax Ditch Association and are therefore not listed as a tax ditch. Despite this difference, the Drainage Program receives drainage concerns for both tax ditches and privately managed ditches.

Leveraging federal dollars to support tax ditch or RC&D projects

The Drainage Program and Conservation Districts strive to leverage state funds with federal funds when possible; however, there is no specific federal program that provides annual funding for these types of projects. Recently, when both water quantity and quality can be improved, a small portion of federal funding sources have been used for drainage projects. The Nanticoke Tax Ditch project, completed in 2015, is an example of federal funds combined with state dollars to restore over 4,300 linear feet of a tax ditch. Projects, like this, are applicable for federal funding due to the water quality and wildlife

habitat benefits that are being provided, in addition to addressing the drainage problems. The amount of federal grant funding fluctuates yearly and is at the discretion of the grant manager.

More recently, the Drainage Program and Conservation Districts received a \$1.0 million federal award from USDA-NRCS for watershed planning funds in the Upper Nanticoke Watershed. The award will lead to watershed improvement projects that could be placed on the RC&D list. The award aligns Delaware nicely to pursue the next phase and request approximately \$15.0 million for design, permitting and construction. Of this amount, we expect the State of Delaware's portion to be \$3-4 million within 3-5 years.

To assist with identifying alternative funding sources, the Drainage Program hired an Environmental Scientist. The Scientist's primary job duty is to obtain permits for RC&D projects; however, a secondary duty is to acquire grant funding. Additionally, the Drainage Program, Conservation Programs Section, and Conservation District staff have increased participation in meetings where grant opportunities are discussed; staff look for additional opportunities where applicable.

However, routine maintenance projects like tax ditch dip outs, ditch crossing installations, etc. are not eligible for federal funding and are typically funded through 3921 State funds.

Additional comments

- The last paragraph on page 14 states the districts were established in 1953, which is incorrect. The act enabling the Districts to form was passed in 1943, but NCCD was formed in 1944, KCD and SCD were formed in 1943.