

Joint Legislative Oversight & Sunset Committee

Conservation District Operations: Delaware Department of Natural Resources and Environmental Control, Division of Watershed Stewardship

January 2022 Status Report

Adopted Recommendation 1 with Option 1: Continue Status

The Delaware Department of Natural Resources and Environmental Control (DNREC) Drainage Program has prepared updates regarding each of the adopted recommendations for your review and consideration.

Adopted Recommendation 2: Drainage Program Realignment Status

As recommended, the DNREC Drainage Program functions as two units within the Division of Watershed Stewardship's, Conservation Programs Section: the Tax Ditch Program and the Public Ditch Program. This has clarified roles and responsibilities of our staff into our two main service areas: (1) tax ditch administrative and technical assistance and (2) Resource Conservation and Development (RC&D) projects and drainage concern assistance.

Adopted Recommendation 3: Tax Ditch Workgroup Status

Through 2021, the DNREC Tax Ditch Program planned and hosted a Tax Ditch Workgroup. The Workgroup consisted of stakeholders at the state, county, and local levels and brought them together to discuss key issues facing tax ditches and identified potential solutions to these challenges. There were nine Workgroup sessions in total that were hosted virtually between June and September of 2021. The findings of this effort, including recommendations for improvements, can be found in the "2021 Tax Ditch Modernization Workgroup Report" (attached).

Adopted Recommendation 4: Existing Tax Ditch Organizations Status

As recommended, the DNREC Tax Ditch Program reviewed the existing 234 tax ditch organizations and identified the following as tax ditch organizations that may be combined following the process outlined in Delaware Code Title 7 Chapter 41 (Table 1). This recommendation was discussed by the Workgroup and is a step towards helping those tax ditches where insufficient funding for maintenance is a concern. The DNREC Tax Ditch Program plans to work with the tax ditch organizations identified in Table 1 to follow the protocol to combine the individual organizations into one.

Table 1 Tax ditch organizations that can be combined following the protocol outlined in Delaware Code Title 7 Chapter 41

| Tax Ditch Organization | Individual Ditch Numbers |
|--|---------------------------------|
| Gum Branch | D-57 thru 65 |
| Meadow Branch | D-56, 68,74 |
| Pepper Creek | D-127 thru 132 |
| Tyndall Branch | D-88 & 89 |
| Williams Canal | D-11 thru 22 |
| Derrickson Canal – Deep Hole – Millville | D-50, 41 & 47 |

Adopted Recommendation 5 with Option: Dissolving a Tax Ditch Organization Status

The dissolution of a tax ditch organization is not in the interest of public health, safety, and welfare. This topic was discussed during the Workgroup and the members agreed. The Workgroup recommended the following as potential solutions:

- Amend Title 7 Chapter 41 § 4161 (10), Powers of a Tax Ditch, to name additional state or local government entities as agencies that a tax ditch organization may elect to transfer their authority.
- Amend Title 7 Chapter 41 § 4161 (10), Powers of a Tax Ditch, to provide an easier method for transferring tax ditch authorities to a state or local government entity when desired by a tax ditch organization.
- Create a state-run opt-in Tax Ditch Maintenance Program.

Understanding existing tax ditch system conditions and an infrastructure inventory is needed before another entity could assume responsibility or management of a tax ditch. To fulfill this need, the Workgroup recommended building a digital inventory of tax ditch systems and noted that additional resources were needed to move forward in this effort. With additional resources, the DNREC Tax Ditch Program will prepare Request for Proposals (RFP) to solicit a vendor to complete this inventory.

Understanding the tax ditch maintenance activities and associated costs as well as the capacity of contractors to perform the work across the state is essential for sustainable tax ditch maintenance planning. Through the Workgroup effort, approximate costs for the various tax ditch maintenance activities for each county were discussed and summarized in the Workgroup Report. Cost approximations for tax ditches in New Castle County were not readily available and additional research is needed.

If DNREC or another entity were to assume management of a tax ditch, then additional financial and technical assistance would be needed to effectively manage the ditches.

Adopted Recommendation 6: Kent and Sussex Conservation District Projects

The Public Ditch Program and the Kent and Sussex Conservation Districts (Districts) meet bi-weekly to discuss active projects in each county to provide updates and request assistance as needed. All projects are in different phases ranging from obtaining landowner permission,

surveying, engineering, and construction. During each bi-weekly meeting the team also coordinates and discusses RC&D projects. The Districts and the Public Ditch Program have agreed on a process to expand the roles of the Districts and improve the implementation of RC&D projects.

The Public Ditch Program handles all drainage concerns, provides a synopsis of the drainage issues, makes a recommendation for the solution, leverages additional funding through grants, obtains permits, acquires all necessary landowner permissions for survey and construction, and assists with overseeing construction and post construction monitoring of the project. The Districts are responsible for surveying the areas of concern, designing projects, requesting Community Transportation Funds (CTF) funding, constructing projects, creating bid packages, advertising projects for bid, coordinating with selected contractors, and overseeing construction.

This process as outlined above has been successful.

Adopted Recommendation 7 with Option: Reporting Updates:

- A.) The “2021 Tax Ditch Modernization Workgroup Report” (attached) summarizes the findings of the Workgroup which identified common themes for improvements to tax ditches including:
- a. Increase education and outreach for tax ditch awareness.
 - b. Funding changes to provide for sufficient funds for maintenance.
 - c. Design changes to provide improved drainage benefit in the landscape today.
 - d. Law changes to streamline, simplify and clarify roles and responsibilities of tax ditch organizations and partner entities.

For each common theme, recommendations were noted in relation to achieving the goals. These recommendations will be reviewed and further prioritized to develop a strategy to complete selected objectives.

- B.) Please see above Adopted Recommendation 4: Existing Tax Ditch Organizations Status
C.) Please see above Adopted Recommendation 5 with Option: Dissolving a Tax Ditch Organization Status
D.) Please see above Adopted Recommendation 6: Kent and Sussex Conservation District Projects.

The DNREC Tax Ditch Program continues to provide support and assistance as needed to the county conservation districts as they work on projects that affect tax ditch organizations. The DNREC Tax Ditch Program continues to provide support and services to conservation district staff to increase projects and work completed on tax ditch systems.

The DNREC Tax Ditch Program is an active participant in the U.S. Department of Agriculture’s (USDA) Natural Resource Conservation Service (NRCS) Upper Nanticoke Watershed Planning effort. In addition, the Program actively works with the Sussex Conservation District as they develop the Sussex Tax Ditch Pilot Program in 2022. This project was funded by the Fiscal Year 2022 Bond and Capital Improvements Act, Community Redevelopment/Reinvestment Fund.

- E.) The list of RC&D projects, now over 1,100, is reviewed and prioritized annually in consultation with the county conservation districts. Projects are evaluated on several

factors including public safety, property damage, frequency of flooding, and age. The current RC&D annual report (attached) includes prioritized projects for the upcoming fiscal year and a list of all RC&D projects in descending order by approved fiscal year. Following the 2022 election and redistricting, the county conservation districts and DNREC Public Ditch Program will discuss active RC&D Projects with the elected officials to ensure priorities align.

Resource, Conservation & Development Projects

FY 2021 Annual Report

Presented to:

Joint Committee on Capital Improvement

Members:

| | |
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June 11, 2021

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

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Fiscal Year 2022 Annual Report

Resource, Conservation, and Development Fund

Background

The Resource, Conservation and Development (RC&D) Fund was 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 infrastructure 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. Kent and Sussex Conservation Districts are leads on a portion of the prioritized projects, as assigned by DNREC, to increase the number of projects constructed.

Fund Status

Over \$81 million has been allocated to the fund since 1996. Table 1 summarizes the breakdown of allocations by county.

Table 1: Summary of allocations to the fund

| | New Castle | Kent | Sussex | Total |
|--------------------------|---------------------|--------------------|---------------------|---------------------|
| FY 1996 – FY 2009 | \$44,552,468 | \$6,503,822 | \$11,311,984 | \$62,368,274 |
| FY 2016 | \$1,350,458 | \$427,730 | \$1,221,812 | \$3,000,000 |
| FY 2017 | \$1,795,962 | \$533,784 | \$1,483,054 | \$3,812,800 |
| FY 2019 | \$1,890,000 | \$756,000 | \$1,554,000 | \$4,200,000 |
| FY 2020 | \$2,300,000 | \$875,000 | \$1,825,000 | \$5,000,000 |
| FY 2021 | \$1,800,000 | \$487,500 | \$712,500 | \$3,000,000 |
| Total | \$53,688,888 | \$9,583,836 | \$18,108,350 | \$81,381,074 |

The DNREC Drainage Program, with the Conservation Districts, completed 77 projects in FY 2021. Table 2 is an excerpt from the RC&D Fund Expenditure Report (Appendix A). It shows the funds expended between FY 2015 and FY 2021; a total of 371 projects were completed in this period, despite record rainfall in calendar year 2018, the first half of calendar year 2019, and nearly all FY2021. A list of the projects that have been completed in FY 2021 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: Expenditures

| | New Castle | Kent | Sussex | Statewide |
|----------------------------------|----------------------|---------------------|----------------------|----------------------|
| Total (FY 1996 – FY 2014) | \$ 41,457,200 | \$ 4,729,014 | \$ 9,339,501 | \$ 55,525,715 |
| FY 2015 | \$ 1,309,287 | \$ 563,513 | \$ 586,974 | \$ 2,459,774 |
| FY 2016 | \$ 1,448,683 | \$ 568,644 | \$ 1,187,668 | \$ 3,204,995 |
| FY 2017 | \$ 1,315,066 | \$ 460,894 | \$ 541,334 | \$ 2,317,294 |
| FY 2018 | \$ 1,364,087 | \$ 206,186 | \$ 766,920 | \$ 2,337,193 |
| FY 2019 | \$ 1,002,390 | \$ 374,005 | \$ 1,533,732 | \$ 2,910,127 |
| FY 2020 | \$ 1,458,202 | \$ 49,071 | \$ 428,209 | \$ 1,935,482 |
| FY 2021 | \$ 1,430,061 | \$ 233,500 | \$ 1,421,094 | \$ 3,084,655 |
| Total | \$ 50,784,976 | \$ 7,184,827 | \$ 15,805,432 | \$ 73,775,235 |

Table 3 summarizes the remaining balance of RC&D program funds as of June 11, 2021. Epilogue language requires, once funding is allocated to a particular county, that funding can only be spent within that county. 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: Total county & state fund balances by county

| | Unexpended | Encumbered | Unencumbered |
|-------------------|--------------------|--------------------|--------------------|
| New Castle | \$3,363,550 | \$3,363,550 | \$0 |
| Kent | \$1,435,994 | \$1,032,424 | \$403,570 |
| Sussex | \$3,161,945 | \$2,073,537 | \$1,088,408 |
| Statewide | \$7,961,489 | \$6,469,511 | \$1,491,978 |

Although, there are balances remaining for each county, the work currently planned in New Castle County and Sussex County exceeds available funding. The next section of this report provides an explanation of FY 2022 work planned in each county.

Active and Proposed Projects

Each year DNREC, in consultation with the Conservation Districts, prepares a list of 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 critical projects. The following factors are considered when prioritizing projects.

- Public Safety
- Frequency of Flooding
- Status of Project
- Property Damage
- Ability to Leverage Additional Funds
- Age of Project

DNREC monitors the Statewide Drainage Concern Hotline, which provides a single point of contact to help constituents get assistance from the agency best suited to address their drainage issues. Constituent concerns not related to stormwater management and on private property are generally assigned to the DNREC Drainage Program in Kent and Sussex Counties, and the New Castle Conservation District in New Castle County, for investigation. Concerns that are investigated may be added to the list of proposed projects, if deemed appropriate. Table 4 provides a summary of active and proposed projects.

Table 4: Project Summary Table

| | New Castle | Sussex | Kent | Total |
|-----------------|-------------------|---------------|-------------|--------------|
| Active | 572 | 263 | 216 | 1,051 |
| Proposed | 133 | 35 | 23 | 191 |
| Total | 705 | 298 | 239 | 1,242 |

There are now 1,051 active projects that have been approved by the Joint Committee on Capital Improvement. Active projects are defined as projects that have been approved by the Joint Committee on Capital Improvement in previous fiscal years that are not fully constructed, active projects can range from the initial project scoping phase to project construction. The total cost of proposed projects is over \$10 million. The proposed additions to the list already exceed the FY 2022 appropriation further increasing the funding deficit for future projects.

It is estimated that the total cost to complete all 1,051 active and proposed projects as described herein is \$102 million. If all projects are matched at the minimum requirement, (10%), then \$92 million of RC&D funds will be required to construct these projects. When including the \$8 million of unexpended RC&D funds, an additional \$84 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 \$84 million because there is not enough capacity to expend those dollars. However, the \$84 million is a useful reference to understand the statewide need for assistance with watershed and drainage issues. Table 5 summarizes the estimated funding to complete the active and proposed projects.

Table 5: Projected Project Costs Summary Table

| | Active Projects Est. Cost | FY22 New Projects Est. Cost | Est. Cost All Projects | RC&D Funds Required | RC&D Unexpended | Fund Deficit |
|-------------------|--|--|-----------------------------------|------------------------------------|--------------------------------|---------------------|
| New Castle | \$40,908,038 | \$6,330,900 | \$47,238,938 | \$42,515,044 | \$3,363,550 | \$39,151,494 |
| Kent | \$17,411,902 | \$1,038,000 | \$18,449,902 | \$16,604,912 | \$1,435,994 | \$15,168,918 |
| Sussex | \$34,548,250 | \$2,750,400 | \$37,298,650 | \$33,568,785 | \$3,161,945 | \$30,406,840 |
| Total | \$92,868,190 | \$10,119,300 | \$102,987,490 | \$92,688,741 | \$7,961,489 | \$84,727,252 |

Fiscal Year 2022 Priorities

The DNREC and the Conservation Districts do not have the capacity to complete all 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 in priority may result due to severe weather events, threat/risk to public safety, disapproval of essential landowners within the project scope, and/or the opportunity to leverage RC&D funds to obtain additional dollars for implementation.

The DNREC and the Conservation Districts look for opportunities to leverage RC&D funds through grants; some grant programs have lengthy application and approval requirements which can delay project implementation. If a particular project meets grant criteria, it may be prioritized to take advantage of the opportunity. RC&D funds have been used to leverage federal dollars through the Environmental Protection Agency grants. Projects have also taken advantage of surface water planning grants from the Water Infrastructure Advisory Council and funding through the National Fish and Wildlife Federation. The next three sections explain the priorities of each of the three counties as we move into FY 2022. These priorities are developed without consideration of available funding.

New Castle County Priorities FY 2022

This section explains what projects New Castle Conservation District and DNREC anticipates working on in FY 2022. 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 Currently Under Construction

- **Sandom Tax Ditch** – Replacing and upgrading failed tiles that are causing flooding on properties.
- **Red Mill Farms** – Using rip rap to stabilize an eroding stream bank. Construction to begin in May.
- **West Cedar Heights – 325 Clyde Street** – Installation of a closed drainage system to alleviate flooding issues in the backyards of multiple properties.

Projects Approaching Construction (i.e. fully funded)

- **Marshallton – Washington Street Drainage Improvements** – Installation of a closed stormwater drainage system to improve the drainage on Old Capital Trail, Washington Street, and neighboring properties. The project has been awarded for construction and is scheduled to start in late May.
- **North Hills – 300 - 302 Woodland Drive** – Removal and replacement of a retaining wall that failed during a severe storm in August 2020. Construction to begin in May.
- **Covered Bridge Farms – Trotters Turn** – Proposed water quality and stream stabilization improvements on a tributary to the East Branch of the Christina River. This project is scheduled to start in June.
- **Wiggins Mill Pond Structures** – Water quality and structural improvements to the pond inlet and stream. The project is in the permitting phase.
- **Upper Pike Creek Road Stream Restoration** – Restoring a stream channel while relocating outbuildings and improvements constructed by the adjoining property owner on a parcel formerly owned by the developer and now under the control of New Castle County. The project is in the permitting phase.
- **Yorklyn Ridge Entrance Pipe Replacement** – Upgrading a substandard entrance pipe that has caused flooding of the road and surrounding properties. This project is in the permitting phase.
- **Brandywine Condominiums Drainage** – Address drainage issues impacting the condominiums from the Friends School property. This project is in the design phase.

Key Projects in the Development Phase

- Odessa National Drainage Improvements
- Rockland Mills Improvements
- Carrcroft – 1212 Evergreen Road
- Mill Creek at 11 Becket Court
- Woodland Park Drainage Improvements
- Windybush Drainage Study

Key projects needing funding

- **Brandywine Creek Dam Removal Project** – A consortium of conservation groups including Shad 2020, the University of Delaware, Hagley Museum, and others support the removal of over a dozen dams on the Brandywine and White Clay Creeks with the goal of restoring the historically significant Shad fishery and migration in northern New Castle County.
- **Independence School Stream Stabilization Study and Project** – This project, when complete, will restore a section of a key tributary of Pike Creek and protect the fire lane access at the rear of the Independence School.
- **Woodland Park Drainage Improvements** – Redesign and restoration of several small tributaries of Little Mill Creek that are impacted by road surface runoff and outdated stormwater management features. Multiple residences in several developments are impacted during higher intensity rain events.
- **Tilton Park Stormwater Management Park** – Initiated as a community-led project, Tilton Park serves as an inner-city focal point and a vital hub for school-age children and their families. This project will replace and upgrade stormwater management facilities within Tilton Park and possibly the adjacent intersection to redirect stormwater that is flooding the playground and limiting its use. This project could serve as a model for stormwater improvements on other parks throughout the City of Wilmington.
- **Carrie Downie School Drainage** – This project will make drainage improvements to several areas around the school that pond during and after storm events limiting the outdoor activities at the school.
- **Rockland Mills Improvements** – The project would address drainage issues coming down from Rockland Road, and replacing failed retaining walls throughout the community.

Kent County Priorities FY2022

This section explains what projects Kent Conservation District and DNREC anticipates working on in FY 2022. 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 Approaching Construction (i.e. fully funded)

- **Plymouth Road / Langley Drainage Improvements** – Maintain and reconstruct approximately 450 linear feet of a private ditch.
- **241 South Shore Drive / Green** – Improve drainage to storm drain system along South Shore Drive with an outlet towards Moores Lake.
- **Wild Quail Phase II** – Maintain stormwater infrastructure and repair a portion of the Wild Quail development.
- **Upper King Road / Johnson Phase II** – Maintain and restore approximately 3,000 linear feet of private ditch.
- **Planters Woods Subdivision Drainage Improvements** – Improve drainage outlet for the Planters Woods Subdivision stormwater ponds.
- **Rt. 44 / Fedewa** – Reconstruct approximately 1,000 linear feet of a private ditch.

Key projects in the Development Phase

- South Bowers Drainage Improvements
- Silver Lake Water Management / DelTech Terry Campus
- Gravelly Run Tax Ditch Main / Severson
- Bryn Zion/Kreiger
- Smyrna Leipsic Road / Scuse
- Paradise Alley Road / Bailey
- Barbara Blvd. / Breezewood / Cerbone
- 4938 Halltown Road / Carey
- Pearsons Corner Road / Detweiler
- Dyke Branch Road / Freidman
- Pearson Corner Road / Trice
- New Wharf Road / Woodshaven
- Greenbriar Road / Pennypacker

Key Projects Needing Funding

- **Silver Lake Water Management / DelTech Terry Campus** – Improvements to the drainage and stormwater system within DelTech Terry Campus which will require stream restoration and bank stabilization. This project has an estimated cost of \$350,000 and has preliminary plans drafted. Additional survey and engineering are required, funds will need to be committed for this project to finish the design and to cover construction costs.
- **South Little Creek Road / Little** – Drainage improvements that will require a stream restoration effort as well as a DelDOT road crossing replacement and repair or replacement of an outlet structure on a pond. This project has an estimated cost of \$300,000 and is currently in the scoping phase. Constituents are beginning to reach out regarding the status and this project, funds will need to be committed for field work and engineering time to be committed in proceeding in design development.

Sussex County Priorities FY 2022

This section explains what projects Sussex Conservation District and DNREC anticipates working on in Sussex County during FY 2022. 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 Under Construction

- **Reid / Delmar Road** – Maintenance of several hundred linear feet of a nonfunctioning private ditch and the replacement of a community road crossing.

Projects Approaching Construction (i.e. fully funded)

- **Chesapeake, Delaware, and Inland Bays/Atlantic Ocean Violator of Probation Projects** – These projects utilize manual labor from the Sussex Community Corrections Center to remove debris from ditch channels in these three Sussex County watersheds.
- **Russell Road / Harris** – Maintenance of approximately 1,900 linear feet of an existing private ditch, the installation of a new road crossing and drainage tile.
- **Heritage Village / Harper** – Installation of a closed drainage system to outlet a blind ditch to the Atlanta Devonshire Tax Ditch.
- **Pusey Road / Hudson-** Reconstruction of approximately 5,000 linear feet of agriculture drainage ditches and the creation of a wetland floodplain.
- **Crestfield / Fluharty / Valentine** – Maintenance and reconstruction of community stormwater system.

Key projects in the Development Phase

- | | |
|--|---|
| • Old Rauetmack / Malone Drainage | • Carsyljan Acres / Jordan Phase I |
| • Frankford Library/Green Street Drainage Improvements | • Hudson Road Tax Ditch / Anicola |
| • Little Bay Tax Ditch Oceanside Parkway Culvert Replacement | • Dukes Job Tax Ditch Phase 2 |
| • Shawnee Road / Bolton | • Johnson Road (S434A) / Wojciechowski/McCabe |
| • Whites Neck Road / Vella | • Cedar Neck Road / Bulluck |
| | • Denton Manor/Jensen |
| | • Clendaniel Road / Fitzpatrick |

Key Projects Needing Funding

Oak Orchard Drainage Improvements –Five high priority drainage projects were identified in the Oak Orchard Drainage Study. Currently, the Mercer Avenue and Captains Grant projects are under construction and funding has been secured, both projects will be completed prior to FY22. AECOM is finalizing the 100% designs for the Oak Meadows Community; however substantial funding is needed to construct the Oak Meadows project and to design and construct the two remaining Oak Orchard Projects.

FY 2022 Funding Need

As of June 11, 2021, there are \$1,491,978 of unencumbered funds available for future RC&D Fund projects (refer to Table 3). This balance includes funds appropriated to DNREC and then allocated to each county based upon each county’s percentage of the estimated total cost of all projects (refer to Table 6). Epilogue language, in the Bond Bill, requires DNREC to track funds by county and mandates that funds allocated to a county be used within that county.

To determine the FY 2022 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.

Table 6: Summary of projected year end balances

| | New Castle | Kent | Sussex | Statewide |
|---------------------------------------|-------------------|-------------|---------------|------------------|
| FY 2021 Year End Balance | \$3,363,500 | \$1,435,994 | \$3,161,945 | \$7,961,489 |
| FY 2022 Projected Expenditures | \$2,250,000 | \$1,000,000 | \$ 1,750,000 | \$5,000,000 |
| FY 2022 Recommended Funding* | \$3,000,000 | \$500,000 | \$1,500,000 | \$5,000,000 |

*FY2022 Governor's recommended budget.

These projections are based upon the priorities developed by each county and explained in the previous three sections of this report. Many factors impact expenditures including weather, landowner permission, or permitting. The FY2022 Governor’s Recommended Budget identified \$5 million to be allocated to RC&D projects, table 6 shows the recommend allocation of the \$5million by each county.

Appendix A:
RC&D 21st Century Fund Expenditure Report

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21st CENTURY DRAINAGE EXPENDITURE REPORT BY FISCAL YEAR BY COUNTY ALL BALANCES
REPORTED ARE ACCURATE AS OF 6/11/2021

| | NEW CASTLE | KENT | SUSSEX | TOTAL |
|---------------------------------------|-------------------|---------------------|----------------------|----------------------|
| ALLOCATIONS | | | | |
| Allocated - FY1996-FY2009 | 44,552,468 | 6,503,822.96 | 11,311,984.16 | 62,368,276.51 |
| Allocated FY2016 | 1,350,458 | 427,730.00 | 1,221,812.00 | 3,000,000.00 |
| Allocated FY2017 | 1,795,962 | 533,784.00 | 1,483,054.00 | 3,812,800.00 |
| Allocated FY2019 | 1,890,000 | 756,000.00 | 1,554,000.00 | 4,200,000.00 |
| Allocated FY2020 | 2,300,000 | 875,000.00 | 1,825,000.00 | 5,000,000.00 |
| Allocated FY2021 | 1,800,000 | 487,500.00 | 712,500.00 | 3,000,000.00 |
| Total Allocated | 53,688,888 | 9,583,836.96 | 18,108,350.16 | 81,381,074.51 |
| EXPENDITURES | | | | |
| Expended FY1996 - FY2000 ¹ | 8,915,505.23 | 459,453.32 | 2,794,700.40 | 12,169,658.95 |
| Expended FY2001 | 2,828,047.97 | 1,002,739.97 | 1,034,837.73 | 4,865,625.67 |
| Expended FY2002 | 2,032,709.00 | 368,542.09 | 1,073,955.21 | 3,475,206.30 |
| Expended FY2003 | 2,294,880.69 | 408,426.48 | 657,955.19 | 3,361,262.36 |
| Expended FY2004 | 3,822,120.89 | 289,670.17 | 516,527.73 | 4,628,318.79 |
| Expended FY2005 | 3,351,503.89 | 199,981.65 | 521,911.91 | 4,073,397.45 |
| Expended FY2006 | 3,424,161.21 | 257,838.23 | 94,696.80 | 3,776,696.24 |
| Expended FY2007 | 6,103,467.71 | 150,146.12 | 219,643.52 | 6,473,257.35 |
| Expended FY2008 | 2,866,456.54 | 177,039.78 | 360,432.13 | 3,403,928.45 |
| Expended FY2009 | 1,523,192.53 | 51,198.86 | 424,434.06 | 1,998,825.45 |
| Expended FY2010 | 356,680.46 | 97,794.90 | 359,652.66 | 814,128.02 |
| Expended FY2011 | 1,958,027.79 | 279,398.81 | 199,290.88 | 2,436,717.48 |
| Expended FY2012 | 705,170.52 | 223,112.44 | 108,293.12 | 1,036,576.08 |
| Expended FY2013 | 747,352.18 | 342,501.04 | 690,257.45 | 1,780,110.67 |
| Expended FY2014 | 527,924.11 | 421,170.61 | 282,912.79 | 1,232,007.51 |
| Expended FY2015 | 1,309,287.48 | 563,513.23 | 586,973.82 | 2,459,774.53 |
| Expended FY2016 | 1,448,682.90 | 568,644.41 | 1,187,668.40 | 3,204,995.71 |
| Expended FY2017 | 1,315,066.12 | 460,894.13 | 541,334.10 | 2,317,294.35 |
| Expended FY2018 | 1,364,086.61 | 206,185.89 | 766,920.26 | 2,337,192.76 |
| Expended FY2019 | 1,002,389.99 | 374,004.83 | 1,533,732.23 | 2,910,127.05 |
| Expended FY2020 | 1,458,202.00 | 49,071.00 | 428,209.00 | 1,935,482.00 |
| Expended FY2021 | 1,430,061.00 | 233,500.00 | 1,421,094.00 | 3,084,655.00 |
| Total Expended | 50,784,976 | 7,184,827 | 15,805,432 | 73,775,235 |
| Allocated Unexpended Balance | 3,363,500 | 1,435,994 | 3,161,945 | 7,961,489 |
| Allocated Open Encumbrances | 3,363,500 | 1,032,424 | 2,073,537 | 6,469,511 |
| Allocated Unencumbered Balance | 0 | 403,570 | 1,088,408 | 1,491,978 |

¹ Not tracked by fiscal year by county for first 5 years

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**Appendix B:
Projects Completed in FY2021**

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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 FY2021 to date | | | | |
| 2017 | Timber Farms - 623 Timber Wood Blvd. | \$ 25,100.00 | 26 | 11 |
| 2018 | Heather Woods - 5 Pine Court | \$ 18,200.00 | 26 | 11 |
| 2020 | Kirkwood Gardens - 2414 Hammond Place | \$ 25,000.00 | 19 | 7 |
| 2020 | Timber Farms - Timber Wood Blvd. | \$ 55,000.00 | 26 | 11 |
| 2020 | Westover Hills - Hopeton Road | \$ 23,900.00 | 4 | 4 |
| 2021 | Great Good Place - 2 Great Circle Road | \$ 11,500.00 | 22 | 8 |
| 2021 | Woodburne - 17 Richeson Drive | \$ 18,300.00 | 5 | 13 |
| 2020 | Ashbourne Hills - 11 East Dickens Drive | \$ 42,000.00 | 7 | 1 |
| 2020 | Augustine Ridge - Rock Manor Avenue | \$ 67,000.00 | 4 | 4 |
| 2020 | Dartmouth Woods - 31 Ross Road | \$ 19,500.00 | 10 | 5 |
| 2020 | Heatherbrooke - 2407 E. Heather Road | \$ 66,200.00 | 6 | 5 |
| 2021 | Ardencroft - Harvey Road and Upper Greenbrier Road Intersection | \$ 11,000.00 | 7 | 5 |
| 2021 | Burn Brae - Highland Blvd | \$ 13,500.00 | 5 | 13 |
| 2021 | Caravel Farms - 307 Caravel Drive | \$ 8,100.00 | 27 | 12 |
| 2021 | Country Woods - 110 Country Wood Drive | \$ 22,300.00 | 15 | 13 |
| 2021 | Elmwood - 6 Majestic Drive | \$ 38,500.00 | 24 | 9 |
| 2021 | Glasgow Pines - Ashkirk Place | \$ 8,500.00 | 15 | 12 |
| 2021 | Kingsridge - 2331 Empire Drive | \$ 27,800.00 | 7 | 5 |
| 2019 | 1940 Rising Sun Lane | \$ 90,500.00 | 4 | 1 |
| 2018 | Country Woods - 202 Timber Knoll Drive | \$ 18,500.00 | 15 | 13 |
| 2018 | Fox Hunter Crossing - 401 Draper Drive | \$ 22,500.00 | 8 | 10 |
| 2019 | 1012 Jamison Corner Road | \$ 44,000.00 | 9 | 12 |
| 2019 | Alapocas - 17 & 19 Granite Road Drainage | \$ 32,000.00 | 4 | 4 |
| 2019 | Augustine Ridge Drainage | \$ 36,200.00 | 4 | 4 |
| 2019 | Beech Hill - 47 Beech Hill Drive | \$ 33,400.00 | 22 | 8 |
| 2019 | Brack Ex - 121 Exmore Avenue | \$ 16,700.00 | 13 | 7 |
| 2019 | Great Good Place II - 117 Great Circle Road | \$ 20,500.00 | 22 | 8 |
| 2019 | Harmony Crest Sec II - 108 Piano Drive | \$ 16,000.00 | 18 | 9 |
| 2019 | Highland Woods - 4 Big Oak Lane | \$ 8,700.00 | 7 | 5 |
| 2019 | Midway Little League Drainage | \$ 21,400.00 | 21 | 9 |
| 2019 | Saddlebrook - 154-168 Freedom Trail | \$ 36,500.00 | 5 | 13 |

| | | | | | |
|---|--|-----------|---------------------|----|----|
| 2019 | Shallcross Place | \$ | 90,000.00 | 8 | 10 |
| 2019 | Westwoods - 311 Blue Jay Drive | \$ | 29,600.00 | 12 | 4 |
| 2019 | Wynthorpe - 212 Southwyk & 38 Bancroft | \$ | 25,600.00 | 17 | 12 |
| 2018 | Old Cooches Bridge Road Drainage | \$ | 39,500.00 | 25 | 10 |
| 2019 | Whitebriar - 741 Whitebriar Road | \$ | 15,300.00 | 12 | 4 |
| 2019 | Sharpley - Foulkstone Road | \$ | 40,700.00 | 12 | 4 |
| 2019 | Oak Hill School Road | \$ | 20,800.00 | 11 | 14 |
| 2019 | Morningside - Morning Glen Lane | \$ | 120,000.00 | 22 | 4 |
| 2019 | Devon - Malvern Ct. and Morningside Rd. | \$ | 49,900.00 | 10 | 5 |
| 2020 | 4293 Dupont Parkway | \$ | 32,500.00 | 11 | 14 |
| 2020 | Bellevue - 506 Calhoun Road | \$ | 20,500.00 | 6 | 1 |
| 2020 | Brack Ex - 117 Exmore Avenue | \$ | 26,500.00 | 13 | 7 |
| 2020 | Caravel Farms - 248 Benjamin Blvd. | \$ | 13,500.00 | 27 | 12 |
| 2020 | Carpenter Row Sign and Drainage | \$ | 11,500.00 | 4 | 4 |
| 2020 | Edinburgh Villas - MacTavish Court | \$ | 57,200.00 | 5 | 13 |
| 2020 | Forest Glen 2 - 312 Paddington Drive | \$ | 57,750.00 | 15 | 12 |
| 2020 | Four Seasons - Autumn Horseshoe Bend | \$ | 95,000.00 | 25 | 10 |
| 2020 | Gateway Townhomes - Beech Tree Lane | \$ | 30,000.00 | 12 | 4 |
| 2020 | Melody Meadows - 53 Stardust Drive | \$ | 36,600.00 | 27 | 10 |
| 2020 | Monterey Farms - 841 Reybold Drive | \$ | 42,700.00 | 5 | 13 |
| 2020 | Pleasant Valley Estates - 125 and 127 Bartley Road | \$ | 39,300.00 | 27 | 10 |
| 2020 | Sharpley - 722 to 726 Foulkstone Road | \$ | 74,500.00 | 12 | 4 |
| 2020 | Yorklyn Ridge - 3 Yorkridge Trail | \$ | 63,100.00 | 12 | 4 |
| | | | | | |
| | | | | | |
| | | | | | |
| Totals | 54 Projects | \$ | 1,930,350.00 | | |
| 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 FY2021 to date | | | | |
| 2016 | 410 Hollets Corner Road / Thorstenson | \$ 22,273.57 | 11 | 15 |
| 2018 | Woodland Beach Road / Richards | \$ 14,167.70 | 28 | 14 |
| 2021 | Marydel Fire House | \$ 5,470.88 | 11 | 15 |
| 2004 | Raughley Hill Road / Faircloth | \$ 17,465.00 | 30 | 18 |
| 2016 | 4948 Halltown Road / Butz | \$ 16,500.00 | 11 | 15 |
| 2021 | 104 King Court / Divver | \$ 2,159.30 | 30 | 18 |
| 2010 | Lucky Estates Subdivision Phase 1 | \$ 2,156.98 | 30 | 18 |
| 2010 | Town of Houston / Breeders Crown | \$ 26,971.26 | 33 | 18 |
| 2019 | Bush Drive / Morris | \$ 5,107.50 | 29 | 17 |
| | | | | |
| Totals | 9 Projects | \$ 112,272.19 | | |
| Projects Recommended for Discontinuation | | | | |
| 2019 | Glohaven Ct. / Harvey | | 34 | 16 |
| | | | | |
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Completed Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Fiscal Year Approved | Project Name | Total Expended | Rep. Dist | Sen. Dist |
|---|---|------------------------|-----------|-----------|
| Completed Projects FY2021 to date | | | | |
| 2007 | Little Hill Road / Leonard Drainage | \$ 42,709.28 | 40 | 21 |
| 2015 | Pepper Creek TD Bank Stabilization | \$ 5,730.55 | 41 | 20 |
| 2008 | Bear Hole TD / Johnson | \$ 59,892.11 | 38 | 20 |
| 2013 | Town of Bethel / Snake Road Drainage Phase 1 | \$ 36,284.85 | 40 | 21 |
| 2004 | Town of Georgetown (Layton Vaughn TD Wilson Street) | \$ 22,043.16 | 37 | 19 |
| 2017 | Clogg Drive & Thorogood's Road | \$ 34,102.42 | 41 | 20 |
| 2009 | Trap Pond Road / White Drainage Improvements | \$ 65,755.99 | 40 | 21 |
| 2019 | Dukes Job TD / Morris Bank Stabilization Phase 1 | \$ 52,091.88 | 40 | 21 |
| 2013 | Town of Bethel / Snake Road Drainage Phase 2 | \$ 90,133.69 | 40 | 21 |
| 2014 | Oak Orchard Mercer Avenue | \$ 583,949.97 | 37 | 20 |
| 2014 | Oak Orchard Captains Grant | \$ 121,971.59 | 37 | 20 |
| 2020 | Batson Branch Tax Ditch Prong 10 | \$ 67,617.00 | 38 | 20 |
| 2019 | Herring Branch Tax Ditch Main / Johnson/ McCabe | \$ 31,987.00 | 41 | 20 |
| 2018 | Baltimore Avenue / Cheeks Public Ditch | \$ 73,856.02 | 38 | 20 |
| | | | | |
| | | | | |
| Totals | 14 Projects | \$ 1,288,125.51 | | |
| Projects Recommended for Discontinuation | | | | |
| 2014 | Bay Colony Marina Sluice Replacement | | 38 | 20 |
| 2019 | Mt. Joy Road / Hoopes | | 41 | 20 |
| | | | | |
| | | | | |

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Appendix C: 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 (RC&D or Match)

Land Rights – Obtaining landowner permission

Permitting – Obtaining environmental permits

Engineering – Surveying and Design

Scoping – Project scope development & and permission to survey

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Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|---|--------------|----------------------|-------------------------|---------------------|
| 2021 | Caravel Farms - 31 Clipper Court | Clean and regrade ditch | Construction | \$ 23,000.00 | 27 | 12 |
| 2021 | Fouk Woods - 2510 Deepwood Drive | Clean channel | Construction | \$ 63,400.00 | 7 | 5 |
| 2021 | Glen Bernie Estates - 104 Rothwell Drive | Clean and grade channel. Stabilize with rip rap. | Construction | \$ 39,600.00 | 19 | 9 |
| 2021 | Melody Meadows - 14 Lullaby Lane | Regrade existing ditch. | Construction | \$ 24,500.00 | 27 | 10 |
| 2021 | Stone's Throw - 225-235 Cobble Creek Curve | Install inlet with underdrain | Construction | \$ 28,900.00 | 25 | 10 |
| 2021 | Whethersfield - 67, 69, 71 Dasher Avenue | Install closed drainage system | Construction | \$ 50,400.00 | 18 | 13 |
| 2021 | Whitehall - 23 Auburn Drive | Install closed drainage system | Construction | \$ 61,500.00 | 18 | 13 |
| 2021 | Harvey Run - 8 Philip Court | Install underdrain | Construction | \$ 42,700.00 | 7 | 1 |
| 2021 | Meeting House Meadow - 273 Pond Drive | Install closed drainage system | Construction | \$ 63,000.00 | 12 | 4 |
| 2021 | Scottfield - Breezewood - Dawson Drive | Clean and grade ditch | Construction | \$ 90,000.00 | 24 | 11 |
| 2021 | Wynthrope - 39 Bancroft Road | Regrade swale | Construction | \$ 12,500.00 | 17 | 12 |
| 2021 | Alban Park I Tax Ditch Improvements | Install closed drainage system | Construction | \$ 18,000.00 | 2 | 3 |
| 2021 | Breckenridge - 12 Balmoral Court | Grade area to drain | Construction | \$ 15,200.00 | 4 | 7 |
| 2021 | Calverese Farms - 301 to 303 Caraway Drive | Install closed drainage system | Construction | \$ 35,000.00 | 5 | 13 |
| 2021 | City of New Castle - 733 W. 12th Street | Install closed drainage system | Construction | \$ 69,600.00 | 16 | 12 |
| 2021 | Highlands of Heritage Park - 2716 & 2718 East Riding | Install closed drainage system | Construction | \$ 28,500.00 | 21 | 9 |
| 2021 | Ramblewood - 1007 Timberwyck Road | Install wall and regrade | Construction | \$ 36,400.00 | 10 | 5 |
| 2021 | Independence School Stream Stabilization | Stream restoration | Engineering | \$ 33,500.00 | 22 | 8 |
| 2021 | 1071 Alley Mill Rd. | Install closed drainage system | Engineering | \$ 63,500.00 | 11 | 14 |
| 2021 | Graylyn Crest - 1005 to 1013 Crestover Road | Install closed drainage system | Engineering | \$ 61,500.00 | 6 | 5 |
| 2021 | Hampton Pointe - Stonebridge Drive | Install closed drainage system | Engineering | \$ 59,900.00 | 22 | 8 |
| 2021 | Weldin Farms - 9 & 11 Lombardy Drive | Regrade ditch | Engineering | \$ 21,000.00 | 6 | 5 |
| 2021 | Windybush Stream Channel Study | Study | Scoping | \$ 37,500.00 | 7 | 5 |
| 2021 | Tilton Park Drainage and Stormwater Management Design | Drainage improvements | Scoping | \$ 150,000.00 | 4 | 3 |
| 2021 | 2711 Duncan Road | Stabilize stream bank | Engineering | \$ 52,800.00 | 19 | 7 |
| 2021 | 56 Cann Road | Replace pipe and grade ditch | Engineering | \$ 53,000.00 | 27 | 10 |
| 2021 | Calverese Farms - 300- 302 Caraway Drive | Install closed drainage system | Construction | \$ 25,500.00 | 5 | 13 |
| 2021 | Carpenter Woods and Ashbourne Swim Club Drainage | Define channel and install closed drainage system | Engineering | \$ 65,000.00 | 7 | 5 |
| 2021 | Carrcroft - 1212 Evergreen Road | Study | Scoping | \$ 3,700.00 | 6 | 5 |
| 2021 | Christiana Village - 2107 Point Hamlet Road | Install closed drainage system | Engineering | \$ 14,300.00 | 26 | 11 |
| 2021 | Concord High School - Brandywine Forge Drainage | Study | Scoping | \$ 10,000.00 | 10 | 5 |
| 2021 | Fairways at Odessa National - Wedge Court | Install closed drainage system | Engineering | \$ 47,200.00 | 9 | 14 |
| 2021 | Hickory Woods - 703 Clifton Drive | Clean and regrade ditch | Construction | \$ 17,500.00 | 15 | 12 |
| 2021 | High Pointe at St. Georges - 1044 Matthew Way | Install closed drainage system | Engineering | \$ 18,000.00 | 15 | 12 |
| 2021 | Melody Meadows - 23 Bowfin Drive | Clear and clean ditch | Construction | \$ 15,000.00 | 27 | 10 |
| 2021 | Newport Gap Pike - 2811 -2819 Newport Gap Pike | Remove trees and grade | Construction | \$ 126,000.00 | 4 | 7 |
| 2021 | North Hills - 300-302 Woodland Drive | Replace failed retaining wall | Construction | \$ 115,000.00 | 1 | 1 |
| 2021 | Piermont Woods - 500 E. Hanna Drive | Connect sump pump to Del DOT system | Construction | \$ 12,500.00 | 26 | 11 |
| 2021 | Skyline Orchard - Dogwood Drive | Repair damage pipe and channel | Construction | \$ 72,000.00 | 12 | 4 |
| 2021 | Varlano - 8 Prescott Drive | Connect sump pump to Del DOT manhole | Construction | \$ 13,000.00 | 26 | 11 |
| 2021 | Village of Long Creek | Repair pipe | Engineering | \$ 5,200.00 | 27 | 10 |
| 2021 | Weldin Park- 4600 Weldin Road | Drainage study | Construction | \$ 10,000.00 | 6 | 5 |
| 2021 | Whitebriar Road from 745 to 760 | Repair sinkholes | Construction | \$ 9,750.00 | 12 | 4 |
| 2021 | Woodhill Townhomes Ditch | Repair rip rap channel | Engineering | \$ 12,000.00 | 1 | 1 |
| 2021 | Yorklyn Ridge Entrance Pipe Replacement | Replace entrance pipe | Engineering | \$ 140,000.00 | 12 | 4 |
| 2021 | White Clay Creek Dam Removal | Placeholder | Funding | \$ 500,000.00 | 23,24 | 8,9 |
| 2021 | Brandywine River Dam(s) | Remove dams | Funding | \$ 500,000.00 | 4 | 4 |
| 2021 | Mariner's Watch Walking Path | Placeholder | Funding | \$ 550,000.00 | 15 | 12 |
| 2021 | Absalom Jones Community Center Drainage | Drainage improvements | Funding | \$ 600,000.00 | 19 | 9 |
| 2021 | Westminster - Heritage Drive | Stream restoration | Funding | \$ 100,000.00 | 4 | 7 |
| 2021 | Drummond Ridge Retaining Walls | Placeholder | Funding | \$ 175,000.00 | 21 | 9 |
| 2021 | 4704 Old Capital Trail | Placeholder | Funding | \$ 15,000.00 | 19 | 9 |
| 2021 | Academy Hills - 7 & 9 Oklahoma State Drive | Placeholder | Funding | \$ 30,000.00 | 25 | 10 |
| 2021 | Berkshire - Braken Avenue | Placeholder | Funding | \$ 150,000.00 | 22 | 4 |
| 2021 | Blackbird Forest Road and Massey Church Road Ditch | Placeholder | Funding | \$ 60,000.00 | 11 | 14 |
| 2021 | Blackbird Landing Tax Ditch | Placeholder | Funding | \$ 30,000.00 | 9 | 14 |
| 2021 | Brandywine Park/The Point - N. Park Drive | Placeholder | Funding | \$ 50,000.00 | 4 | 4 |
| 2021 | Brennan Berry Tax Ditch | Placeholder | Funding | \$ 50,000.00 | 11 | 14 |
| 2021 | Chatham - 2413 Graydon Road | Install closed drainage system | Funding | \$ 42,800.00 | 6 | 5 |
| 2021 | Christina Hollow - Birchgrove Road | Install closed drainage system | Funding | \$ 90,000.00 | 26 | 11 |
| 2021 | Dartmouth Woods - 35 Sturbridge Drive | Install closed drainage system | Funding | \$ 96,200.00 | 10 | 5 |
| 2021 | Dartmouth Woods - Abington Road | Install closed drainage system | Funding | \$ 39,400.00 | 10 | 5 |
| 2021 | Fairfax - 129 Devonshire Road | Placeholder | Funding | \$ 40,000.00 | 12 | 4 |
| 2021 | Forest Ridge - 201 Cunane Circle | Install closed drainage system | Funding | \$ 21,700.00 | 25 | 10 |
| 2021 | Forwood Preserve Demonstration Project | Placeholder | Funding | \$ 250,000.00 | 6 | 5 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|---|--------------|----------------------|-------------------------|---------------------|
| 2021 | Gray Acres - 248 East Flagstone Drive | Install closed drainage system | Funding | \$ 69,500.00 | 26 | 11 |
| 2021 | Gray Acres - West Flagstone Drive | Placeholder | Funding | \$ 35,000.00 | 26 | 11 |
| 2021 | Harmony Hills - 534 Tamara Circle | Install closed drainage system | Funding | \$ 60,000.00 | 21 | 9 |
| 2021 | Hickory Woods - 108 Dorothy Drive | Clean and grade ditch | Funding | \$ 22,500.00 | 27 | 12 |
| 2021 | Mendenhall Village - Cold Spring Circle | Grade and stabilize ditch | Funding | \$ 12,700.00 | 22 | 4 |
| 2021 | Montchan - Montchan Road | Placeholder | Funding | \$ 50,000.00 | 4 | 4 |
| 2021 | Pencader Tax Ditch | Placeholder | Funding | \$ 50,000.00 | 27 | 10 |
| 2021 | Post and Rail Farms - 101 Saddle Drive | Placeholder | Funding | \$ 35,000.00 | 8 | 10 |
| 2021 | Rolling Meadows - 911 & 913 Clydesdale Drive | Remove and replace failed pipe | Funding | \$ 30,000.00 | 15 | 12 |
| 2021 | Rolling Meadows - 307 Morgan Drive | Placeholder | Funding | \$ 20,000.00 | 15 | 12 |
| 2021 | Rose Hill - 24 Crimson King Drive | Placeholder | Funding | \$ 35,000.00 | 27 | 10 |
| 2021 | Sandom Branch Tax Ditch | Placeholder | Funding | \$ 50,000.00 | 11 | 14 |
| 2021 | Scottfield - 44 Woodfield Court | Install closed drainage system | Funding | \$ 63,300.00 | 24 | 11 |
| 2021 | Sharpley - 628 Halstead | Install closed drainage system | Funding | \$ 25,000.00 | 12 | 4 |
| 2021 | Valley Run - 16 Thistle Court | Placeholder | Funding | \$ 40,000.00 | 10 | 5 |
| 2021 | Villa Monterey - Corinne Court | Placeholder | Funding | \$ 60,000.00 | 6 | 1 |
| 2021 | Westover Chase - 140 Moorfield Drive | Drainage improvements | Funding | \$ 49,600.00 | 12 | 4 |
| 2021 | Whethersfield - Dasher Avenue | Placeholder | Funding | \$ 60,000.00 | 18 | 13 |
| 2021 | Whethersfield - Daniels Court | Placeholder | Funding | \$ 25,000.00 | 18 | 13 |
| 2021 | Windybush - 136 Delview Drive | Replace damaged concrete gutter with rip rap | Funding | \$ 43,000.00 | 7 | 5 |
| 2021 | Wood Creek - 230 Barberry Drive | Install closed drainage system | Funding | \$ 30,900.00 | 21 | 4 |
| 2021 | Wynthorpe - 402 & 404 Wynthorpe Road | Install closed drainage system | Funding | \$ 49,600.00 | 17 | 12 |
| 2020 | Marshallton - Washington Avenue | Drainage improvements | Construction | \$ 175,000.00 | 19 | 7 |
| 2020 | Brookmeade - Redstart Court | Install closed drainage system | Construction | \$ 32,700.00 | 4 | 7 |
| 2020 | Caravel Farms - Forrestal Drive | Clean and regrade ditch | Construction | \$ 33,900.00 | 27 | 12 |
| 2020 | Melody Meadows - Misty Court | Clean Ditch and Install Driveway Pipes | Construction | \$ 41,500.00 | 27 | 10 |
| 2020 | Oak Hill School Road - Ditch | Clean and regrade ditch | Construction | \$ 37,000.00 | 11 | 14 |
| 2020 | Pike Creek Road and Pennock Road | Install closed drainage system | Construction | \$ 85,000.00 | 21 | 9 |
| 2020 | River Ridge - Villa Road | Install closed drainage system | Construction | \$ 100,000.00 | 6 | 1 |
| 2020 | Augustine Hills - Stone Hill Road | Curb Replacement | Construction | \$ 48,600.00 | 4 | 4 |
| 2020 | Duncan Woods - 3731 Wild Cherry Lane | Install closed drainage system | Construction | \$ 146,600.00 | 19 | 8 |
| 2020 | Harvey Run - Nikhil Court | Install closed drainage system and underdrain | Construction | \$ 37,500.00 | 7 | 1 |
| 2020 | Rose Hill - 16 Crimson King Drive | Install ditch | Construction | \$ 13,600.00 | 27 | 10 |
| 2020 | Village of Red Lion Creek | Clean ditch | Construction | \$ 49,700.00 | 15 | 12 |
| 2020 | 204 Eagles Landing Road | Install pipe and regrade | Construction | \$ 25,000.00 | 9 | 14 |
| 2020 | 409 Junction Street | Install closed drainage system | Construction | \$ 20,000.00 | 13 | 7 |
| 2020 | 409 New Road | Install closed drainage system | Construction | \$ 29,700.00 | 13 | 7 |
| 2020 | Estates of Red Lion - 8 S. Gabriel Drive | Install closed drainage system | Construction | \$ 36,600.00 | 15 | 12 |
| 2020 | Westover Chase - Moorfield Turn | Install closed drainage system | Construction | \$ 17,600.00 | 12 | 4 |
| 2020 | Chestnut Valley - Renee Lane | Install closed drainage system | Construction | \$ 65,000.00 | 22 | 4 |
| 2020 | Spring Creek - 246 Labrador Lane | Install closed drainage system | Construction | \$ 37,700.00 | 9 | 14 |
| 2020 | Marshallton Drainage Study | Study | Engineering | \$ 60,000.00 | 19 | 7 |
| 2020 | 207 Wiggins Mill Road | Install control structures at the ponds | Engineering | \$ 160,000.00 | 11 | 14 |
| 2020 | Upper Pike Creek Road Stream Restoration | Stream stabilization | Engineering | \$ 130,000.00 | 22 | 4 |
| 2020 | 1112 Smyrna Landing Road | Clean and regrade ditch | Engineering | \$ 23,500.00 | 9 | 14 |
| 2020 | Mariners Watch -157 & 159 Portside Court | Regrade area to drain | Engineering | \$ 13,900.00 | 15 | 12 |
| 2020 | Meadow Glen Ditch | Regrade ditch | Engineering | \$ 22,500.00 | 27 | 12 |
| 2020 | Stonefield - 21 Mica Street | Regrade ditch | Engineering | \$ 37,500.00 | 9 | 14 |
| 2020 | Westridge - 512 Thorndale Drive | Install ditch | Engineering | \$ 26,600.00 | 12 | 8 |
| 2020 | Edinburgh Villas - MacKenzie Court | Install closed drainage system | Engineering | \$ 58,500.00 | 5 | 13 |
| 2020 | Stenning Woods - 302 Hadley Court | Install swale | Engineering | \$ 30,600.00 | 22 | 8 |
| 2020 | Carrie Downie School Drainage | Drainage Study | Scoping | \$ 25,000.00 | 16 | 12 |
| 2020 | Woodland Run Park Drainage Improvements | Stream restoration and improvements | Funding | \$ 800,000.00 | 26 | 11 |
| 2020 | 109 N. Dupont Road | Placeholder | Funding | \$ 30,000.00 | 4 | 4 |
| 2020 | 705 Bay View Road | Placeholder | Funding | \$ 40,000.00 | 9 | 14 |
| 2020 | 960 S. Chapel Street | Placeholder | Funding | \$ 20,000.00 | 24 | 11 |
| 2020 | 3520 Newport Gap Pike | Placeholder | Funding | \$ 20,000.00 | 4 | 7 |
| 2020 | Afton - 1603 Bolton Road | Placeholder | Funding | \$ 20,000.00 | 10 | 5 |
| 2020 | Anglesey - 19 Harlech Drive | Placeholder | Funding | \$ 20,000.00 | 4 | 7 |
| 2020 | Appoquin Farms - 8 Brant Court | Placeholder | Funding | \$ 10,000.00 | 14 | |
| 2020 | Aspen Woods - 37 Cardenti Court | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2020 | Barrett Run - Barrett Run Place | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2020 | Beech Hill - 109 Beech Hill Drive | Placeholder | Funding | \$ 1,000.00 | 22 | 8 |
| 2020 | Brackenville Road Drainage | Placeholder | Funding | \$ 1,000.00 | 12 | 4 |
| 2020 | Brandywine Hunt - 405 Derby Way | Install closed drainage system | Funding | \$ 40,700.00 | 10 | 5 |
| 2020 | Brookland Terrace - Bookland Ave. and Rhode Island Avenue | Placeholder | Funding | \$ 50,000.00 | 7 | 13 |
| 2020 | Cedar Farms - 1 Cedar Farms Drive | Install closed drainage system | Funding | \$ 94,700.00 | 26 | 11 |
| 2020 | Centerville Point - Centerville Terrace Circle | Install swale and regrade yards to drain | Funding | \$ 41,500.00 | 4 | 7 |
| 2020 | Chelfonte - Granby Road and Oakmere Road | Placeholder | Funding | \$ 30,000.00 | 10 | 5 |
| 2020 | Chestnut Valley - Willow Creek Lane | Placeholder | Funding | \$ 30,000.00 | 22 | 4 |

Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|--------------|----------------------|-------------------------|---------------------|
| 2020 | Cragmere Woods | Install closed drainage system | Funding | \$ 119,200.00 | 6 | 1 |
| 2020 | Dartmouth Woods - 2611 Abington Road | Install closed drainage system | Funding | \$ 39,400.00 | 10 | 5 |
| 2020 | Deerborne Woods - 47 Deerborne Trail | Placeholder | Funding | \$ 1,000.00 | 27 | 10 |
| 2020 | Exton - 2103 Exton Drive | Install closed drainage system | Funding | \$ 33,700.00 | 10 | 5 |
| 2020 | Fairfax Farms - Nenagh Drive | Re-grade rear yard | Funding | \$ 18,200.00 | 12 | 4 |
| 2020 | Faulkland Road Drainage | Placeholder | Funding | \$ 20,000.00 | 4 | 7 |
| 2020 | Harmony Hills - 208 Catalina Drive | Install swale and regrade yard to drain | Funding | \$ 24,400.00 | 21 | 9 |
| 2020 | Hockessin Greene | Placeholder | Funding | \$ 50,000.00 | 22 | 4 |
| 2020 | Hockessin Valley Falls | Placeholder | Funding | \$ 10,000.00 | 22 | 4 |
| 2020 | Hunters Ridge - Entrance | Stabilize slopes | Funding | \$ 25,000.00 | 22 | 4 |
| 2020 | Hunters Ridge - Haystack Drive | Drainage improvements | Funding | \$ 61,500.00 | 22 | 4 |
| 2020 | Hyde Run - 3316 Heritage Drive | Placeholder | Funding | \$ 20,000.00 | 4 | 7 |
| 2020 | Lamatan - Flint and Quartz Mill Roads | Install closed drainage system | Funding | \$ 39,300.00 | 22 | 8 |
| 2020 | Llangollen Estates - 316 Wooddale Ave. | Placeholder | Funding | \$ 5,000.00 | 17 | 12 |
| 2020 | Manley - Robin Drive | Placeholder | Funding | \$ 20,000.00 | 22 | 4 |
| 2020 | Milltown Road | Drainage improvements | Funding | \$ 80,000.00 | 21 | 9 |
| 2020 | Northcrest - 1812 Walter Drive | Regrade yard to drain | Funding | \$ 33,200.00 | 10 | 5 |
| 2020 | Oak Lane Manor - 2104 Allendale Road | Placeholder | Funding | \$ 1,000.00 | 12 | 4 |
| 2020 | Rising Sun Lane - Drainage Improvements | Regrade area and support railroad abutment | Funding | \$ 225,000.00 | 4 | 1 |
| 2020 | Rivers End - Bynum Place | Placeholder | Funding | \$ 1,000.00 | 18 | 11 |
| 2020 | Rockland Mills Pond | Placeholder | Funding | \$ 50,000.00 | 4 | 4 |
| 2020 | Salem Woods - 9 Linette Court | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2020 | Sedgley Farms - Stone Barn Lane | Placeholder | Funding | \$ 35,000.00 | 4 | 4 |
| 2020 | ShIPLEY Road and Wilson Road Drainage | Install closed drainage system | Funding | \$ 200,000.00 | 6 | 5 |
| 2020 | Southwood - Slashpine Circle | Placeholder | Funding | \$ 15,000.00 | 22 | 8 |
| 2020 | Summer Hill - 2 Jaymar Drive | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2020 | The Ridge - Sleepy Hollow Court | Install underdrain and grade | Funding | \$ 26,350.00 | 22 | 4 |
| 2020 | Timber Farms - West Hummock Lane | Install closed drainage system | Funding | \$ 50,000.00 | 26 | 11 |
| 2020 | Tybrook and Woodland Park Drainage Study | Study | Funding | \$ 25,000.00 | 4 | 7 |
| 2020 | Tybrook - Frann Road | Drainage improvements | Funding | \$ 6,000.00 | 4 | 7 |
| 2020 | Villages at Fairview Farm - 19 Fairview Avenue | Placeholder | Funding | \$ 20,000.00 | 8 | 10 |
| 2020 | Weber Tract - Lloyd Place | Placeholder | Funding | \$ 40,000.00 | 10 | 5 |
| 2020 | Webster Farms - 1115 Webster Drive | Install closed drainage system | Funding | \$ 55,000.00 | 6 | 5 |
| 2020 | Weldin Farms - 1506 Turkey Run Road | Regrade ditch | Funding | \$ 11,700.00 | 6 | 5 |
| 2020 | Wellington Hills - Pierson Drive | Grade yard to drain | Funding | \$ 40,600.00 | 10 | 8 |
| 2020 | West Cedar Heights - 326 Clyde Street | Install closed drainage system | Funding | \$ 69,800.00 | 19 | 9 |
| 2020 | Westhaven - Willing Way | Placeholder | Funding | \$ 50,000.00 | 4 | 4 |
| 2020 | Westover Hills - 702 to 704 Hopeton Road | Install closed drainage system | Funding | \$ 82,000.00 | 4 | 4 |
| 2020 | Westover Woods - Sarah Court | Clean channel | Funding | \$ 18,100.00 | 26 | 11 |
| 2020 | Windy Hill - 34 Ferncliff Drive | Placeholder | Funding | \$ 10,000.00 | 24 | 9 |
| 2019 | Simonds Gardens Drainage Improvements | Drainage improvements | Construction | \$ 391,600.00 | 16 | 2 |
| 2019 | Covered Bridge Farms - 5 Trotters Turn | Stream restoration | Construction | \$ 275,000.00 | 23 | 8 |
| 2019 | Hickory Woods - North Hickory Drive | Clean and regrade ditch | Construction | \$ 114,700.00 | 27 | 12 |
| 2019 | Odessa National - Loft Street | Install closed drainage system | Construction | \$ 40,200.00 | 9 | 14 |
| 2019 | Sherwood Forest - 39 Stature Drive | Regrade yard to drain | Construction | \$ 9,300.00 | 24 | 9 |
| 2019 | North Star - 210 Mercury Road | Install closed drainage system | Construction | \$ 100,400.00 | 22 | 8 |
| 2019 | Whethersfield - Dasher Avenue | Install closed drainage system | Construction | \$ 47,750.00 | 18 | 13 |
| 2019 | Whethersfield - Penny Lane | Install closed drainage system | Construction | \$ 42,300.00 | 18 | 13 |
| 2019 | Spring Creek Pond #1 and #2 | Erosion at pond outfalls | Construction | \$ 105,000.00 | 9 | 14 |
| 2019 | Londonderry - Emerald Place | Install closed drainage system | Construction | \$ 29,250.00 | 10 | 5 |
| 2019 | Brookmeade - 8 Waxwing Court | Install trench drain and closed drainage system | Construction | \$ 36,600.00 | 4 | 7 |
| 2019 | Chatam - 2401 Brookshire Drive | Install closed drainage system | Construction | \$ 15,600.00 | 6 | 5 |
| 2019 | Enclave at Odessa - Barcelona & Madrid | Regrade swale | Engineering | \$ 45,800.00 | 9 | 14 |
| 2019 | Sunnybrae - 13 Crenshaw Drive | Stream stabilization | Engineering | \$ 39,200.00 | 10 | 5 |
| 2019 | 1109 Clayton Greenspring Road | Placeholder | Funding | \$ 1,000.00 | 11 | 14 |
| 2019 | 1163 Valley Road Drainage | install closed drainage system | Funding | \$ 20,200.00 | 12 | 4 |
| 2019 | 1515 Dexter Corner Road | Placeholder | Funding | \$ 1,000.00 | 11 | 14 |
| 2019 | 1920 Clayton Delaney Road | Repair Erosion | Funding | \$ 12,500.00 | 11 | 14 |
| 2019 | Afton - 2603 Fairhope Road | install closed drainage system | Funding | \$ 45,500.00 | 10 | 5 |
| 2019 | Alapocas - 17 and 19 Alapocas Road | install closed drainage system | Funding | \$ 32,000.00 | 4 | 4 |
| 2019 | Ashbourne Hills - 30 East Avon Drive | Placeholder | Funding | \$ 1,000.00 | 7 | 1 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|--|--------------|----------------------|-------------------------|---------------------|
| 2019 | Breezewood - Noble Court & Newland Court | Placeholder | Funding | \$ 1,000.00 | 24 | 11 |
| 2019 | Chelsea Estates - 107 Talbot Drive | Placeholder | Funding | \$ 1,000.00 | 17 | 13 |
| 2019 | Christiana Village - Barnaby Street | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2019 | City of Wilmington - Helen Chambers Playground Drainage | Placeholder | Funding | \$ 1,000.00 | 3 | 3 |
| 2019 | Estates of Red Lion | Clear and grade open space | Funding | \$ 10,000.00 | 15 | 12 |
| 2019 | Fairway Falls | Placeholder | Funding | \$ 1,000.00 | 21 | 4 |
| 2019 | Faulkland Woods - 2301 Woods Road | Install trench drain | Funding | \$ 66,400.00 | 4 | 7 |
| 2019 | Food Bank of Delaware | Drainage improvements | Funding | \$ 40,000.00 | 8 | 10 |
| 2019 | Glen Berne Estates - 1601 Glenmore Drive | Placeholder | Funding | \$ 1,000.00 | 19 | 9 |
| 2019 | Gwinhurst - Laurel Avenue | Place trench drain and closed drainage system | Funding | \$ 40,000.00 | 7 | 1 |
| 2019 | Hickory Woods - 651 Clifton Drive | Placeholder | Funding | \$ 1,000.00 | 15 | 12 |
| 2019 | Lynnfield - Homewood Rd. and Ridgeland Rd. | Placeholder | Funding | \$ 1,000.00 | 6 | 5 |
| 2019 | Monterey Farms - 856 Reybold Drive | Regrade and clean ditch | Funding | \$ 32,900.00 | 5 | 13 |
| 2019 | Mt. Zion Cemetery Drainage | Placeholder | Funding | \$ 1,000.00 | 4 | 4 |
| 2019 | North Grant Avenue | Repave street to address drainage issues. | Funding | \$ 63,000.00 | 4 | 1 |
| 2019 | Oak Ridge - 3703 Oak Ridge Road | Reinstall swale and replace headwalls | Funding | \$ 88,000.00 | 22 | 4 |
| 2019 | Odessa National - 220 - 224 Alloway Place | Placeholder | Funding | \$ 1,000.00 | 9 | 14 |
| 2019 | Paper Mill Farms - 8 Ranch Court | Stabilize slopes | Funding | \$ 62,500.00 | 23 | 8 |
| 2019 | Pencader Village - Garvey Lane | Placeholder | Funding | \$ 1,000.00 | 25 | 10 |
| 2019 | Rambleton Acres Drainage | Clear area and install channel | Funding | \$ 158,000.00 | 5 | 13 |
| 2019 | Stoney Batter Condominium Drainage | Create two outfalls and stabilize eroded areas | Funding | \$ 36,500.00 | 22 | 4 |
| 2019 | Thornwood - Spur Ridge Court | Placeholder | Funding | \$ 1,000.00 | 27 | 10 |
| 2019 | Village of Lindell | Placeholder | Funding | \$ 1,000.00 | 21 | 9 |
| 2019 | Yorklynn - Center for the Creative Arts | Placeholder | Funding | \$ 1,000.00 | 8 | 4 |
| 2018 | Brandywood - 2133 Brandywood Drive | Install closed drainage system. | Construction | \$ 27,000.00 | 10 | 5 |
| 2018 | Sycamore Gardens - Brewster Drive | Clean and regrade ditch | Construction | \$ 16,700.00 | 24 | 9 |
| 2018 | Odessa National Study Phase 1 and 2 | Study | Scoping | \$ 60,900.00 | 9 | 14 |
| 2018 | Asbury Chase Drainage | Placeholder | Funding | \$ 1,000.00 | 9 | 12 |
| 2018 | Beau Tree Stormwater Pond | Stormwater pond rehabilitation | Funding | \$ 17,250.00 | 10 | 5 |
| 2018 | Cambridge Gardens - 24 Beacon Lane | Install closed drainage system | Funding | \$ 22,400.00 | 5 | 13 |
| 2018 | Cardiff - 3203 & 3205 Landsdowne Drive | Closed drainage system | Funding | \$ 10,950.00 | 10 | 5 |
| 2018 | Christ The Teacher Stormwater Pond | Placeholder | Funding | \$ 1,000.00 | 27 | 10 |
| 2018 | Christine Manor - 101 Mason Drive | Stabilize eroded area. | Funding | \$ 5,000.00 | 23 | 8 |
| 2018 | Colonial Woods - Brandywine Boulevard | Remove and replace deteriorated curb | Funding | \$ 50,000.00 | 12 | 5 |
| 2018 | Guyencourt Road Drainage | Placeholder | Funding | \$ 1,000.00 | 12 | 4 |
| 2018 | Hickory Woods - Clifton Drive | Placeholder | Funding | \$ 1,000.00 | 15 | 12 |
| 2018 | Hockessin Glen Stormwater Pond | Placeholder | Funding | \$ 1,000.00 | 12 | 4 |
| 2018 | Holly Oak Terrace - 1217 Washington Place | Install concrete gutter | Funding | \$ 26,700.00 | 6 | 1 |
| 2018 | North Hills - Marsh Road - Brighton Road Drainage | Install closed drainage system | Funding | \$ 82,500.00 | 1 | 1 |
| 2018 | Northshire - Graywood Road | Placeholder | Funding | \$ 1,000.00 | 7 | 5 |
| 2018 | Pyles Lane and Pigeon Point Road Ditching | Ditching | Funding | \$ 1,500,000.00 | 16 | 2 |
| 2018 | Springfields - Charles Drive | Placeholder | Funding | \$ 1,000.00 | 5 | 13 |
| 2018 | Valley Run - Thistle Court | Placeholder | Funding | \$ 1,000.00 | 10 | 5 |
| 2018 | Village of Becks Pond - Becks Woods Road | Placeholder | Funding | \$ 1,000.00 | 15 | 12 |
| 2018 | Wellington Meadows - Cromell Court & St. Thomas Lane | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2018 | Whethersfield - Daniels Place | Placeholder | Funding | \$ 1,000.00 | 18 | 13 |
| 2018 | Wrangle Hill Estates - 124 Carlotta Drive | Install a grass swale | Funding | \$ 7,150.00 | 15 | 12 |
| 2017 | 1609 Joe Goldsborough Road | Install ditch | Construction | \$ 72,000.00 | 11 | 14 |
| 2017 | Edgemoor Gardens - Rysing Drive | Install closed drainage system | Engineering | \$ 238,000.00 | 6 | 1 |
| 2017 | Massey's Church Tax Ditch | Tax ditch maintenance | Engineering | \$ 24,000.00 | 11 | 14 |
| 2017 | Drawyer's Branch Tax Ditch | Tax ditch maintenance | Engineering | \$ 60,000.00 | 8 | 10 |
| 2017 | Jefferson Farms Tax Ditch | Tax ditch maintenance | Engineering | \$ 20,000.00 | 16 | 2 |
| 2017 | 1038 Fieldsboro Road | Clean out ditch. Install crossroad pipes | Engineering | \$ 27,000.00 | 9 | 14 |
| 2017 | 3323 Silverside Road | Install closed drainage system | Funding | \$ 36,500.00 | 10 | 5 |
| 2017 | Devonshire - Rockfield Drive | Install closed drainage system | Funding | \$ 37,500.00 | 10 | 5 |
| 2017 | Drexel - 3210 Drexel Drive | Install closed drainage system | Funding | \$ 12,800.00 | 10 | 5 |
| 2017 | Fox Fire - Foxfire Drive | Stabilize eroded area | Funding | \$ 5,800.00 | 22 | 4 |
| 2017 | Bristol Place Drainage | Install closed drainage system | Funding | \$ 25,300.00 | 27 | 12 |
| 2017 | Caravel Farms - 255 Benjamin Drive | Grade and clean out ditch. | Funding | \$ 23,200.00 | 27 | 12 |
| 2017 | Caravel Farms - 5 Congress Drive | Grade and clean out ditch. | Funding | \$ 30,900.00 | 27 | 12 |
| 2017 | Castleshire - Dandenog Drive | Stabilize eroded areas | Funding | \$ 15,000.00 | 21 | 7 |
| 2017 | Ballymeade Drainage | Placeholder | Funding | \$ 1,000.00 | 10 | 5 |
| 2017 | Afton - Fairhope Road | Placeholder | Funding | \$ 1,000.00 | 10 | 5 |
| 2017 | Northgate | Placeholder | Funding | \$ 1,000.00 | 10 | 5 |
| 2017 | A-Street Ditch Project | Placeholder | Funding | \$ 1,000.00 | 16 | 2 |
| 2017 | Barretts Run Ponds | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2017 | Becks Pond | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2017 | Chapelcroft - Burnett Drive | Armor bank with rip rap | Funding | \$ 6,500.00 | 10 | 5 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|--------------|----------------------|-------------------------|---------------------|
| 2017 | City of New Castle - Harmony Street | Placeholder | Funding | \$ 1,000.00 | 17 | 12 |
| 2017 | City of New Castle - Stuyvesant Avenue | Placeholder | Funding | \$ 1,000.00 | 16 | 12 |
| 2017 | City of New Castle - West Third Street | Placeholder | Funding | \$ 1,000.00 | 17 | 12 |
| 2017 | Cotswold Hills | Placeholder | Funding | \$ 1,000.00 | 22 | 8 |
| 2017 | Elmwood Pond | Placeholder | Funding | \$ 1,000.00 | 24 | 9 |
| 2017 | Grantchester Ponds | Study | Funding | \$ 5,000.00 | 22 | 8 |
| 2017 | Holly Oak Terrace - 3 Brookside Place | Replace failed pipe | Funding | \$ 20,500.00 | 6 | 1 |
| 2017 | Leatherems Run Improvements | Placeholder | Funding | \$ 1,000.00 | | |
| 2017 | Lukens Drive - Zenith | Placeholder | Funding | \$ 1,000.00 | 17 | 2 |
| 2017 | Owls Nest Road Drainage | Placeholder | Funding | \$ 1,000.00 | 12 | 4 |
| 2017 | Owls Ridge Pond | Placeholder | Funding | \$ 1,000.00 | 12 | 4 |
| 2017 | Perch Creek Ponds | Placeholder | Funding | \$ 1,000.00 | 27 | 10 |
| 2017 | Westbrite - Westbrite Court | Placeholder | Funding | \$ 1,000.00 | 10 | 5 |
| 2017 | Windy Hills - Dillwyn Road | Install underdrain | Funding | \$ 10,000.00 | 24 | 9 |
| 2017 | Woods Road Tax Ditch | Placeholder | Funding | \$ 1,000.00 | 15 | 12 |
| 2017 | 185 Blackbird Station Road | Placeholder | Funding | \$ 1,000.00 | 11 | 14 |
| 2017 | Brandywine Park Improvements | Placeholder | Funding | \$ 1,000.00 | 4 | 3 |
| 2017 | City of Wilmington Drainage Improvements | Drainage and flooding problems in Wilmington | Funding | \$ 0.00 | | |
| 2016 | Guthrie Tax Ditch | Tax ditch maintenance | Engineering | \$ 55,000.00 | 27 | 10,12 |
| 2016 | Countryside Farms Tax Ditch | Tax ditch maintenance | Engineering | \$ 30,000.00 | 27 | 12 |
| 2016 | David's Corner Tax Ditch | Tax ditch maintenance | Engineering | \$ 102,000.00 | 9 | 14 |
| 2016 | 130 Upper Pike Creek Road | Stream restoration | Engineering | \$ 120,000.00 | 21 | 9 |
| 2016 | 130 Upper Pike Creek Road | Flood study | Study | \$ 120,000.00 | 21 | 9 |
| 2016 | 600 N. DuPont Parkway | Install curb | Funding | \$ 12,500.00 | 17 | 12 |
| 2016 | Beacon Hill - East Court | Install closed drainage system | Funding | \$ 38,500.00 | 10 | 5 |
| 2016 | Channin - 2501 Ruthwell Road | Recommend a study | Funding | \$ 5,000.00 | 10 | 5 |
| 2016 | Christina River - Christiana Flood Study | Flood study | Funding | \$ 42,000.00 | 18 | 13 |
| 2016 | Country Creek - 444 Barley Drive | Extend sump pump discharge to existing system | Funding | \$ 8,100.00 | 26 | 11 |
| 2016 | Coventry - Dunsinane Drive | Install closed drainage system | Funding | \$ 25,400.00 | 18 | 13 |
| 2016 | Governor Printz & Rolling Road | Install closed drainage system | Funding | \$ 39,000.00 | 6 | 1 |
| 2016 | Harmony Hills - Kingsley Drive | Install closed drainage system | Funding | \$ 44,000.00 | 21 | 9 |
| 2016 | Norwegian Woods - Penney Lane | Install trench drain | Funding | \$ 13,000.00 | 26 | 11 |
| 2016 | Rolling Meadows - 900 & 902 Clydesdale Drive | Clean and restore drainage ditch | Funding | \$ 24,800.00 | 15 | 12 |
| 2016 | Rolling Meadows - 908 Clydesdale Drive | Replace driveway pipe | Funding | \$ 5,500.00 | 15 | 12 |
| 2016 | Rutherford - 4 Rolling Drive | Install closed drainage system | Funding | \$ 74,000.00 | 18 | 9 |
| 2016 | 1010 Red Lion Road | Placeholder | Funding | \$ 1,000.00 | 15 | 12 |
| 2016 | 130 Upper Pike Creek Road | 520 ft. of stream bank stabilization. | Funding | \$ 120,000.00 | 21 | 9 |
| 2016 | 202 East 6th Street | Placeholder | Funding | \$ 1,000.00 | 16 | 12 |
| 2016 | 600 N. DuPont Parkway | Install curb | Funding | \$ 12,500.00 | 17 | 12 |
| 2016 | 770 Blackbird Station Road | Placeholder | Funding | \$ 1,000.00 | 11 | 14 |
| 2016 | Addicks Estates - 26 Marion Avenue | Placeholder | Funding | \$ 1,000.00 | 10 | 1 |
| 2016 | Anglesey - Harlech Drive | Placeholder | Funding | \$ 1,000.00 | 4 | 7 |
| 2016 | Beacon Hill - East Court | Closed drainage system to tie-in roof drains | Funding | \$ 38,500.00 | 10 | 5 |
| 2016 | Benton - 15 Benton Court | Install closed drainage system | Funding | \$ 38,000.00 | 10 | 5 |
| 2016 | Brandywine Falls Raceway Rehabilitation | Repair raceway | Funding | \$ 90,000.00 | 4 | 1 |
| 2016 | Christianstead Pedestrian Bridge | STABILIZE STREAM BANKS WITH RIPRAP | Funding | \$ 45,000.00 | 23 | 8 |
| 2016 | Commodore Estates II - 106 Bakerfield Drive | Placeholder | Funding | \$ 1,000.00 | 9 | 12 |
| 2016 | Dunleith - Bunche Blvd | Placeholder | Funding | \$ 1,000.00 | 16 | 2 |
| 2016 | Dunleith - Morehouse Drive | Placeholder | Funding | \$ 1,000.00 | 16 | 2 |
| 2016 | Dunleith - Oval Circle | Placeholder | Funding | \$ 1,000.00 | 16 | 02 |
| 2016 | Grande View Farms - Bullen Drive | Clean ditch | | \$ 100,000.00 | 9 | 10 |
| 2016 | Woodland Park - Glenoak Road | Drainage study | Study | \$ 50,000.00 | 4 | 7 |
| 2016 | Woodrose - Rose Circle | Stabilize banks | Funding | \$ 460,000.00 | 21 | 9 |
| 2015 | Elsmere - Sycamore Avenue | Install closed drainage system | Construction | \$ 408,300.00 | 13 | 7 |
| 2015 | Red Mill Farms - 14 to 20 Andries Road | Repair erosion with bank stabilization. | Construction | \$ 62,900.00 | 24 | 9 |
| 2015 | Marshallton - Old Capitol Trail | Drainage improvements | Engineering | \$ 225,000.00 | 19 | 7 |
| 2015 | Boxwood Road | Flood study | Study | \$ 10,000.00 | 13 | 7 |
| 2015 | 2018 Marsh Road | Remove and replace failed pipe and catch basin. | Funding | \$ 14,900.00 | 7 | 5 |
| 2015 | Brandywood - Valley Avenue | Install closed drainage system | Funding | \$ 37,900.00 | 10 | 5 |
| 2015 | Brennan Estates - Sarah Circle | Install underdrain along Sarah Court | Funding | \$ 62,000.00 | 27 | 10 |
| 2015 | Chalfonte - Landon Drive | Install closed drainage system. | Funding | \$ 44,500.00 | 10 | 5 |
| 2015 | Chestnut Hills Estates - 66 E. Stephen Drive | Clean out channel, remove tree and sediment | Funding | \$ 37,900.00 | 24 | 11 |
| 2015 | Christiana - E. Main Street | Study on flooding conditions in Christiana. | Funding | \$ 50,000.00 | 18 | 13 |
| 2015 | Christiana Green - Old Baltimore Pike | Placeholder | Funding | \$ 1,000.00 | 26 | 11 |
| 2015 | Fairway Falls - Stream Stabilization | Stream Stabilization | Funding | \$ 210,000.00 | 21 | 4 |
| 2015 | Grantchester - Findail Drive | Placeholder | Funding | \$ 1,000.00 | 22 | 8 |
| 2015 | Hillcrest - Beverly Place | Install swale in back yard. | Funding | \$ 10,400.00 | 6 | 1 |
| 2015 | Magazine Ditch | Placeholder | Funding | \$ 1,000.00 | 16 | 2 |
| 2015 | Marrows Road - Marrows Court-Chaucer Drive | Study with City of Newark | Funding | \$ 50,000.00 | 24 | 11 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|--|---------|----------------------|-------------------------|---------------------|
| 2015 | Marshallton Heights - Overlook Avenue | Clear & grub ditch remove sediment and armor with riprap. | Funding | \$ 29,500.00 | 19 | 7 |
| 2015 | New Castle - Battery Park | Drainage improvements in the park | Funding | \$ 25,000.00 | 17 | 12 |
| 2015 | Old Baltimore Pike (1205 & 1211) | Stabilize channel with riprap. | Funding | \$ 29,900.00 | 25 | 10 |
| 2015 | Pleasant Hills - Kentucky Avenue | Install closed drainage system that ties into DeDOT's. | Funding | \$ 65,000.00 | 19 | 9 |
| 2015 | Rutherford - 123 & 125 Rolling Drive | Install closed drainage system. | Funding | \$ 61,600.00 | 18 | 9 |
| 2015 | Saint Georges - Church Street | Replace driveway pipe and regrade as needed. | Funding | \$ 13,600.00 | 15 | 12 |
| 2015 | Upper Pike Creek Road | Study on flooding conditions. | Funding | \$ 36,000.00 | 22 | 4 |
| 2015 | Vineyards Maintenance Corporation | Install underdrain from rear yard to existing catch basin. | Funding | \$ 12,800.00 | 7 | 5 |
| 2015 | Wilmington - 2401 Paper Lane | Placeholder | Funding | \$ 1,000.00 | 10 | 5 |
| 2015 | Wilton - 19 Blyth Court | Placeholder | Funding | \$ 1,000.00 | 18 | 13 |
| 2015 | Windy Hills -314 North Dillwyn Road | Install slot drain and outlet into back yard. | Funding | \$ 18,000.00 | 24 | 9 |
| 2014 | Port Penn Dike Rehabilitation | Rehabilitate dike | Funding | \$ 3,000,000.00 | 9 | 14 |
| 2014 | Brairwood - Briar Road | Install closed drainage system that ties into DeDOT's system. | Funding | \$ 26,650.00 | 6 | 5 |
| 2014 | Caravel Farms - West Savannah Drive | Recommend a study be done. | Funding | \$ 37,200.00 | 27 | 12 |
| 2014 | Devon - Rosetree Court | Install inlets with pipe. | Funding | \$ 26,200.00 | 10 | 5 |
| 2014 | Elwin Manor - Godwin Drive | Erosion Repair at pipe outlet | Funding | \$ 14,500.00 | 25 | 10 |
| 2014 | Jamison Corner Road | Placeholder | Funding | \$ 1,000.00 | 9 | 12 |
| 2014 | Naamans Creek - Brandywine LL | Modify drainage system to correct problem. | Funding | \$ 250,000.00 | 10 | 5 |
| 2014 | Post & Rail Farms - Old School House Road | Install swales to convey runoff to DeDOT's system. | Funding | \$ 26,700.00 | 8 | 10 |
| 2014 | Sharpley - Whitby Road | Replace curb and install 2 new drainage inlets | Funding | \$ 32,288.00 | 12 | 4 |
| 2014 | Shellpot Creek - Flood/Drainage Study Cardiff, Woodbine and Tarleton | Study for FEMA Map Revision | Funding | \$ 24,300.00 | 10 | 5 |
| 2014 | St. Georges Heights - Hybridge Avenue | Redirect swale to Colton Meadows. | Funding | \$ 18,500.00 | 9 | 14 |
| 2014 | The Oaks - Split Rail Lane | Clear & grub easives. Needs wetlands permit | Funding | \$ 12,400.00 | 26 | 11 |
| 2014 | Wilmington - 9th Avenue | Repair catch basin | Funding | \$ 4,500.00 | 2 | 3 |
| 2014 | Wilmington Marsh Wetlands Project | Wetland rehabilitation | Funding | \$ 100,000.00 | 2 | 3 |
| 2014 | Woodburne - Wildfire Lane | | Funding | \$ 30,200.00 | 5 | 13 |
| 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 |
| 2013 | Chelsea Estates - Mark Drive/Louise Road | Install underdrain to intercept spring that freezes on roadway. | Funding | \$ 71,200.00 | 17 | 13 |
| 2013 | Hockessin Valley Falls - Peoples Way | Realign, reshape, and stabilize existing channel. | Funding | \$ 23,300.00 | 22 | 4 |
| 2013 | Wilmington - 6 to 12 Main Street | Eliminate drainage problem in street. | Funding | \$ 76,700.00 | 4 | 4 |
| 2013 | Alapocas - Edgewood Road | Placeholder | Funding | \$ 1,000.00 | 4 | 4 |
| 2012 | 2217 Pleasant Valley Road | Channel erosion and cleaning | Funding | \$ 25,000.00 | 27 | 10 |
| 2012 | 1117 Bohemia Mill Road | Drainage problem | Funding | \$ 110,500.00 | 8 | 10 |
| 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 |
| 2012 | 3110 Old Limestone Road | Install closed drainage system of pipe and inlets from existing DeDOT C.B. | Funding | \$ 42,600.00 | 21 | 9 |
| 2012 | Caravel Woods - 102 Savannah Drive | Reconstruct roadside swale | Funding | \$ 9,600.00 | 27 | 12 |
| 2012 | Chalfonte - 2305 Berwyn Drive | Install pipe system with inlets & connect rear roof drains. | Funding | \$ 15,450.00 | 10 | 5 |
| 2012 | Chatham - 1204 Windon Drive | Redirect sump pump outlet to DeDOT's drainage system. | Funding | \$ 15,000.00 | 6 | 5 |
| 2012 | Chestnut Hills Estates - Merion & Davies | Clear & grub, remove sediment and replace any damaged concrete gutter | Funding | \$ 48,500.00 | 24 | 11 |
| 2012 | Christiana Green - 504 Blacksmith Lane | Construct swale in backyards of 506, 504, 502 & 500 and adjust fences. | Funding | \$ 5,100.00 | 26 | 11 |
| 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 |
| 2012 | English Creek - 1993 Carol Drive | Install underdrain under curb. | Funding | \$ 28,850.00 | 21 | 9 |
| 2012 | Grears Acres - 923 Grears Corner Road | Drainage & swale improvements | Funding | \$ 11,800.00 | 11 | 14 |
| 2012 | Hillcrest - 305 & 307 Woodside Avenue | Install berm with swale and concrete curb. | Funding | \$ 22,150.00 | 6 | 1 |
| 2012 | Hockessin Valley Falls - 502 Wilson Drive | Replace with larger pipe | Funding | \$ 37,000.00 | 22 | 4 |
| 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 |
| 2012 | Lancashire - Inwood Road | Parcels being considered for flood remediation. | Funding | \$ 1,280,000.00 | 7 | 5 |
| 2012 | Old Kennett Road near Way Road | Install underdrain | Funding | \$ 12,600.00 | 12 | 9 |
| 2012 | Ramblewood Pond | Water quality assessment & Improvement project | Funding | \$ 175,000.00 | 10 | 5 |
| 2012 | Salem Woods - 1 White Drive | Debris pit remediation | Funding | \$ 100,000.00 | 26 | 11 |
| 2012 | Stockdale - 11 Palace Drive | Construct swale with berm behind 11 Palace Drive & adjacent properties. | Funding | \$ 29,900.00 | 7 | 1 |
| 2012 | Sunset Lake - Sediment Control & Habitat Enhancement | Water quality | Funding | \$ 225,000.00 | 24 | 10 |
| 2012 | Sycamore Gardens - 3 Medill Lane | Install underdrain under sidewalk | Funding | \$ 17,000.00 | 24 | 5 |
| 2012 | The Timbers - 7 Magnolia Court | Remove and replace damaged sections of concrete channel. | Funding | \$ 13,000.00 | 10 | 5 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|--------------|----------------------|-------------------------|---------------------|
| 2012 | Thornwood - 2 Hazelwood Drive | Request letter was dated June 16, 2010 but was received Oct. 4, 2010. | Funding | \$ 21,800.00 | 25 | 10 |
| 2012 | Village of Lindell - 2315 & 2313 St. Francis Street | Repair or replace deteriorated timber retaining wall. | Funding | \$ 71,000.00 | 21 | 9 |
| 2012 | Wedgewood - 128 Dutton Court | Install basin with pipe connection to existing basin | Funding | \$ 14,700.00 | 18 | 13 |
| 2012 | Weldin Wood - Weldin Circle Drainage | Install closed drainage system. | Funding | \$ 99,700.00 | 6 | 5 |
| 2012 | Willow Run - 10 Harrow Place | Construct swale/berm | Funding | \$ 6,200.00 | 13 | 7 |
| 2012 | Brookside - Keller Road | Clear & regrade swale | Funding | \$ 38,000.00 | 24 | 11 |
| 2012 | DuRoss Heights | | Funding | \$ 225,000.00 | 17 | 13 |
| 2011 | Buckingham Heights - 2116 Buckingham Road | Install closed drainage system behind homes. | Funding | \$ 28,200.00 | 7 | 5 |
| 2010 | ROBSCOTT MANOR 36 & 38 GILL DRIVE | REPLACE DRIVEWAY PIPE AT EAST CHESTNUT HILL ROAD | Funding | \$ 26,800.00 | 25 | 12 |
| 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 |
| 2010 | Brookhaven - 45 to 71 Green Ridge Road | Install closed drainage system behind homes. | Funding | \$ 167,800.00 | 21 | 9 |
| 2010 | HARMONY WOODS - DIMINISH DRIVE #150 | INSTALL CLOSED DRAINAGE SYSTEM BEHIND 148 & 150 | Funding | \$ 25,400.00 | 18 | 9 |
| 2010 | OLD CAPITOL TRAIL - 4400 | REPAIR STREAM BANK EROSION | Funding | \$ 12,800.00 | 19 | 7 |
| 2010 | SHIPLEY ROAD - 1919 | INSTALL RIPRAP PROTECTION AT CRITICAL POINTS ALONG BANK AND PIPE OUTLET | Funding | \$ 60,500.00 | 6 | 5 |
| 2010 | HARMONY WOODS - HARMONY CREST DR. # 123 | INSTALL A CLOSED DRAINAGE SYSTEM | Funding | \$ 26,100.00 | 18 | 9 |
| 2010 | MEADOWOOD - 118 FORSYTHIA DRIVE | INSTALL CLOSED DRAINAGE SYSTEM IN REAR YARDS. | Funding | \$ 20,900.00 | 21 | 9 |
| 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 |
| 2009 | DELAWARE CITY DRAINAGE IMP-PHASE II (Branch Canal) | DESIGN AND CONSTRUCT CITY DRAINAGE IMPROVEMENTS | Construction | \$ 2,700,000.00 | 15 | 12 |
| 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 |
| 2009 | SOUTH WILMINGTON - CENTRAL PARK | REGIONAL STORMWATER MANAGEMENT STUDY | Funding | \$ 150,000.00 | 2 | 3 |
| 2009 | SOUTH WILMINGTON - WEST | NEIGHBORHOOD WIDE DRAINAGE ISSUES | Funding | \$ 200,000.00 | 16 | 2 |
| 2009 | NEWPORT GAP PIKE - 3704 | RIPRAP PROTECTION AND WATER MANAGEMENT | Funding | \$ 68,000.00 | 22 | 4 |
| 2009 | MORNINGSIDE - MORNING GLEN LANE # 30 | SOLUTION TO BE DETERMINED | Funding | \$ 16,200.00 | 22 | 4 |
| 2009 | Fairfax - 201 Pinehurst Drive | Install closed pipe system with inlet. | Funding | \$ 26,000.00 | 12 | 4 |
| 2009 | Stratford - 33 E. Edinburgh Drive | Install swale & lawn inlets | Funding | \$ 21,000.00 | 17 | 13 |
| 2008 | Bayview Beach flood protection | New Castle County project in partnership with NCCD | Construction | \$ 750,000.00 | 9 | 14 |
| 2008 | PLEASANT VALLEY FARMS - FERRIS COURT | REALIGN AND STABILIZE A SECTION OF MUDDY RUN | Funding | \$ 136,600.00 | 27 | 10 |
| 2008 | BARLEY MILL COURT STREAM STABILIZATION | STREAM IMPROVEMENTS | Funding | \$ 105,000.00 | 12 | 4 |
| 2008 | AIRPORT ROAD # 168 - # 174 | CONSTRUCT DETENTION POND AND LATERAL DITCHING TO CONTROL RUNOFF | Funding | \$ 153,000.00 | 17 | 13 |
| 2008 | BECHTEL PARK - WALKING PATH BRIDGE | SOLUTION TO BE DETERMINED | Funding | \$ 36,600.00 | 10 | 5 |
| 2008 | HARMONY WOODS - DIMINISH DRIVE #140 | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE STANDING WATER | Funding | \$ 28,800.00 | 18 | 9 |
| 2008 | HARMONY WOODS - MINOR COURT | INSTALL CLOSED DRAINAGE SYSTEM IN REAR YARD. CONNECT TO DOT ON DIMINISH DR. | Funding | \$ 32,200.00 | 18 | 9 |
| 2008 | HARMONY WOODS - PIANO DRIVE # 106 | CONSTRUCT SWALES TO RELIEVE STANDING WATER | Funding | \$ 13,100.00 | 18 | 9 |
| 2008 | CARAVEL HUNT - RICE DR. | SOLUTION TO BE DETERMINED | Funding | \$ 14,700.00 | 15 | 12 |
| 2008 | MARSHALLTON - DUNCAN AND GREENBANK ROAD | REPLACE GUARDRAIL AND RETAINING WALL WITH CONCRETE CHANNEL AND DECORATIVE PARAPET | Funding | \$ 205,000.00 | 19 | 7 |
| 2008 | GREENBANK ROAD # 610 | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE BANK EROSION | Funding | \$ 24,400.00 | 19 | 7 |
| 2008 | HOCKESSIN VILLAGE | IMPLEMENT STUDY RECOMMENDATIONS | Funding | \$ 100,000.00 | 20 | 4 |
| 2008 | LEXINGTON SQUARE - SENTRY LANE | REPAIR CATCH BASIN AND SINKHOLES. REGRADE SWALE | Funding | \$ 13,700.00 | 21 | 9 |
| 2008 | STONEFIELD - BASALT STREET | CONSTRUCT DRAINAGE SWALE IN REAR YARDS FOR PROPER DRAINAGE | Funding | \$ 11,600.00 | 9 | |
| 2008 | WELDIN WOODS - WELDIN CIRCLE | INSTALL UNDERDRAIN AND SWALE TO DRAIN PROPERTY TO STREAM | Funding | \$ 77,700.00 | 6 | 5 |
| 2008 | STONEFIELD - OLIVINE CIR. | INSTALL CB AND PIPE TO DRAIN PONDING AREA | Funding | \$ 7,600.00 | 9 | 14 |
| 2008 | MENDENHALL VILLAGE - BEECHWOOD CIRCLE TO TALL OAKS DRIVE | SOLUTION TO BE DETERMINED | Funding | \$ 10,800.00 | 22 | 4 |
| 2008 | CANNONSHIRE - GENERAL MAXWELL COURT | SOLUTION TO BE DETERMINED | Funding | \$ 32,700.00 | 25 | 10 |
| 2008 | ADDICKS ESTATE 14 MARION AVE | INSTALL CURB & GUTTER WITH CLOSED DRAINAGE SYSTEM TO DIVERT RUNOFF | Funding | \$ 54,800.00 | 10 | 1 |
| 2008 | HARMONY WOODS - CORONET COURT # 5 | CONSTRUCT SWALE TO DRAIN STANDING WATER AREAS IN FRONT AND SIDE YARDS | Funding | \$ 14,800.00 | 18 | 9 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|---------|----------------------|-------------------------|---------------------|
| 2008 | FAULKLAND WOODS - WOODS ROAD | INSTALL NEW ROAD DRAINAGE SYSTEM | Funding | \$ 357,000.00 | 4 | 7 |
| 2008 | WEBSTER FARMS - WEBSTER DRIVE #1119 - #1121 | INSTALL CLOSED SYSTEM TO RELIEVE FLOODING CONDITIONS | Funding | \$ 54,000.00 | 6 | 5 |
| 2008 | DARTMOUTH WOODS - STURBRIDGE DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE SUMP PUMP DISCHARGE INTO STREET | Funding | \$ 34,500.00 | 10 | 5 |
| 2008 | DEVONSHIRE - ALTAMONT DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO CONTROL RUNOFF DIRECTED AT BASEMENT WALL | Funding | \$ 12,500.00 | 10 | 5 |
| 2008 | MIDDLETOWN-SLOOP LANE | INSTALL CLOSED DRAINAGE SYSTEM WITH DROP STRUCTURES TO CHECK EROSION | Funding | \$ 34,000.00 | 9 | 10 |
| 2008 | BELLEFONTE - PROSPECT AVENUE | IMPLEMENT STREAM STABILIZATION AND EROSION CONTROL MEASURES | Funding | \$ 58,600.00 | 6 | 1 |
| 2008 | EDENRIDGE - MT. LEBANON ROAD # 721 | INSTALL CATCH BASIN AND PIPE TO DRAIN LOW AREA IN REAR YARD | Funding | \$ 41,000.00 | 12 | 4 |
| 2008 | THE TIMBERS - MAGNOLIA COURT | INSTALL CATCH BASIN AND PIPE TO ELIMINATE PONDING IN LOW AREA OF CURB | Funding | \$ 19,600.00 | 10 | 5 |
| 2007 | GEORGE READ VILLAGE | FENCE REPAIRS | Funding | \$ 6,500.00 | 25 | 8 |
| 2007 | DIXIE LINE ROAD - NORTH OF I-95 | RESOLVE FLOODING ISSUES | Funding | \$ 25,000.00 | 25 | 10 |
| 2007 | NAAMANS MANOR - VALLEY AVENUE #2204 | SOLUTION TO BE DETERMINED | Funding | \$ 66,800.00 | 7 | 5 |
| 2007 | ARDEN - MARSH ROAD | INSTALL DRAINAGE SYSTEM TO CONTROL RUNOFF FROM MARSH ROAD | Funding | \$ 83,200.00 | 7 | 5 |
| 2007 | BROOKSIDE - KENMAR DRIVE | REESTABLISH AND STABILIZE DRAINAGE DITCH | Funding | \$ 37,000.00 | 24 | 11 |
| 2007 | ROCKLAND - MT. LEBANON ROAD | DRAINAGE IMPROVEMENTS TO CONTROL FLOODING | Funding | \$ 350,000.00 | 12 | 4 |
| 2007 | BRANDYWOOD - VALLEY ROAD | FLOODPROOFING, BOULDER BANK STABILIZATION, SWALE CONSTRUCTION | Funding | \$ 66,800.00 | 10 | 5 |
| 2007 | FAULKLAND ROAD # 2203 | INSTALL DRAINAGE SYSTEM TO ALLEVIATE RUNOFF ENTERING HOUSE | Funding | \$ 37,600.00 | 4 | 7 |
| 2007 | WESTOVER HILLS - SECT. B | REPAIR /REPLACE DETERIORATED AND DAMAGED SIDEWALKS | Funding | \$ 31,100.00 | 4 | 4 |
| 2007 | PINE VALLEY FARMS - WHITE PINE DRIVE | REPLACE PIPE UNDER ROAD WITH ONE OF ADEQUATE CAPACITY | Funding | \$ 48,400.00 | 9 | 14 |
| 2007 | RADNOR GREEN - OSAGE ROAD | REESTABLISH SWALE WITH BERM ALONG SCHOOL PROPERTY TO CONTROL RUNOFF | Funding | \$ 80,800.00 | 7 | 1 |
| 2007 | MORNINGSIDE - MORNING GLEN LANE # 2 | REESTABLISH DRAINAGE DITCH AND STABILIZE WITH RIPRAP TO PREVENT EROSION | Funding | \$ 120,000.00 | 22 | 4 |
| 2007 | FOX WOODS - FOX DRIVE # 106 (REINSTATE) | INSTALL DRAINAGE SYSTEM TO RELIEVE BACKYARD FLOODING | Funding | \$ 22,500.00 | 24 | 9 |
| 2007 | GRAYLYN CREST - GRAYLYN ROAD | STABILIZE STREAM BANKS WITH RIPRAP | Funding | \$ 49,000.00 | 6 | 5 |
| 2007 | FOULK WOODS - DEEPWOOD DRIVE | RESOLVE EROSION CONDITIONS | Funding | \$ 50,000.00 | 10 | 5 |
| 2007 | LUMS POND ESTATES III - HOPE COURT EAST | INSTALL DRAINAGE SYSTEM TO REDIRECT FLOW ALONG BACK OF PROPERTY | Funding | \$ 16,500.00 | 15 | 12 |
| 2007 | CONCORD MANOR - BROOKFIELD AVE. & MARIANNA DRIVE | STUDY TO DEVELOP SOLUTION TO FLOODING OF INTERSECTION | Funding | \$ 30,000.00 | 12 | 5 |
| 2007 | HOCKESSIN HUNT - BRIDLE PATH EAST | REDEFINE AND STABILIZE DRAINAGE CHANNEL | Funding | \$ 17,400.00 | 22 | 4 |
| 2007 | HICKMAN ROAD | CONSTRUCT CURB AND SIDEWALK ALONG HICKMAN RD. | Funding | \$ 33,200.00 | 10 | 1 |
| 2006 | RIVER PARK CONDOMINIUM 1100 LORE AVENUE | STABILIZE DRAINAGE CHANNEL WITH BOULDER WALL AND RIPRAP | Funding | \$ 87,000.00 | 6 | 1 |
| 2006 | GRANDE VIEW FARMS-WELLINGTON WAY | REESTABLISH DRAINAGE DITCH AND ALIGN TO PIPE CROSSING OF RT. 13 | Funding | \$ 19,100.00 | 9 | 12 |
| 2006 | ROLLING MEADOWS-HACKNEY DRIVE | INSTALL PIPE IN ROADSIDE SWALE | Funding | \$ 15,400.00 | 15 | 12 |
| 2006 | NAAMANS MANOR - VALLEY & CLEARVIEW AVES | INSTALL CURBING AND CLOSED SYSTEM FOR DRAINAGE CONTROL | Funding | \$ 93,400.00 | 7 | 5 |
| 2006 | BROOKMEADE - SKYLARK ROAD | INSTALL CATCH BASINS AND PIPE IN STREET TO CONTROL SURFACE RUNOFF | Funding | \$ 17,700.00 | 4 | 7 |
| 2006 | CANNONSHIRE-CANNON RUN #16 & #18 | INSTALL CLOSED DRAINAGE SYSTEM AND SWALE. CONNECT TO DELDOT | Funding | \$ 34,100.00 | 25 | 10 |
| 2006 | ALBAN PARK - HOMESTEAD ROAD | REPLACE FAILED STORM SEWER SYSTEM | Funding | \$ 37,000.00 | 2 | 3 |
| 2006 | BELLE TERRE | STORMWATER MANAGEMENT POND | Funding | \$ 50,000.00 | 12 | 4 |
| 2006 | BRANDYWINE SPRINGS MANOR- ADDISON DRIVE | INST. CLOSED DRAINAGE AND SWALE TO ELIMINATE BASEMENT FLOODING & EROSION | Funding | \$ 48,900.00 | 4 | 7 |
| 2006 | BREEZEWOOD II - W. SHADY DRIVE | EXTEND EXISTING PIPE. CONSTRUCT DRAINAGE INLET. INSTALL PROTECTION GRATE | Funding | \$ 19,500.00 | 24 | 11 |
| 2006 | BRANDYWOOD - MAJESTIC DRIVE | CONSTRUCT DRAINAGE SWALES TO DIRECT RUNOFF AWAY FROM HOUSE STRUCTURE | Funding | \$ 9,700.00 | 10 | 5 |
| 2006 | HARMONY HILLS - KINGSLEY DRIVE | INSTALL DRAINAGE SYSTEM IN REAR YARDS TO ELIMINATE FLOODING | Funding | \$ 44,400.00 | 21 | 9 |
| 2006 | HYDE RUN EROSION CONTROL | EROSION CONTROL AND STABILIZATION MEASURES | Funding | \$ 110,000.00 | 12 | 7 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|---------|----------------------|-------------------------|---------------------|
| 2006 | ELSMERE - LOCUST AVENUE | STUDY & DEVELOP SOLUTION TO DRAINAGE PROBS BEHIND 242 TO 268 LOCUST AVE. | Funding | \$ 15,000.00 | 13 | 7 |
| 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 |
| 2006 | CHRISTIANA BRACE | STORMWATER MANAGEMENT POND | Funding | \$ 100,000.00 | 24 | 11 |
| 2006 | CHANNIN - RAMBLEWOOD DRIVE | REPLACE FAILED DRAINAGE SYSTEM | Funding | \$ 26,800.00 | 10 | 5 |
| 2006 | CHRISTIANA ACRES-MEADOW LANE | CLEAN AND RESHAPE TIDAL DRAINAGE DITCH | Funding | \$ 65,000.00 | 17 | 13 |
| 2006 | WESTOVER HILLS-WESTOVER CIRCLE | STUDY AND DEVELOP SOLUTIONS AND ESTIMATES TO CORRECT RETAINING WALL AND SLOPE FAILURES | Funding | \$ 71,000.00 | 4 | 4 |
| 2006 | VILLAGE OF LINDELL - GREENWAY | CONSTRUCT GREENWAY PATH | Funding | \$ 427,400.00 | 21 | 9 |
| 2006 | COLONIAL PARK-ATKINS AVENUE | INSTALL CLOSED DRAINAGE SYSTEM TO RELIEVE BACK YARD FLOODING AND PONDING | Funding | \$ 40,400.00 | 13 | 3 |
| 2006 | EDINBURGH VILLAS-SHETLAND WAY | INSTALL DRAINAGE SYSTEM IN REAR YARDS TO ELIMINATE STANDING WATER PROBLEMS | Funding | \$ 49,900.00 | 5 | 13 |
| 2006 | YORK FARMS-CORNWELL DRIVE | CLEAR VEGETATION AND INSTALL UNDERDRAIN TO ALLEVIATE ROAD ICING CONDITIONS | Funding | \$ 24,800.00 | 15 | 12 |
| 2006 | CHARTER OAKS 1 | STORMWATER MANAGEMENT POND | Funding | \$ 35,000.00 | 12 | 4 |
| 2006 | STUYVESANT HILLS | STORMWATER MANAGEMENT POND | Funding | \$ 100,000.00 | 12 | 4 |
| 2006 | MENDENHALL VILLAGE 1 | STORMWATER MANAGEMENT POND | Funding | \$ 250,000.00 | 22 | 4 |
| 2006 | THE MILLRACE (ROCKLAND) | DRAINAGE IMPROVEMENTS TO RESOLVE FLOODING PROBLEMS | Funding | \$ 344,400.00 | 10 | 4 |
| 2006 | WESTGATE FARMS-WESTGATE DRIVE | INSTALL UNDERDRAIN SYSTEM, WITH INLETS, DISCHARGING INTO STREAM IN PARKLAND | Funding | \$ 75,700.00 | 4 | 7 |
| 2006 | CLELAND HEIGHTS-CLELAND COURSE | PE TO EVALUATE FLOODING PROBLEMS AND DEVELOP SOLUTIONS | Funding | \$ 15,000.00 | 13 | 3 |
| 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 |
| 2006 | HICKORY WOODS - CHRISSY COURT & SHAGBARK COURT | REESTABLISH DRAINAGE SWALE | Funding | \$ 48,500.00 | 27 | 12 |
| 2006 | GREEN VALLEY-6TH STREET | CONSTRUCT SWALE TO CONVEY RUNOFF OUT OF REAR YARDS | Funding | \$ 11,800.00 | 21 | 9 |
| 2006 | MILLCREEK ROAD # 2802 | INSTALL UNDERDRAIN SYSTEM TO CONTROL SPRING ACTIVITY | Funding | \$ 14,900.00 | 21 | 7 |
| 2006 | ASHBOURNE HILLS - 8 RUBY DRIVE | REPLACE FAILED STORM SEWER PIPE. INSTALL CB TO CONTROL STREET RUNOFF | Funding | \$ 15,000.00 | 7 | 1 |
| 2006 | BELLEFONTE-BEESON ROAD | INSTALL CLOSED DRAINAGE SYSTEM TO RELIEVE BASEMENT AND GARAGE FLOODING | Funding | \$ 47,300.00 | 6 | 1 |
| 2006 | BRANDON-SMITH LANE | INSTALL CLOSED SYSTEM TO ELIMINATE PONDING IN REAR YARD OF 2313 SMITH LN. | Funding | \$ 30,700.00 | 10 | 5 |
| 2006 | NORTHCREST - WALTER DRIVE | INSTALL SWALE TO DRAIN REAR YARDS | Funding | \$ 24,800.00 | 10 | 5 |
| 2006 | SCOTTFIELD - BROADFIELD DRIVE | INSTALL CLOSED DRAINAGE SYSTEM WITH SWALES TO RELIEVE PONDING | Funding | \$ 15,500.00 | 24 | 11 |
| 2006 | WEMBLEY-WEMBLEY DRIVE | INSTALL COMBINED DRAINAGE/UNDERDRAIN SYSTEM TO SOLVE SPRING & ICING PROBS. | Funding | \$ 39,100.00 | 7 | 1 |
| 2006 | WESTWOOD MANOR-BEECHWOOD DRIVE | REPLACE FAILED DRAINAGE SYSTEM | Funding | \$ 30,300.00 | 7 | 5 |
| 2006 | WOODMILL II-W. WOODMILL DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO CONTROL RUNOFF | Funding | \$ 24,900.00 | 21 | 9 |
| 2005 | HYDE PARK | FLOODING PROBLEMS IN AREA | Funding | \$ 150,000.00 | 19 | 7 |
| 2005 | RIVERS END WEST DRIVE | REPLACE CURB TO PROPER GRADE TO PREVENT RUNOFF ONTO DRIVEWAY | Funding | \$ 20,500.00 | 5 | 11 |
| 2005 | RIVERS END EAST DRIVE | INSTALL UNDERDRAINS AND CATCH BASINS TO RESOLVE DRAINAGE PROBLEMS IN YARD | Funding | \$ 20,800.00 | 5 | 11 |
| 2005 | ELSMERE - TOWN WIDE | ANALYZE DRAINAGE INFRASTRUCTURE. SUGGEST IMPROVEMENTS TO REDUCE FLOODING | Funding | \$ 66,000.00 | 13 | 7 |
| 2005 | COOPER FARM - LOCUST ROAD #15 | INSTALL SWALE AND BERM TO DIRECT RUNOFF FROM SCHOOL PROPERTY TO A JUNCTION BOX CONVERTED TO A CATCH BASIN | Funding | \$ 9,400.00 | 19 | 7 |
| 2005 | DELPARK MANOR - REESE COURT | INSTALL CLOSED DRAINAGE SYSTEM. CONNECT TO DELDOT | Funding | \$ 59,800.00 | 19 | 9 |
| 2005 | CEDARCREST | FLOOD DAMAGE REPAIRS | Funding | \$ 20,000.00 | 19 | 7 |
| 2005 | SHELLBURNE DRAINAGE IMPROVEMENTS | CONST. STUDY SOLUTION TO DRAINAGE PROBS ON CARWELL, PASC10, SHELLBURNE | Funding | \$ 240,500.00 | 6 | 5 |
| 2005 | LIMESTONE HILLS - GREENWAY | REPAIR AND RESURFACE GREENWAY PATH | Funding | \$ 110,000.00 | 20 | 8 |
| 2005 | HYDE PARK - DUNCAN ROAD | REMOVE AND REPLACE CURB TO PROPER GRADE. INSTALL CLOSED DRAINAGE SYSTEM | Funding | \$ 28,300.00 | 19 | 7 |
| 2005 | GREEN ACRES - GRINNELL ROAD | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE PONDING IN REAR YARD | Funding | \$ 27,000.00 | 6 | 5 |
| 2005 | SOUTHWOOD | IMPLEMENT STUDY SOLUTIONS FOR EROSION AND DRAINAGE PROBLEMS ON MILL CREEK | Funding | \$ 200,000.00 | 22 | 8 |

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21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|----------|----------------------|--|------------------------|
| 2005 | WESTMINSTER | DETENTION BASIN | Funding | \$ 100,000.00 | 4 | 7 |
| 2005 | CONCORD MANOR - BETHEL STREET | INSTALL DRAINAGE SYSTEM TO RELIEVE BACK YARD PONDING | Funding | \$ 20,800.00 | 12 | 5 |
| 2005 | LINDAMERE - NORTH RD | REMOVE PCC SLAB AND BUILD CATCH BASIN | Funding | \$ 7,400.00 | 6 | 1 |
| 2005 | POSSUM HOLLOW ROAD | SURVEY, INVESTIGATE, AND PREPARE PLANS AND ESTIMATES FOR DRAINAGE IMPROVEMENTS | Funding | \$ 30,000.00 | 21 | 8 |
| 2005 | EAGLE GLEN-WINBURNE DRIVE | INSTALL CLOSED DRAINAGE SYSTEM TO ELIMINATE SWALE DISCHARGE ONTO PAVEMENT | Funding | \$ 10,800.00 | 18 | 13 |
| 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 |
| 2004 | WILMINGTON - WEBB ST. | STUDY FLOODING PROBLEMS | Funding | \$ 1,450,000.00 | 3,4 | 1,3,4 |
| 2004 | ROSEVILLE PARK - BOXWOOD AVENUE | RECONSTRUCT BOXWOOD AVE. BETWEEN OAK AVE. AND CHESTNUT AVE. | Funding | \$ 134,000.00 | 21 | 9 |
| 2004 | WOODLAND TRAILS - DEFOE CIRCLE | INSTALL U-DRAIN SYSTEM CONNECTING TO CB ON TAYLOR DR. TO SOLVE PONDING | Funding | \$ 85,500.00 | 18 | 11 |
| 2004 | VALLEY RUN - BUTTERNUT LANE | INSTALL CLOSED DRAINAGE SYSTEM ALONG VALLEY ROAD (BITTERSWEET DRIVE) | Funding | \$ 14,000.00 | 10 | 5 |
| 2004 | WOODS - SIOUX COURT | INSTALL U-DRAIN TO RELIEVE PONDING. CONNECT TO DELDOT. | Funding | \$ 17,000.00 | 18 | 9 |
| 2003 | ABSALOM JONES DRAINAGE PHASE II | WALL REPAIR AND DRAINAGE IMPROVEMENTS OUTLETING TO STREAM UNDER CEDAR AVE | Planning | \$ 700,000.00 | 19 | 9 |
| 2003 | MILL CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 300,000.00 | 12,19,21,22 | 4,7,8,9 |
| 2003 | DUNLEITH - ANDERSON DR. | INSTALL UNDERDRAIN. CONNECT TO CB ON BUNCHE BOULEVARD | Funding | \$ 52,000.00 | 16 | 2 |
| 2002 | DEERHURST - PIERCE RD | INSTALL UNDERDRAIN AND CATCH BASINS | Funding | \$ 29,300.00 | 6 | 5 |
| 2001 | WILMINGTON - ROCKFORD & IVY/BANCROFT MILLS | INVESTIGATE DRAINAGE AND POLLUTION PROBLEMS | Funding | \$ 80,000.00 | 4 | 1 |
| 2000 | WESTOVER HILLS- DRAINAGE- 5 LOCATIONS | STUDY OF DRAINAGE PROBLEMS IN WESTOVER HILLS | Funding | \$ 615,000.00 | 4 | 4 |
| | LITTLE MILL CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 2,750,000.00 | 2,3,4,12,13,19 | 3,4,7 |
| | NAAMANS CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 750,000.00 | 7,10 | 15 |
| | NAAMANS WATERSHED PROJECTS | PROJECTS IDENTIFIED IN THE NAAMANS CREEK FLOOD ABATEMENT STUDY | Funding | \$ 100,000.00 | 7,10 | 1,5 |
| | RED CLAY CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 250,000.00 | 4,12,21,22 | 4,7,8,9 |
| | WHITE CLAY CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED | Funding | \$ 250,000.00 | 21,22,23,24,25 | 4,7,8,9 |
| | PIKE CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 147,000.00 | 12,17,18,19,21,22, 24 | 4,7,8,9 |
| | SHELLPOT CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 1,100,000.00 | 1,2,6,7,10,12 | 1,2,5 |
| | SHELLPOT CREEK- STORM WATER MANAGEMENT | DEVELOP LAND FOR STORMWATER CONTROL | Funding | \$ 2,000,000.00 | 1,2,6,7,10,12 | 1,2,5 |
| | CHRISTINA CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 300,000.00 | 2,3,4,5,12,13,16,17, 18,19,23,24,25,26,2 7 | 2,3,7,8,9,10,11,12, 13 |
| | DRAGON RUN CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 150,000.00 | 12,22 | 4,8 |
| | WILMINGTON SOUTH DRAINAGE | DRAINAGE PROBLEMS IN WATERSHED | Planning | \$ 250,000.00 | 16 | 2 |
| | CALF RUN WATERSHED | STUDY BANK STABILIZATION PROBLEMS AND IMPLEMENT SOLUTIONS | Funding | \$ 250,000.00 | 15 | 12 |
| | BRIDLESHIRE FARMS | DESIGN AND CONSTRUCT SECONDARY SPILLWAY TO POND | Funding | \$ 200,000.00 | 10 | 1 |
| | ARMY CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 50,000.00 | 19 | 7 |
| | BRANDYWINE CREEK WATERSHED | SEDIMENT CONTROL | Funding | \$ 120,000.00 | 5,17,18 | 1,2,13 |
| | 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 |
| | BACK CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 500,000.00 | 16,17 | 2 |
| | AUGUSTINE CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 50,000.00 | 22 | 8 |
| | Red Clay Creek Watershed - Hyde Run | Streambank stabilization & erosion control for water quality | Funding | \$ 50,000.00 | 16 & 17 | 2 & 12 |
| | New Castle County Flood Studies | Flood studies to revise poorly mapped floodplains in New Castle County | Funding | \$ 250,000.00 | 5 | 13 |
| | Debris Pit | Debris Pit Remediation | | \$ 150,000.00 | | |
| | RUTHERFORD - W. RUTHERFORD DR. #102-#104 | SOLUTION TO BE DETERMINED | Funding | \$ 13,000.00 | 18 | 9 |
| | CHESTNUT RUN | STUDY AND MODELING TO DEVELOP SOLUTIONS TO FLOODING | Funding | \$ 45,000.00 | 24 | 11 |
| | STONEY CREEK WATERSHED | EROSION CONTROL ALONG STREAM | Funding | \$ 15,600.00 | 21 | 4 |
| | RED LION CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 50,000.00 | 5 | 13 |
| | PLUM RUN WATERSHED | EROSION AND STORMWATER CONTROL | Funding | \$ 125,000.00 | 1-13; 15-27 | 1,14 |
| | DRAWYERS CREEK WATERSHED | FLOODING PROBLEMS IN WATERSHED AREA | Funding | \$ 50,000.00 | 18 | 9 |
| | SILVERBROOK RUN | STUDY FLOODING PROBLEMS | Funding | \$ 100,000.00 | 12 | 4 |
| | Woodland Run - 12 Buttonwood Court | Place topsoil in low area & regrade to drain. | Funding | \$ 2,600.00 | 22 | 4 |

Active Resource Conservation and Development Projects

21st Century Fund

New Castle County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|---|---|--|----------|----------------------|-------------------------|---------------------|
| | CANNONSHIRE-CANNON RUN #41-#43 | REPLACE FAILED CURB | Funding | \$ 2,100.00 | 6 | 1 |
| | 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 |
| | Deer Run Road - 145 | Replace three driveways with elliptical arch pipes. | Funding | \$ 160,000.00 | 18 | 9 |
| | FAIRWINDS - GREEN STREET | SOLUTION TO BE DETERMINED | Funding | \$ 90,000.00 | 4 | 7 |
| | LIFTWOOD - WELDIN ROAD | PLACE TOPSOIL, REGRADE, SEED & MULCH TO ELIMINATE LOW AREAS IN FRONT YARD | Funding | \$ 14,000.00 | 4 | 7 |
| | Linden Heath - 6 Inverness Court | Construct a grass swale alongside yard thru to back yard and 3LBGC open space. | Funding | \$ 13,500.00 | 4 | 7 |
| | LONGVIEW FARMS - SOUTH OVERHILL COURT | STUDY AND DESIGN SOLUTION TO FAILING RETAINING WALL | Funding | \$ 85,000.00 | 6 | 5 |
| | MIDDLE RUN CROSSING GREENWAY | CONSTRUCT GREENWAY PATH CONNECTING STARLING STREET TO PARK ON EBENEZER CHURCH ROAD | Funding | \$ 497,800.00 | 22 | 8 |
| | MILL CREEK- HOCKESSIN TO LANTANA | GREENWAY | Funding | \$ 463,800.00 | 25 | 10 |
| | MILL CREEK-PIERSONS RIDGE TO BRACKENVILLE | STUDY FLOODING PROBLEMS, PREPARE PRELIMINARY DESIGN, PERMITS, IMPLEMENT IMPROVEMENTS | Planning | \$ 1,200,000.00 | 10 | 5 |
| | MONTGOMERY WOODS - MONTGOMERY WOODS DR. # 616 | CONSTRUCT SWALE TO DRAIN PONDING WATER ON PROPERTY | Funding | \$ 17,800.00 | 10 | 5 |
| | RADNOR GREEN - NEWCOMB COURT | CONNECT SUMP PUMP DISCHARGE TO DEDOT STORM SEWER SYSTEM | Funding | \$ 9,900.00 | 13 | 3 |
| | Stage Road - 33 Stage Road | Install approx. 150 linear feet of curbing. | Funding | \$ 16,300.00 | 12 | 5 |
| | THE LANDINGS TWIN C LANE | STUDY TO RESOLVE DRAINAGE ISSUES IN BACKYARDS | Funding | \$ 25,000.00 | 10 | 5 |
| | Village of Lindell - 2111 Lindell Blvd. | Recommend a concrete retaining wall. | Funding | \$ 68,400.00 | 6 | 5 |
| SUBTOTAL – 572 New Castle County Active Projects | | | | \$ 40,908,038 | | |

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Active Resource Conservation and Development Projects

21st Century Fund

Kent County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|--|-------------|----------------------|-------------------------|---------------------|
| 2021 | Rt.-14 / Glanden | Approx. 800' of tile system | Scoping | \$ 12,000.00 | 30 | 18 |
| 2021 | Banning Rd. / Maxwell | Approx. 2,000' of open ditch | Scoping | \$ 50,000.00 | 34 | 16 |
| 2021 | Rt.-12 / Stopper | Approx. 4,000' of open ditch | Scoping | \$ 50,000.00 | 30 | 15 |
| 2021 | Upper King Rd. / Johnson Phase II | Approx. 3,000' of open ditch | Scoping | \$ 30,000.00 | 34 | 16 |
| 2021 | Town of Farmington | Drainage outlets | Scoping | \$ 80,000.00 | 30 | 16 |
| 2021 | Cheswold / Strimel | Approx. 1,000' of open ditch | Scoping | \$ 12,500.00 | 29 | 15 |
| 2021 | Sportsman Rd. / Moore | Approx. 4,000' of open ditch | Scoping | \$ 50,000.00 | 30 | 15 |
| 2021 | Brookfield Dr. / DelDOT | Approx. 200' of open ditch | Scoping | \$ 4,000.00 | 34 | 16 |
| 2021 | Jockey Hollow / Spiegelman | Approx. 5,000' of open ditch | Scoping | \$ 25,000.00 | 11 | 15 |
| 2020 | Kitts Hummock Road / Webb | Tile drainage for crossroad pipe | Scoping | \$ 10,000.00 | 32 | 16 |
| 2020 | Rt-9 / Wicks | Tile drainage for crossroad pipe | Scoping | \$ 30,000.00 | 28 | 14 |
| 2020 | Downes Drive / Rodden | Channel reconstruction | Scoping | \$ 50,000.00 | 11 | 15 |
| 2020 | W. Fairway Circle / Hugg | Channel construction and pipe installation | Scoping | \$ 80,000.00 | 29 | 15 |
| 2020 | Pearsons Corner Road / Passwaters | Cleanout of roadside ditching and reset driveway pipes or tile drainage installation to the rear of property | Scoping | \$ 60,000.00 | 29 | 15 |
| 2020 | Windrow Way / Moreau | Reconstruction of swales | Scoping | \$ 10,000.00 | 33 | 16 |
| 2020 | Kenton Road / Stotler | Reconstruction of swales | Scoping | \$ 7,000.00 | 29 | 15 |
| 2020 | Farmington Drainage / Butler | Open ditch reconstruction | Scoping | \$ 10,000.00 | 30 | 16 |
| 2020 | Hopkins Cemetery Road / Peterson | Installation of new pipe system along road | Scoping | \$ 60,000.00 | 30 | 15 |
| 2020 | Paradise Alley Road / Bailey | Installation of new tile system for road pipe | Scoping | \$ 30,000.00 | 30 | 15 |
| 2020 | Fernwood Drive / Webber | Construct open ditch through Fernwood Development | Scoping | \$ 25,000.00 | 30 | 16 |
| 2020 | Rose Dale Lane / Fleitz | Construction of open ditch and tile drainage | Scoping | \$ 50,000.00 | 11 | 15 |
| 2020 | Plum Drive / Hurd | Fix pipe with a sink hole and construct outlet ditch | Scoping | \$ 50,000.00 | 34 | 16 |
| 2020 | Ironmine Road / Ford | Construct open ditch | Scoping | \$ 20,000.00 | 30 | 15 |
| 2020 | 1679 DuPont Highway / KCD | Pipe and catch basin repair | Engineering | \$ 50,000.00 | 32 | 16 |
| 2020 | Kenton Rd. / High Street | Storm drain system | Scoping | \$ 75,000.00 | 30 | 18 |
| 2020 | McKee Rd. / Pruett | Reconstruction of open ditch and replacement of pipes | Scoping | \$ 25,000.00 | 29 | 15 |
| 2020 | Moore's Meadows | Construction of open ditch | Scoping | \$ 50,000.00 | 29 | 17 |
| 2020 | Williamsville Rd. / Pike | Reconstruction of open ditch and replacement of pipes | Scoping | \$ 50,000.00 | 11 | 15 |
| 2019 | Alley Corner Rd / Lowman | Installation of approx. 160' pipe and two catch basins | Engineering | \$ 15,000.00 | 29 | 15 |
| 2019 | Delshire Dr. / Bastian | Swale and/or tile construction | Scoping | \$ 10,000.00 | 29 | 17 |
| 2019 | Fast Landing Road / Worshan | Regrading and open ditching | Scoping | \$ 20,000.00 | 29 | 17 |
| 2019 | Fulton St. / Coker | Reconstruction of approx. 1,500' of open ditch and replacement of pipe crossings. | Scoping | \$ 20,000.00 | 29 | 15 |
| 2019 | Logan Dr. / Cooper | Reconstruction of approx. 1,100' of roadside swale and repair of driveways. | Scoping | \$ 80,000.00 | 29 | 17 |
| 2019 | Lynbury Woods Road / Kern | Reconstruction of approx. 1,000' of open ditch and replacement of 4 pipe crossings. | Scoping | \$ 80,000.00 | 29 | 18 |
| 2019 | Midstate Road / George | Reconstruction of approx. 2,000' of roadside ditch and installation of 10 pipes | Scoping | \$ 40,000.00 | 33 | 16 |
| 2019 | N. Erin Ave / Wright | Backyard drainage and/or tile system | Scoping | \$ 10,000.00 | 30 | 15 |
| 2019 | Parkway Dr. / Lucas | Repair catch basins and fill sinkhole around existing catch basins | Scoping | \$ 10,000.00 | 29 | 17 |
| 2019 | Pinewood Acres Mobile Home Park / Moore | Reconstruction of approx. 2,000' of open ditch. | Scoping | \$ 12,000.00 | 29 | 15 |
| 2019 | W. Denneys Rd. / Opdyke | Reconstruction of approx. 2,000' of open ditch including a portion through residential yards. | Scoping | \$ 20,000.00 | 29 | 15 |
| 2019 | West Milby St. / Benson | Reconstruction of approx. 500' of ditch. | Scoping | \$ 5,000.00 | 30 | 18 |
| 2018 | Smyrna Leipsic Rd / Scuse | Approx. 450' of storm drain and 3 catch basin installation | Engineering | \$ 100,000.00 | 28 | 14 |
| 2018 | 85 Laurel Dr / Malago | Approx. 600' of storm drain system and 5 catch basins installation | Scoping | \$ 125,000.00 | 32 | 17 |
| 2018 | Brookview Ave / Hans | Rock outlet protection | Scoping | \$ 7,000.00 | 34 | 16 |
| 2018 | Central Church Rd / Pritchett | Approx. 800' of open ditch, approx. 500' of storm drain, and 3 catch basins | Scoping | \$ 100,000.00 | 29 | 15 |
| 2018 | Cypress Branch Rd / Goodwill | Approx. 300' of storm drain system and 3 catch basins | Scoping | \$ 60,000.00 | 32 | 16 |
| 2018 | Fast Landing Rd / Mack | Approx. 500' of open ditch | Scoping | \$ 10,000.00 | 28 | 14 |
| 2018 | Gravelly Run Tax Ditch S-3 of S-12 of P-8 | Approx. 800' of open ditch reconstruction | Scoping | \$ 10,000.00 | 11 | 15 |
| 2018 | Heritage Dr / Hutchins | Approx. 2,000' of open ditch | Scoping | \$ 15,000.00 | 31 | 17 |
| 2018 | Janice Dr / Reinholz | Approx. 2,000' of open ditch | Scoping | \$ 20,000.00 | 34 | 16 |
| 2018 | Marvels Crossroads Tax Ditch Dip out | Approx. 3,200' of open ditch | Planning | \$ 25,000.00 | 33 | 18 |
| 2018 | Marydel Tax Ditch Prong H / Steele | Bank stabilization | Scoping | \$ 30,000.00 | 11 | 15 |
| 2018 | The Mead / Cooper | Approx. 100' of open ditch, approx. 200' of storm drain, and 2 catch basins installation | Scoping | \$ 50,000.00 | 33 | 18 |
| 2018 | Tobacco Rd / Fulton | Approx. 600' of open ditch | Scoping | \$ 20,000.00 | 29 | 15 |
| 2018 | Vernon Tax Ditch | Approx. 5,000' of tax ditch dip out | Scoping | \$ 10,000.00 | 30 | 15 |
| 2018 | Westville Rd / Profaci | Approx. 1,000' of open ditch | Scoping | \$ 10,000.00 | 29 | 15 |
| 2018 | Woods Edge Rd / Loeffler | Approx. 300' of yard drainage | Scoping | \$ 10,000.00 | 30 | 15 |

Active Resource Conservation and Development Projects

21st Century Fund

Kent County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|-------------|----------------------|-------------------------|---------------------|
| 2018 | Woodyard Rd / Brubaker | Approx. 800' of open ditch and approx. 100' of tile drainage | Scoping | \$ 40,000.00 | 30 | 18 |
| 2017 | Gravelly Run Tax Ditch Main / Severson | Replace crossing | Engineering | \$ 75,000.00 | 11 | 15 |
| 2017 | 241 South Shore Drive / Green | Approx. 600' roadside ditch with pipe replacements and rock outlet protection. | Engineering | \$ 60,000.00 | 34 | 16 |
| 2017 | Willow Grove Rd / Pratt | Approx. 1,000' of 6" tile and well installation | Scoping | \$ 10,000.00 | 30 | 15 |
| 2017 | N. Little Creek Rd / Denham | Pipe replacement | Engineering | \$ 50,000.00 | 32 | 17 |
| 2017 | 751 Oak Point School Rd / Slack | Approx. 1,000' of ditch reconstruction and regrade yard | Scoping | \$ 10,000.00 | 11 | 15 |
| 2017 | 115 Stevenson Dr / McDonald | Approx. 4,500' of open ditch in yards | Scoping | \$ 70,000.00 | 34 | 16 |
| 2017 | 1472 Log Cabin Rd / Peterman | Approx. 4,500' of open ditch and pipe replacement | Scoping | \$ 35,000.00 | 33 | 16 |
| 2017 | 1697 Sorghum Mill Rd. / Hoffecker | Approx. 600' of ditch reconstruction and bank stabilization. | Scoping | \$ 20,000.00 | 34 | 16 |
| 2017 | 299 Daniel Rodney Dr. / Bryant | Pipe repair | Scoping | \$ 5,000.00 | 32 | 16 |
| 2017 | 4134 Dupont Hwy. / Kisner | Approx. 1,700' of ditch reconstruction. | Scoping | \$ 10,000.00 | 29 | 17 |
| 2017 | 727 Twin Willows Rd / Boyer | Approx. 100' of ditch reconstruction and repair or replace old dam. | Scoping | \$ 20,000.00 | 28 | 14 |
| 2017 | Carlisle Village / Palchik | Approx. 350' of ditch reconstruction | Scoping | \$ 2,500.00 | 29 | 15 |
| 2017 | Gunter Road / Hamonko | Approx. 700' of ditch reconstruction and replace two pipes | Scoping | \$ 10,000.00 | 11 | 15 |
| 2017 | Millchop Lane / Shuford | Approx. 2,000' of ditch reconstruction and approx. 200' of pipe replacement | Scoping | \$ 40,000.00 | 34 | 16 |
| 2017 | Pearsons Corner Rd / Mosley | Approx. 1,500' of ditch reconstruction | Scoping | \$ 7,500.00 | 29 | 15 |
| 2017 | Pearsons Corner Rd / Simpers | Approx. 2,300' of ditch reconstruction | Scoping | \$ 25,000.00 | 29 | 15 |
| 2017 | Brook Court / Nabb | Approx. 1,700' of ditch reconstruction | Scoping | \$ 15,000.00 | 11 | 15 |
| 2017 | 267 Pardoners Tale Ln. / Jefferson | Pipe repair | Scoping | \$ 5,000.00 | 30 | 15 |
| 2016 | 4938 Halltown Rd / Carey | Pipe replacement | Engineering | \$ 100,000.00 | 11 | 15 |
| 2016 | Tomahawk Tax Ditch / Greenwood Rd | Prong 6 bank stabilization | Scoping | \$ 40,000.00 | 30 | 18 |
| 2016 | 12338 South Dupont Hwy. / Alam | Approx. 2,500' of ditch reconstruction | Scoping | \$ 25,000.00 | 30 | 15 |
| 2016 | 703 Fence Post Ln. / Burgess | Approx. 4,000' of ditch reconstruction | Scoping | \$ 40,000.00 | 34 | 17 |
| 2016 | 2608 Hunting Quarter Rd. / Passwaters | Approx. 1,500' of ditch reconstruction | Scoping | \$ 10,000.00 | 30 | 18 |
| 2016 | 863 Peach Basket Rd. / Crouch | Approx. 1,500' of ditch reconstruction | Scoping | \$ 10,000.00 | 30 | 15 |
| 2016 | 1335 Hazletville Rd. / Rogers | Approx. 2,000' or ditch reconstruction and new pipe under road | Scoping | \$ 30,000.00 | 29 | 15 |
| 2016 | 3132 Kenton Rd. / Kaper | Approx. 300' of ditch reconstruction | Scoping | \$ 3,000.00 | 29 | 15 |
| 2016 | 866 Sunnyside Rd. / Jones | Approx. 150' of roadside swale | Scoping | \$ 2,000.00 | 29 | 14 |
| 2016 | 52 Luther Marvel Rd. / Smith-Morlock | Approx. 600' of roadside ditch and pipe | Scoping | \$ 6,000.00 | 11 | 15 |
| 2016 | 245 Artis Dr. / Emerson | Approx. 3,000' of ditch reconstruction | Scoping | \$ 30,000.00 | 29 | 17 |
| 2016 | 861 Rothermel Rd. / Runkel | Approx. 1000' of roadside swale and/or ditch | Scoping | \$ 10,000.00 | 33 | 18 |
| 2016 | 936 Proctors Purchase Rd. / Walker | Approx. 500' of ditch reconstruction | Scoping | \$ 5,000.00 | 11 | 15 |
| 2016 | 3698 Judith Rd. / Gonzalez | Approx. 4,000' of ditch reconstruction | Scoping | \$ 40,000.00 | 11 | 15 |
| 2016 | 56 Myrtle St. / English | Backyard drainage improvements | Scoping | \$ 30,000.00 | 28 | 14 |
| 2016 | 2887 McKee Rd. / Pruett | Approx. 1,000' of ditch reconstruction and pipes | Scoping | \$ 20,000.00 | 29 | 15 |
| 2016 | 2484 Arthursville Rd / Metheny | Approx. 500' of open ditch | Scoping | \$ 10,000.00 | 11 | 15 |
| 2016 | 414 Turkey Point Rd / Thompson | Approx. 800' of open ditch | Scoping | \$ 16,000.00 | 34 | 16 |
| 2016 | 292 Evelynale Dr. / Ballis | Approx. 2,000' of roadside ditches | Scoping | \$ 75,000.00 | 29 | 17 |
| 2016 | 105 Fox Hall Dr / Posey | Approx. 800' of open ditch | Scoping | \$ 16,000.00 | 31 | 17 |
| 2016 | 219 Fox Crossing Dr. / Foltz | Approx. 1,000' of open ditch and replace 2 pipes | Scoping | \$ 30,000.00 | 11 | 15 |
| 2015 | Pearsons Corner Road / Trice | Approx. 1,500' of pipe and catch basins | Engineering | \$ 100,000.00 | 29 | 15 |
| 2015 | 1778 Peachtree Run / Walsh | Approx. 4,000' of open ditch construction | Land Rights | \$ 40,000.00 | 34 | 16 |
| 2015 | 155 Carlisle Dr. / Macolley | Install yard basin and approx. 200' of pipe out to roadside pipe. | Scoping | \$ 20,000.00 | 29 | 15 |
| 2015 | 128 Rocky Meadows Ln. / Reyna | Approx. 3,000' open ditch construction | Scoping | \$ 20,000.00 | 29 | 17 |
| 2015 | 1463 Hartly Rd. / Hightman | Approx. 200' of open ditch construction | Scoping | \$ 1,000.00 | 29 | 15 |
| 2015 | 272 Mt. Friendship Rd. / Sebastianelli | Replace approx. 1,000' of tile | Land Rights | \$ 8,000.00 | 29 | 15 |
| 2015 | 3 Vigil Ct. / Jester | Yard basin and approx. 200' of 6" tile installation | Scoping | \$ 2,000.00 | 29 | 15 |
| 2015 | 307 Gettysburg Rd. / Burton | Repair existing pipe joint. | Scoping | \$ 1,000.00 | 31 | 17 |
| 2015 | 50 Bulldog Dr. / Gondeck | Approx. 3,000' of open ditch construction. | Scoping | \$ 20,000.00 | 32 | 17 |
| 2015 | 53 East St. / Hutchins | Pipe replacement with catch basin | Scoping | \$ 50,000.00 | 29 | 15 |
| 2015 | 566 Upper King / Mathews | Approx. 4,000' of open ditch construction and approx. 500' of pipe replacement | Scoping | \$ 70,000.00 | 34 | 15 |
| 2015 | 651 Strauss Ave. / Pinder | Replace approx. 450' of 24" corrugated metal pipe and install three catch basins. | Scoping | \$ 40,000.00 | 29 | 15 |
| 2015 | 27 Wildwood Road / Fairfield Farms / Ott | Streambank stabilization on Isaac's Branch | Scoping | \$ - | 34 | 16 |
| 2015 | 7435 Pearsons Corner Rd. / Scott | Approx. 600' of open ditch construction. | Scoping | \$ 3,000.00 | 29 | 16 |
| 2015 | 75 Aspencade Dr. / Washington | Approx. 800' of open ditch construction and total disposal of debris. | Scoping | \$ 10,000.00 | 34 | 15 |
| 2015 | 86 Logan Dr. / Johnson | Approx. 500' of open ditch construction and approx. 90' of pipe replacement | Scoping | \$ 20,000.00 | 30 | 15 |
| 2015 | Still Rd / Berhaier / Storage | Approx. 9,000' of open ditch | Scoping | \$ 45,000.00 | 30 | 15 |
| 2014 | Bethesda Tax Ditch / Shetzler | Bank stabilization | Scoping | \$ 15,000.00 | 11 | 15 |
| 2014 | Bowers Beach Road / Tuthill | Reconstruct approx. 300' of channel outlet | Scoping | \$ 5,000.00 | 33? | 16 |

Active Resource Conservation and Development Projects

21st Century Fund

Kent County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|--------------|----------------------|-------------------------|---------------------|
| 2014 | Bryn Zion Road / Tackett | Install approx. 300' of new storm drain | Scoping | \$ 20,000.00 | 11 | 14 |
| 2014 | Thompsonville Road / Cohee | Reconstruct approx. 3,500' of channel outlet | Scoping | \$ 25,000.00 | 33 | 16 |
| 2014 | Vining Road, Pharsalia | Bank stabilization and/or stream restoration | Scoping | \$ 20,000.00 | 34 | 16 |
| 2014 | Woodmill Drive / Hill | Reconstruct approx. 2,500' of channel outlet | Scoping | \$ 20,000.00 | 31 | 17 |
| 2013 | Walnut Shade Road / Lavender | Cleanout/flush pipe and area at outlet of pipe | Engineering | \$ 10,000.00 | 34 | 16 |
| 2013 | Abbotts Pond Road / Gallagher | Reconstruct approx. 1,000' of channel outlet and replace DeDOT crossing pipe | Scoping | \$ 20,000.00 | 30 | 18 |
| 2013 | Big Ditch Road / Szweczyk | Reconstruct approx. 600' of channel outlet | Scoping | \$ 5,000.00 | 11 | 15 |
| 2013 | Carpenters Bridge Road / Wooters | Reconstruct approx. 2,000' of channel outlet | Scoping | \$ 20,000.00 | 33 | 15, 18 |
| 2013 | Clapham Road / Roe | Reconstruct approx. 1,000' of channel outlet | Scoping | \$ 15,000.00 | 33 | 16 |
| 2013 | Deep Grass Lane / Griffith | Reconstruct approx. 4,000' of channel outlet | Scoping | \$ 40,000.00 | 30, 33 | 18 |
| 2013 | Dickerson Street/Clayton/Pazdalski | Reconstruct approx. 600' of channel outlet | Scoping | \$ 5,000.00 | 28 | 14 |
| 2013 | Evens Road / Stevens / Dill | Repair and/or replace 6" tile outlet | Scoping | \$ 7,500.00 | 34 | 16 |
| 2013 | Little Mastens Corner Road / Alexander | Reconstruct approx. 1,000' of channel outlet | Scoping | \$ 10,000.00 | 30 | 15 |
| 2013 | Paradise Alley Road / Wright | Solution to be determined | Scoping | \$ 20,000.00 | 30 | 15 |
| 2013 | Twin Eagles Farms / Caldwell | Reconstruct approx. 7,000' of channel outlet | Scoping | \$ 70,000.00 | 11 | 15 |
| 2013 | Willow Grove Road / Blawn | Reconstruct approx. 1,000' of channel outlet | Scoping | \$ 15,000.00 | 34 | 15 |
| 2013 | Town of Little Creek | Reconstruct, restore, and enhance approx. 6,000' of channel outlet | Scoping | \$ 60,000.00 | 28 | 16 |
| 2013 | Brownsville Road / Arthur Biggs | Reconstruct approx. 2,000' of channel outlet | Scoping | \$ 20,000.00 | 30 | 15 |
| 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 | \$ 83,280.00 | 32 | 16 |
| 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase II - Pickering Beach | Installation of approx. 1,250' of roadside ditch and 50' of storm drain near the intersection of Pickering Beach Road and entrance to Little Creek Wildlife Area. | Engineering | \$ 50,318.00 | 32 | 16 |
| 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase III - Kitts Hummock | Installation of drainage inlets and approx. 100' of storm drain with backflow prevention. | Engineering | \$ 53,044.00 | 32 | 16 |
| 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase IV - Kitts Hummock | Installation of approx. 7' of roadside drainage with riprap protection. | Engineering | \$ 18,500.00 | 32 | 16 |
| 2012 | Kent County Bay Beach Communities Drainage Studies / Improvements Phase V - Kitts Hummock | Maintain roadside ditches from the intersection of Bay Drive to community entrance. | Engineering | \$ 83,280.00 | 32 | 16 |
| 2012 | Voshells Cove, Richard Blvd. / Gibson | Approx. 2,000' of channel reconstruction | Scoping | \$ 30,000.00 | 29 | 15 |
| 2012 | Andrews Lake Road / Baker | Approx. 4,000' of channel reconstruction | Scoping | \$ 40,000.00 | 33 | 16 |
| 2012 | North Rehoboth Blvd., Milford / Kent Sussex Industries | Bank stabilization | Scoping | \$ 35,000.00 | 33 | 18 |
| 2012 | Rosebowl Road / Seeny | Approx. 2,000' of channel reconstruction | Scoping | \$ 30,000.00 | 29 | 15 |
| 2012 | South State Street / Young | Storm drain maintenance | Scoping | \$ 20,000.00 | 34 | 16 |
| 2012 | Star Hill Village, Lingo Drive / Freeman | Storm drain maintenance | Scoping | \$ 35,000.00 | 34 | 16 |
| 2012 | Windward Drive, Lakewind / Whidby | Subdivision storm drain maintenance | Scoping | \$ 30,000.00 | 33 | 16 |
| 2012 | Persimmon Park Place / Blanchfield | Reconfigure storm drain system | Scoping | \$ 25,000.00 | 28 | 17, 14 |
| 2012 | Breeders Crown Farm, Foal Court / Roy Jones | Subdivision storm drain upgrade | Scoping | \$ 25,000.00 | 33 | 18 |
| 2011 | Persimmon Park Place | Approx. 4,000' of channel reconstruction | Scoping | \$ 675,000.00 | 28 | 17, 14 |
| 2011 | Plymouth Road / Langley Drainage Improvements | Approx. 750' of channel reconstruction | Engineering | \$ 8,000.00 | 30 | 15 |
| 2011 | Plymouth Road / Miller Drainage Improvements | Approx. 450' of channel reconstruction | Engineering | \$ 5,000.00 | 30 | 15 |
| 2011 | Pearsons Corner Road / Durham | Reconstruct approx. 2,000' of channel outlet | Scoping | \$ 20,000.00 | 29, 11 | 15 |
| 2011 | Dyke Branch Road / Kelty | Approx. 900' of channel reconstruction | Scoping | \$ 6,480.00 | 29 | 17 |
| 2011 | West Big Woods Road / Lafon | Approx. 500' of channel reconstruction | Scoping | \$ 5,000.00 | 28 | 15 |
| 2011 | West Evens Road / Seeley | Approx. 2,500' of channel reconstruction | Scoping | \$ 30,000.00 | 34 | 16 |
| 2011 | Hidden Pond, Felton | Approx. 2,000' of channel reconstruction | Engineering | \$ 10,000.00 | 30 | 15 |
| 2011 | Owls Nest Road / Payes | Approx. 800' of channel reconstruction | Scoping | \$ 5,000.00 | 11 | 15 |
| 2011 | Moose Lodge Road / Larrimore Drainage Improvements | Approx. 2,500' of channel reconstruction | Scoping | \$ 30,000.00 | 34 | 16 |
| 2011 | Woods Haven / New Wharf Road Drainage Improvements | Approx. 2,000' of channel reconstruction and replace and/or repair portion of storm drain system | Engineering | \$ 65,000.00 | 33 | 18 |
| 2011 | Chesapeake Bay, Kent County, Conservation Initiatives | Various channel and wetland restoration and creation projects | Scoping | \$ 100,000.00 | 11, 29, 30 | 15, 18 |
| 2011 | Fox Hall / Carnoustie Road | Approx. 1,000' of channel reconstruction | Scoping | \$ 3,600.00 | 31 | 17 |
| 2011 | Wild Quail Drainage Improvements Phase II | Replace and/or repair various storm drains and storm drain outlets | Funding | \$ 150,000.00 | 29 | 15 |
| 2011 | Deer Valley Road / Lear | Approx. 3,000' of channel reconstruction | Scoping | \$ 30,000.00 | 33 | 18 |
| 2010 | Town of Houston Drainage Improvements Phase I | Improve drainage outlets for various low areas in and around the Town of Houston. Phase I is for Breeder's Crown | Construction | \$ 90,000.00 | 33 | 18 |

Active Resource Conservation and Development Projects

21st Century Fund

Kent County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|--|-------------|----------------------|-------------------------|---------------------|
| 2010 | Hazelwood Subdivision Drainage Improvements | Roadside swale or pipe along private road and improve drainage outlet for Hazelwood subdivision | Engineering | \$ 40,000.00 | 28 | 14 |
| 2010 | McGinnis Pond Road / Wilgus | Reconstruct approx. 1,000' of channel outlet | Scoping | \$ 12,000.00 | 33 | 16 |
| 2010 | Millchop Lane / Perry | Approx. 500' of ditch reconstruction | Scoping | \$ 6,000.00 | 34 | 16 |
| 2010 | Mt. Friendship Road / Miller | Pipe replacement and ditch reconstruction | Scoping | \$ 20,000.00 | 29 | 15 |
| 2010 | Westville Road / Hurd | Approx. 500' of ditch reconstruction | Scoping | \$ 4,000.00 | 29 | 15 |
| 2010 | Lucky Estates Subdivision Drainage Improvements | Improve drainage outlet for Lucky Estates Subdivision | Scoping | \$ 50,000.00 | 30 | 18 |
| 2010 | Planters Woods Subdivision Drainage Improvements | Improve drainage outlet for Planter's Woods Subdivision stormwater ponds | Scoping | \$ 30,000.00 | 29 | 15 |
| 2010 | Drake Ct., Wild Quail / Susan Cook | Approx. 200' of storm drain repair | Scoping | \$ 20,000.00 | 29 | 15 |
| 2010 | Town of Houston Drainage Improvements Phase II | Improve drainage outlets for various low areas in and around the Town of Houston. Phase II is for Front Street | Scoping | \$ 90,000.00 | 33 | 18 |
| 2010 | Town of Houston Drainage Improvements Phase III | Improve drainage outlets for various low areas in and around the Town of Houston. Phase III is for Deep Grass Rd | Scoping | \$ 90,000.00 | 33 | 18 |
| 2009 | Millington Road / Walsh | Approx. 1,000' of outlet reconstruction | Scoping | \$ 12,000.00 | 11 | 15 |
| 2008 | Seeneytown Road / Peet | Approx. 4,000' of ditch reconstruction | Engineering | \$ 24,000.00 | 11 | 15 |
| 2008 | Bryn Zion Road / Timber Mills / Kreiger | Replace approx. 1,200' of deteriorated storm drain and install approx. 4 catch basins | Engineering | \$ 200,000.00 | 11 | 15 |
| 2008 | Paradise Lane / Pallum / Looney | Beaver dam removal | Scoping | \$ 5,000.00 | 31 | 17 |
| 2008 | Puncheon Run Drainage & Stormwater Improvements | Stream and drainage improvements | Scoping | \$ 250,000.00 | 31, 32 | 16, 17 |
| 2007 | City of Dover- Tarr Ditch | Improvements to drain system | Funding | \$ 8,000,000.00 | 32, 31 | 17 |
| 2007 | W. Denneys Road, near Maidstone Branch Road / Blose / Foltz | Reconstruct approx. 4,000' of channel outlet | Scoping | \$ 80,000.00 | 29 | 15 |
| 2007 | Burnite Mill Road / Dearman | Reconstruct approx. 4,000' of channel outlet | Scoping | \$ 60,000.00 | 30 | 15 |
| 2007 | Carlson Way | Reconstruct approx. 3,500' of channel outlet | Scoping | \$ 60,000.00 | 29 | 15 |
| 2007 | North Little Creek Road / Desanto | Install approx. 400' of storm drain and reconstruct approx. 300' of channel | Engineering | \$ 20,000.00 | 32 | 17, 16 |
| 2007 | Fairfield Drive / Krum Phase 2 | Reestablish approx. 1,000' of drainage way through yards | Scoping | \$ 75,000.00 | 34 | 16 |
| 2006 | Greenbriar Road / Penneypacker | Flood study | Engineering | \$ 15,000.00 | 11 | 15 |
| 2006 | Commerce Street, Cheswold / Caldwell | Repair approx. 500' of deteriorated storm drain | Engineering | \$ 65,000.00 | 29 | 15 |
| 2006 | Karl Drive, Eberton / Towery | Remove debris from existing ditch | Scoping | \$ 3,000.00 | 29 | 17 |
| 2006 | Seven Hickories Road / Towery | Reconstruct approx. 1,000' of existing ditch | Scoping | \$ 12,000.00 | 29 | 15 |
| 2006 | Town of Camden West Street Drainage Improvements | Ditch reconstruction and storm drain improvements within the Town of Camden in the vicinity of West Street | Scoping | \$ 350,000.00 | 34 | 17 |
| 2005 | Swain Ave., Tara Subdivision / Murray | Reconstruct approx. 1,200' of roadside swale within Tara Subdivision | Scoping | \$ 24,000.00 | 33 | 16 |
| 2005 | Dyke Branch Road / Friedman | Reconstruct approx. 1,000' of ditch through and along yards into wooded wetland | Engineering | \$ 8,000.00 | 29 | 17 |
| 2005 | Rt. 44 / Fedewa | Reconstruct approx. 1,000' of channel outlet (Rt. 44 / Altemus Phase 2) | Land Rights | \$ 6,600.00 | 11 | 15 |
| 2005 | Deer Track Lane / Snyder | Approx. 4,000' of channel reconstruction | Scoping | \$ 35,000.00 | 29 | 17 |
| 2004 | Barbara Blvd., Breezewood / Cerbone | Approx. 4,000' of ditch reconstruction | Engineering | \$ 37,800.00 | 34 | 16 |
| 2004 | Midtree Drive / Murphy | Approx. 600' of ditch reconstruction | Scoping | \$ 6,000.00 | 33 | 18 |
| 2004 | North Little Creek Road / Maurer / Miller | Replace approx. 1,200' of storm drain | Scoping | \$ 36,000.00 | 32 | 17 |
| 2004 | South Dupont Hwy. / McGowan | Approx. 1,600' of ditch reconstruction and replace approx. 3 private crossing pipes | Scoping | \$ 24,000.00 | 30 | 18 |
| 2004 | Overlook on Silver Lake / Richardson | Retrofit catch basin | Scoping | \$ 20,000.00 | 31 | 17 |
| 2004 | Kitts Hummock Drainage Improvements - Phase II | Approx. 3,000' of ditch reconstruction through marsh | Land Rights | \$ 120,000.00 | 32 | 16 |
| 2004 | Rt. 44 / Altemus Phase 2 | Approx. 500' of ditch reconstruction | Land Rights | \$ 15,000.00 | 11 | 15 |
| 2004 | Judith Road / Sego | Approx. 6,000' of ditch reconstruction and replace 3 private crossing pipes | Scoping | \$ 36,000.00 | 11 | 15 |
| 2003 | Pearsons Corner Road / Detweiler | Approx. 7,000' of ditch reconstruction | Engineering | \$ 75,000.00 | 11, 29 | 15 |
| 2002 | Hidden Acres | Stream improvements | Permitting | \$ 40,000.00 | 29 | 15 |
| 2002 | Pearsons Corner Road / Sbriglia | Approx. 5,000' of ditch reconstruction | Land Rights | \$ 10,000.00 | 11, 29 | 15 |
| 2002 | Wyoming Mill Pond Spillway - Bank Stabilization | Approx. 750' of bank stabilization | Scoping | \$ 120,000.00 | 31, 34 | 17 |
| 2002 | Apple Grove School Road, Washington / Todds Mill Road | Stream improvements | Scoping | \$ 12,000.00 | 29, 31 | 15 |
| 2002 | Hazletville Road / Blann | Approx. 4,000' of ditch reconstruction | Scoping | \$ 30,000.00 | 11, 29 | 15 |
| 2001 | Town of Clayton Drainage Improvements Phase III | Storm drain improvement for the west side of the Town of Clayton | Scoping | \$ 70,000.00 | 28 | 14 |
| 2000 | Silver Lake Water Management Project - DelTech Terry Campus | Design, construct and improve the drainage and stormwater system within DelTech Terry campus | Engineering | \$ 350,000.00 | 31 | 17 |
| 2000 | Rodney Village / Abbate | Approx. 2,000' of channel reconstruction | Scoping | \$ 25,000.00 | 32 | 17 |

Active Resource Conservation and Development Projects

21st Century Fund

Kent County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|---|--|--|---------|----------------------|-------------------------|---------------------|
| 2000 | Beech Drive, Eden Rock / Carson Phase II | Remove invasive species from pond and revegetate with native plants | Scoping | \$ 5,000.00 | 29 | 15 |
| 2000 | Silver Lake Water Management Project - Dover Pool | Design and construct approx. 200' of a regenerative stormwater conveyance system | Scoping | \$ 100,000.00 | 28, 31 | 17 |
| 2000 | Silver Lake Water Management Project | Update water management practices for the Silver Lake Watershed | Scoping | \$ 387,000.00 | 31 | 17 |
| 2000 | Silver Lake Water Management Project - Central Middle School | Design and construct approx. 200' of a regenerative stormwater conveyance system | Scoping | \$ 25,000.00 | 31 | 17 |
| 1998 | South Little Creek Road / Little | Approx. 4,000' of ditch reconstruction, replace DeDOT road crossing pipe, and repair and/or replace existing pond outlet structure | Scoping | \$ 300,000.00 | 32 | 17, 16 |
| 1998 | Lockwood Chapel Road / Krupka Phase 2 (Main) | Approx. 3.5 miles of ditch reconstruction | Scoping | \$ 200,000.00 | 11 | 15 |
| SUBTOTAL – 216 Kent County Active Projects | | | | \$ 17,411,902 | | |

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Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|---|-------------|----------------------|-------------------------|---------------------|
| 2021 | Ross Station Rd. / Murphy | Dip out of a private ditch (350 ft.) that outlets a big area of roadside (Ross Station Rd.) drainage going back to the outlet at Herring Branch Tax Ditch (Main). S 2020-67 Murphy. | Scoping | \$ 35,000.00 | 39 | 21 |
| 2021 | Lighthouse Rd. (Rt. 54) / Adkins | During the Rt. 54 expansion a stormwater pond was installed by Del-Dot and its outlets to a ditch that does not flow. The ditch borders a farm field and a development (Tea Berry Woods) and outlets to Roy Creek. This ditch would be considered tidal on the downstream end. Approx. 1,050' of dip out is needed on this ditch badly. | Scoping | \$ 43,000.00 | 39 | 18 |
| 2021 | Phillips Ditch / Probert | Downed tree removal on a section of the ditch, sediment bar removal, and clear/grub near the outlet pipes. S 2020-102 Probert | Scoping | \$ 25,000.00 | 41 | 20, 21 |
| 2021 | Picarello / Nicholas - Sanchez / Tranquility Lane | Connect private ditch to CB that outlets to Georgetown Vaughn TD - Prong 15. S 2018-387, S 2019-336, S 2020-20 | Scoping | \$ 27,000.00 | 37 | 19 |
| 2021 | Hudson Road Tax Ditch / Anicola | Drainage improvement to address drainage concerns in the vicinity of Prong 1 of the Hudson Road Tax Ditch. | Engineering | \$ 100,000.00 | 20 | 6 |
| 2021 | Town of Blades/ West Eighth Street | Install catch basin, approx. 20' of pipe, and 32' of curb to the catch basin. | Scoping | \$ 9,500.00 | 39 | 19, 21 |
| 2021 | Spinnaker Court/Bay Harbor/Cannon | Repair of on street drainage collection/conveyance and repair/replacement of failing outfall pipe | Scoping | \$ 20,000.00 | 14 | 6 |
| 2021 | Clendaniel Rd. / Fitzpatrick | Approx. 5,000' of existing ditch maintenance | Engineering | \$ 40,000.00 | 18 | 35 |
| 2021 | Kovach / SW Milford Drainage Improvements | Cleanout and debris removal of approx. 3,000' of existing drainage course. | Scoping | \$ 60,000.00 | 18 | 36 |
| 2020 | Airport Road/Hearn | Placeholder while project is being developed (DC S2018-338) | Scoping | \$ 1,000.00 | 39 | 21 |
| 2020 | Branch Acres/Taylor | Approx. 450' of new ditch construction and approx. 1,000' of channel reconstruction | Scoping | \$ 35,000.00 | 41 | 20 |
| 2020 | Brickyard Road/Hearn | Approx. 1,700' of ditch maintenance that borders Mobile Gardens Mobile Home Park (DC S2018-355) | Scoping | \$ 1,000.00 | 39 | 21 |
| 2020 | Byard Road/Langenfelder | Approx. 1,600' of channel reconstruction | Scoping | \$ 1,000.00 | 38 | 20 |
| 2020 | Cedar Neck Road/Bullock | Approx. 5,000' of ag ditch maintenance, installation of approx. 1,500' of new storm drain, and construction of approx. 800' of new ditch. | Planning | \$ 200,000.00 | 36 | 18 |
| 2020 | Clam Avenue/Brittingham | Drainage improvements in Beachwood Development | Scoping | \$ 1,000.00 | 38 | 20 |
| 2020 | Gordy Road/Chapman | Placeholder while the project is being developed (DC S2018-259) | Scoping | \$ 1,000.00 | 40 | 21 |
| 2020 | Lisa Avenue/Kaufman | Approx. 1,000' of channel reconstruction, approx. 400' new ditch (DC S2019-248), replacement of crossroad pipe (DC S2018-346 S2019-248) | Scoping | \$ 35,000.00 | 38 | 20 |
| 2020 | Morgan Drive/Gale | New swale construction and driveway pipe installation. Approx. 1,000' of ditch cleanout | Scoping | \$ 25,000.00 | 35 | 18 |
| 2020 | Nelsa Lane/Valente | Addition to the scope of Oak Orchard/Oak Meadows | Engineering | \$ 75,000.00 | 37 | 20 |
| 2020 | Old Stage Road watershed study | Flood study of Cooper Branch tributary to Broad Creek | Scoping | \$ 60,000.00 | 40 | 21 |
| 2020 | Paradise Road/Richardson | Approx. 7,000' of channel reconstruction | Scoping | \$ 75,000.00 | 40 | 19 |
| 2020 | Rehoboth Manor/ Difrancesco | New street drainage on Canal and Bay Streets and rehabilitation of existing storm drains for approx. 930' (DC S2019-13) | Engineering | \$ 150,000.00 | 14 | 6 |
| 2020 | Route 5/Thompson | Replacement of private crossroad pipe on Rock Switch Street and ditch cleanout. | Scoping | \$ 20,000.00 | 20 | 18 |
| 2020 | Smithfield Acres/Lyons | Emergency addition to replace pipe under Smith Avenue and ditch cleanout. | Planning | \$ 21,000.00 | 38 | 20 |
| 2020 | Spicer Road/Baynes | Approx. 4,500' of channel reconstruction | Scoping | \$ 75,000.00 | 36 | 18 |
| 2020 | The Glade/August | Approx. 1,000' of channel reconstruction and replacement of 8 driveway pipes. | Planning | \$ 35,000.00 | 14 | 6 |
| 2020 | Warwick Park/Fowler | Solve multiple drainage issues and rehabilitate storm drain within the community | Scoping | \$ 200,000.00 | 41 | 20 |
| 2020 | Cannon Road/Cancel | Reconstruct approx. 1,500' of open ditch connecting to Bucks Branch Tax Ditch | Scoping | \$ 15,000.00 | 39 | 19 |
| 2020 | Cross Keys Road/Messick | Approx. 4,500' of dip out and new ditch construction (DC S2019-376) | Scoping | \$ 60,000.00 | 41 | 21 |
| 2020 | Denton Manor/Jensen | Approx. 2,000' of channel reconstruction. Replacement of culvert and storm drain along Railway Avenue. Reconstruction of drainage network inside of Denton Manor | Engineering | \$ 225,000.00 | 38 | 20 |
| 2020 | Gordy Road/Littleton | Reconstruct approx. 2,100' of agricultural drainage ditch. (DC S2019-249) | Scoping | \$ 30,000.00 | 40 | 21 |
| 2020 | Magnolia Street Drainage / Town of Milton | Town of Milton project to improve the drainage of Magnolia Street and the Municipal parking lot. | Planning | \$ 150,000.00 | 20 | 6 |

Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|------------------------|----------------------|-------------------------|---------------------|
| 2020 | Midpark/Pertuccy | Installation of storm drain system in development. Potential streetscape project | Scoping | \$ 200,000.00 | 14 | 6 |
| 2020 | N. Union Church Rd. / Fitzgerald / Evans | Approx. 15,000' of ditch reconstruction and replacement of pipes. (DC S2019-205) | Scoping | \$ 100,000.00 | 35 | 18 |
| 2020 | Quaint Acres / VanBergen / Pusey Drainage Improvement | Reconstruct approx. 2,000' of drainage swales and road crossings in the development. This project ties into the upper end of Sub 1 of Prong 3A (DC S2018-294 & S2019-327) | Scoping | \$ 75,000.00 | 38 | 20 |
| 2020 | Shiloh Rd / Semat | Roadside drainage improvements and expansion of L&W Tax Ditch (DC S2019-241) | Scoping | \$ 50,000.00 | 40 | 21 |
| 2020 | South Hampton / McCabe Tax Ditch | Replacement of 6 private crossroad pipes in the South Hampton Development. | Scoping | \$ 150,000.00 | 38 | 20 |
| 2020 | Wil King Road / Thomas | Approx. 2,000' of new ditch to provide an outlet to the northern end of Wilking Road. (DC S2019-355) | Scoping | \$ 25,000.00 | 14 | 6 |
| 2020 | Wilson Hill Road / Klingensmith | Reconstruct approx. 4,500' of open ditches that outlet to Mifflin Tax Ditch (DC S2019 -293) | Scoping | \$ 50,000.00 | 35 | 19 |
| 2019 | Dukes Job Tax Ditch / Morris Bank Stabilization Phase 2 | Bank stabilization on the Main of Dukes Jobs Tax Ditch above Prong 5 | Engineering/Permitting | \$ 60,000.00 | 40 | 21 |
| 2019 | Johnson Road (S434A) / Wojciechowski/McCabe | Reconstruction of 3,000' of channel and/or addition of Prong to Indian Drain Tax Ditch | Engineering | \$ 75,000.00 | 40 | 21 |
| 2019 | Pusey Road / Hudson | Reconstruction of approx. 5,000' of agricultural drainage ditches | Engineering | \$ 40,000.00 | 40 | 20 |
| 2019 | Herring Branch Tax Ditch Prong 8 /Town of Frankford | Reconstruction of Prong 8 of Herring Branch Tax Ditch and improve connection with Town infrastructure | Scoping | \$ 100,000.00 | 41 | 20 |
| 2019 | Anderson Corner Rd. / Marsh | Reconstruction of approx. 1,500' of ditch and replacement of culverts | Land Rights | \$ 25,000.00 | 20 | 19 |
| 2019 | Bethesda Road / Gaskins | Approx. 800' of storm drain to provide an outlet for properties east of Bethesda Rd. | Scoping | \$ 100,000.00 | 41 | 20 |
| 2019 | Chapel Branch Road / Davis | Approx. 2,000' of new ditch through agricultural lands | Scoping | \$ 20,000.00 | 39 | 19 |
| 2019 | Dennis Lane / Pocomoke Tax Ditch Main Bank Stabilization | Stabilization of areas upstream and downstream of Dennis Lane along the right bank. | Scoping | \$ 75,000.00 | 41 | 21 |
| 2019 | Holly Branch Tax Ditch / Dunn | Piping approx. 850' of Holly Branch Tax Ditch along Horsey Church Road (S510) | Scoping | \$ 455,000.00 | 40 | 21 |
| 2019 | Indian Beach Drainage Improvements | Reconstruction of tidal ditches that provide an outlet to Route 1 and the Indian Beach Community | Scoping | \$ 50,000.00 | 14 | 5 |
| 2019 | Kent Avenue / Middlesex Beach Drainage Improvements | Drainage improvements in the community and the outlet for community along Kent Avenue to the canal. | Scoping | \$ 150,000.00 | 38 | 20 |
| 2019 | Neals School Road / Jester Drainage Improvements | Reconstruction of approx. 850' of existing ditch near the intersection of Neals School Road and Hill Road | Scoping | \$ 7,500.00 | 39 | 19 |
| 2019 | Pear Tree Rd / Cooper | Reconstruction of approx. 2,000' of ditch through agricultural lands and woods. | Scoping | \$ 40,000.00 | 41 | 21 |
| 2019 | Route 54 / James Branch Tax Ditch / McKelvey Drainage Improvements | Improvements to Prong 1 of James Branch Tax Ditch to improve the outlet for Rt. 54 | Scoping | \$ 40,000.00 | 40 | 21 |
| 2019 | Savannah Ditch Drainage Improvements | Reconstruction of approx. 5 miles of channels in the Savannah ditch watershed. Provides drainage outlet to Sand Hill Rd, Route 9, and the Northeast Quadrant of Georgetown. | Scoping | \$ 500,000.00 | 36, 37, 20 | 19, 5 |
| 2019 | Sea Country Estates / Suter/ Barton Drainage Improvements | Reconstruction of approx. 4,000' of existing ditch between developments and internal drainage within Sea Country Estates | Scoping | \$ 75,000.00 | 38 | 20 |
| 2019 | Walnut Street / Town of Frankford / Garcia Gusman | Reconstruction of approx. 1,000' of ditch North of Walnut Street in Frankford. | Scoping | \$ 30,000.00 | 41 | 20 |
| 2018 | Frankford Library/Green Street Drainage Improvements | Replacement of approx. 300' of storm drainpipe and maintenance of approx. 250' drainage ditch | Planning | \$ 75,000.00 | 38 | 20 |
| 2018 | Clearbrooke Estates / Damms | Improve swale conveyance within development and add outlet to Hearn's pond. (DC 2017-173) | Scoping | \$ 750,000.00 | 35 | 19 |
| 2018 | Gravel Hill Rd / Kershaw | Approx. 1,200' of open ditch to improve drainage and relieve flooding on property and buildings; catch basin nearby. (S2017-70) | Scoping | \$ 12,000.00 | 36 | 19 |
| 2018 | King George III Street / McFadden | Re-grading and new swales and possible pipe installation in development adjacent to Indian River High School. (S2017-124) | Scoping | \$ 25,000.00 | 41 | 20 |
| 2018 | Manchester Manor / Navarro | Drainage improvements within the Manchester Manor Subdivision (S 2017-83) | Scoping | \$ 100,000.00 | | |
| 2018 | Pepper Creek TD Sub Prong 3 of 1 Relocation | Relocate and dip-out sub-prong 3 of prong to create outlet that was previously filled in by Savannah Square Shopping Center project. | Scoping | \$ 25,000.00 | 41 | 20 |
| 2018 | Sussex Avenue / Allen St. /Dunn | Rain garden with connection into City of Seaford drainage system. (S2017-30) | Scoping | \$ 20,000.00 | 39 | 21 |

Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|--|------------------------|----------------------|-------------------------|---------------------|
| 2018 | Woodland Road / Massey | Approx. 1,000' of new ditch to connect to DelDOT drainage | Scoping | \$ 18,000.00 | 39 | 21 |
| 2017 | Russel Rd. / Harris | Maintenance of approx. 1,900' of existing ditch with installation of crossing at farm lane. | Land Rights | \$ 50,000.00 | 35 | 19 |
| 2017 | Reid / Delmar Rd | Maintenance of nonfunctioning drainage ditch | Construction | \$ 40,000.00 | 40 | 21 |
| 2017 | Whites Neck Rd / Vella | Approx. 3,200' of ditch reconstruction and cleanout of existing culvert. Drainage Improvements within White Neck Village (DC S 2019-224) | Planning | \$ 150,000.00 | 38 | 20 |
| 2017 | Walston Walk Ct. / Greene | Clean and replace approx. 420' of open and piped ditch; coordinate with DelDOT | Scoping | \$ 50,000.00 | 38 | 20 |
| 2017 | Oyster Bay / Bay Vista Rd | Ditch/swale ponding water to catch basin. Approx. 1,200' of proposed storm drain to Rehoboth Canal | Scoping | \$ 250,000.00 | 14 | 6 |
| 2017 | Dartmouth Drive Congestion Relief Project / DelDOT | Storm drain improvements for the relief route between Dartmouth Drive and SR1 | Scoping | \$ 25,000.00 | 14 | 6 |
| 2016 | Harts Landing - Love Creek Pines Lane - Pizzadili Drainage Improvements | Drainage improvements to re-route flow from Harts Landing to Love Creek. | Land Rights | \$ 150,000.00 | 14 | 6 |
| 2016 | Bridgeville Branch Main Channel Restoration Phase II | Stabilize and/or restore Bridgeville Branch Tax Ditch between Route 13 and 13A. | Engineering/Permitting | \$ 500,000.00 | 35 | 19 |
| 2016 | Crazy Ln & 5th St - Stinson Drainage Improvements | Drainage improvements to Bay Vista subdivision. | Scoping | \$ 20,000.00 | 14 | 6 |
| 2016 | Highland Acres Drainage Improvements | Drainage improvements to Highland Acres subdivision. | Scoping | \$ 50,000.00 | 20 | 6 |
| 2016 | Sea Aire Village - Kings Creek Drainage Improvements | Drainage improvements within Sea Aire Village and connection of blind ditch to outlet. | Scoping | \$ 50,000.00 | 14 | 6 |
| 2016 | Swedes & Bayard Streets - Dewey Beach - Yorgiadis Drainage Improvements | Drainage improvements to outlet drainage from intersection and residential lots. | Scoping | \$ 25,000.00 | 14 | 6 |
| 2015 | Nanticoke Watershed Parrot Feather Eradication | Treatment program for the removal of Parrot Feather milfoil. Partnership with several tax ditches and SCD. | Planning | \$ 10,000.00 | 30, 35 | 18, 19 |
| 2015 | Bay Haven Street / Scott Drainage Improvements | Drainage improvements in Roger's Haven Subdivision. | Scoping | \$ 25,000.00 | 38 | 20 |
| 2015 | Ocean Way Estates - Hoffmaster Drainage Improvements | Drainage Improvements to Ocean Way Estates | Scoping | \$ 75,000.00 | 38 | 20 |
| 2015 | Long Neck Drainage Study | Drainage Studies and Improvements in the Long Neck Community | Scoping | \$ 100,000.00 | 37 | 6, 20 |
| 2015 | Cart Branch Tax Ditch Prong C Bank Stabilization | Installation of approx. 300' of pipe and/or replacement piles. | Scoping | \$ 50,000.00 | 35 | 18 |
| 2015 | Anchorage Canal Drainage Area Highway Wet Pond Stormwater Retrofit | Stormwater Retrofit to existing wet ponds | Scoping | \$ 750,000.00 | 38 | 20 |
| 2015 | Anderson Corner Rd / Giove Drainage Improvements | Dip out of approx. 500' of ditch and removal of large vegetation | Scoping | \$ 6,500.00 | 20 | 19 |
| 2015 | Branchview / Niblett Phase II | Repair approx. 1,200' of existing corrugated metal pipe storm drain in Branchview Development | Scoping | \$ 60,000.00 | 39 | 20 |
| 2015 | Bunting Road - Buckalew Drainage Improvements | Install 1,500' of drainage from low area out to Pepper Creek. | Scoping | \$ 100,000.00 | 41 | 20 |
| 2015 | Club House Rd / Hutson Drainage Improvements | Creation of ditch in backyards to outlet residential low spot to Derricksan Canal Tax Ditch. | Scoping | \$ 3,500.00 | 38 | 20 |
| 2015 | Ellendale Tax Ditch/Beach Hwy Rt.16 / Wyatt Drainage Improvements | Drainage improvements to Ellendale Tax Ditch. | Scoping | \$ 25,000.00 | 36 | 18 |
| 2015 | Hunter Drive / McGinnis Drainage Improvements | Drainage Improvements to failed infiltration pond | Scoping | \$ 36,000.00 | 20 | 6 |
| 2015 | Little Bay Tax Ditch Restoration | Approx. 100' of bank stabilization and creation of a floodplain along Prong 1. | Scoping | \$ 35,000.00 | 38 | 20 |
| 2015 | Mallard Lakes Drainage Improvements | Drainage improvements to community of Mallard Lakes | Scoping | \$ 200,000.00 | 38 | 20 |
| 2015 | McColley Street/Stevens Drainage Improvements | Drainage improvements to the residences between McColley, Gilcrest, and Marshall Streets | Scoping | \$ 2,500.00 | 36 | 18 |
| 2015 | Peddler's Village - DelDOT Drainage Improvements | Drainage improvements to existing infrastructure. | Scoping | \$ 50,000.00 | 14 | 6 |
| 2015 | Overbrook Shores/Moore Drainage Improvements | Install catch basins and culverts under the driveways with an outfall at the marina. | Scoping | \$ 34,000.00 | 20 | 6 |
| 2015 | Sherwood Forest /Jackson / Dawson | Stormwater management pond retrofit and conveyance from strip lots along Rt. 24 | Scoping | \$ 30,000.00 | 37 | 19 |
| 2015 | Ward Cordrey TD P3 Drainage Improvements | Re-install pipes and dip-out approx. 1,650' of channel to provide positive outfall to Prong 3 of tax ditch. | Scoping | \$ 40,000.00 | 40 | 21 |
| 2015 | Unity Branch/Holly Lake Campground Watershed Study | Drainage studies and improvements in the Unity Branch watershed upstream of Rt. 24. | Scoping | \$ 100,000.00 | 20, 37 | 6, 19 |
| 2015 | Bay Colony - Cripple Creek Drainage Improvements | Drainage improvements to structures within the Bay Colony and Cripple Creek subdivisions. | Scoping | \$ 550,000.00 | 38 | 20 |

Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|--|--------------|----------------------|-------------------------|---------------------|
| 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. | Construction | \$ 750,000.00 | 37 | 20 |
| 2014 | Little Bay T.D. / Oceanside Pkwy Culvert Replacement | Replacement of culvert under Oceanside Pkwy. | Engineering | \$ 400,000.00 | 38 | 20 |
| 2014 | Oak Orchard Drainage Improvements - Phase 5 | Drainage Improvements to Oak Meadows Subdivision. | Engineering | \$ 918,000.00 | 37 | 20 |
| 2014 | Oak Orchard Drainage Improvements - Phase 3 | Drainage improvements to the intersection of River Road, Cerise Avenue, & Roberta Lane. | Engineering | \$ 951,000.00 | 37 | 20 |
| 2014 | Oak Orchard Drainage Improvements - Phase 2 | Drainage improvements to River Road approx. 2,000' west of Chief Road. | Engineering | \$ 945,000.00 | 37 | 20 |
| 2014 | Overbrook Shores / Frey Drainage Improvements | Install approx. 500' of pipe and catch basins to Carsyljan Acres Tax Ditch | Engineering | \$ 150,000.00 | 20 | 6 |
| 2014 | East Drive / Harvey Trip Drainage Projects | Installation of approx. 700' of pipes, catch basins, and an outlet structure of existing pond. | Scoping | \$ 65,000.00 | 41 | 20 |
| 2014 | Discount Land Rd / Carter Drainage Improvements | Channel construction/addition to Prong 5 to Mirey Branch T.D. north of Discount Land Rd (S468) | Planning | \$ 13,000.00 | 39 | 21 |
| 2014 | Argyle Lane / Fise / Gugerty Drainage Improvements Phase II | Drainage improvements to Argyle Lane and construction of drainage conveyance to Kent Avenue. | Planning | \$ 175,000.00 | 38 | 20 |
| 2014 | Reservation Trail / Grzybowski Drainage Improvements | Re-establish approx. 500' of drainage swales | Land Rights | \$ 12,000.00 | 38 | 20 |
| 2014 | Guinea Creek Tax Ditch | Creation of a new tax ditch to help Long Neck Drainage issues | Planning | \$ 600,000.00 | 37 | 20 |
| 2014 | Deer Run Acres Drainage Improvements | Stormwater management system upgrades to subdivision and Forest Rd (DC S292, S112-118) | Scoping | \$ 315,000.00 | 38 | 20 |
| 2014 | Delaware Avenue / Godwin Drainage Improvements | Construct approx. 2,300' of ditch along Delaware Ave (S054A), private property, & railroad | Scoping | \$ 96,000.00 | 41 | 20 |
| 2014 | Town of Millsboro / Wilson Hwy Drainage Improvements | Approx. 500' of storm drain replacement along Wilson Hwy. | Scoping | \$ 360,000.00 | 41 | 20 |
| 2014 | Town of Oceanview / Atlantic Ave. Drainage Improvements | Improvements to stormwater management plan outlet along Atlantic Ave. (S026) | Scoping | \$ 65,000.00 | 38 | 20 |
| 2014 | Beaverdam Rd / Hollymount Rd | Approx. 2000' of ditch regrading and piping. Addition of crossroad pipes under road. (Barnes) | Scoping | \$ 52,000.00 | 20 | 6 |
| 2014 | Burbage Rd / Mark Brown Drainage Improvements | Approx. 1,000' of open ditch. | Scoping | \$ 13,000.00 | 38 | 20 |
| 2014 | Evans Real Estate Drainage Improvements | Approx. 60' of pipe and catch basin | Scoping | \$ 20,000.00 | 38 | 20 |
| 2014 | Murray Estates Drainage Improvements | Repair and replacement of existing stormwater management infrastructure. | Scoping | \$ 32,500.00 | 38 | 20 |
| 2014 | Vines Creek / Cathell Drainage Improvements | Clearing and snagging trees along Vines Creek. | Scoping | \$ 32,500.00 | 41 | 20 |
| 2014 | Plantation Park / Silver Woods Public Ditch | Dip out of approx. 5,300' of ditch | Scoping | \$ 106,000.00 | 38 | 20 |
| 2014 | City of Seaford / Virginia Ave (S639) Drainage Improvements | Stormwater management system upgrades | Scoping | \$ 75,000.00 | 39 | 21 |
| 2014 | Yacht Basin Rd / Ellis Drainage Improvements | Dip out and reconstruction of approx. 1,800' of public ditch | Scoping | \$ 36,000.00 | 38 | 20 |
| 2014 | Chapel Branch Prong / Lare | Dip out of approx. 7,300' of prong | Scoping | \$ 73,000.00 | 39 | 19 |
| 2014 | Poplar Grove / Forest Rd Drainage Improvements | Upgrade stormwater management system to subdivision and Forest Rd. (S292) | Scoping | \$ 315,000.00 | 20 | 6 |
| 2014 | Brasures Branch TD / Rickards Bank Stabilization | Bank stabilization of tax ditch | Scoping | \$ 35,000.00 | 38 | 20 |
| 2014 | Longneck / Christina Hall Drainage Improvement | Install approx. 250' of open drainage to stormwater management plan | Scoping | \$ 9,750.00 | 37 | 19 |
| 2014 | Angola Rd / Maietti Drainage Improvements | Drainage improvements through Angola By the Bay Subdivision south of Angola Rd. (S277) | Scoping | \$ 650,000.00 | 14 | 6 |
| 2014 | Lakeview Rd / Donna Lanham Bank Stabilization | Approx. 200' of bank stabilization east of bridge. | Scoping | \$ 52,000.00 | 41 | 21 |
| 2014 | Rt. 30 Whitesville Rd / Philips Drainage Improvements | Replacement of failing catch basin south of Whitesville Rd (S064). | Scoping | \$ 6,500.00 | 40 | 21 |
| 2014 | Munchy Branch Rd/Griffith Drainage Improvements | Approx. 1,300' of pipe and ditch regrading. | Scoping | \$ 80,000.00 | 14 | 6 |
| 2014 | Town of Oceanview / Caroline St. Drainage Improvements | Approx. 2,000' of drainage improvements. | Scoping | \$ 39,000.00 | 38 | 20 |
| 2013 | Carsyljan Acres / Jordan Drainage Improvements | Reconstruct drainage in the Carsyljan Acres Development | Engineering | \$ 150,000.00 | 20 | 6 |
| 2013 | Georgetown Vaughn P-9 | Redesign Prong 9 of Georgetown Vaugh Tax Ditch including the replacement of 500' of storm drain | Scoping | \$ 105,000.00 | 37 | 19 |
| 2013 | Deer Forrest Rd / Price Drainage Improvements | Approx. 1,700' of pipe and catch basins | Scoping | \$ 525,000.00 | 35 | 19 |

Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|---|-------------|----------------------|-------------------------|---------------------|
| 2013 | Elliott-Evans TD/ Evans Bank Stabilization | Approx. 700' of bank stabilization/stream restoration on lower end of main ditch | Scoping | \$ 210,000.00 | 40 | 21 |
| 2013 | Line Rd / Lee Drainage Improvements | Agriculture drainage | Scoping | \$ 53,000.00 | 40 | 21 |
| 2013 | North Oak Grove Rd / Willin Drainage Improvements | Reconstruct approx. 5,000' of existing agricultural drainage ditch | Scoping | \$ 28,000.00 | 39 | 19 |
| 2013 | Shawnee Rd / Cummings Drainage Improvements | Culvert under Shawnee Rd and tie into Young-Patterson tax ditch | Scoping | \$ 27,000.00 | 35 | 18 |
| 2013 | Town of Bridgeville / Mill Street Drainage Improvements | Installation of new catch basin and approx. 200' feet of storm drain. | Scoping | \$ 35,000.00 | 35 | 19 |
| 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 | \$ 265,000.00 | 41 | 20 |
| 2013 | Falling Point Rd / Witmer Drainage Improvements | Replacement of approx. 120' of 24" storm drain and removal of sediment from lagoon | Scoping | \$ 42,000.00 | 38 | 20 |
| 2012 | Silver Lake / Rehoboth Phase II | Improvements to outfall of Silver Lake. | Engineering | \$ 225,000.00 | 14 | 6 |
| 2012 | Woodpecker Rd / Wollschlager Drainage Improvements | Cleanout approx. 6,000' of ditch | Scoping | \$ 60,000.00 | 39 | 21 |
| 2012 | Ennis Road/ Owens Drainage Improvements | Approx. 200' of ditch maintenance | Land Rights | \$ 15,000.00 | 37 | 19 |
| 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 | \$ 37,000.00 | 36 | 18 |
| 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 | \$ 27,000.00 | 36 | 18 |
| 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 | \$ 40,000.00 | 36 | 18 |
| 2012 | Primehook / Fowlers Beach Drainage Improvements Phase 1 | 340' 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 | \$ 94,000.00 | 36 | 18 |
| 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 | \$ 147,000.00 | 36 | 18 |
| 2012 | RD 207/213 Drainage Improvements | Approx. 2,700' of ditch maintenance | Engineering | \$ 75,000.00 | 35, 36 | 18 |
| 2012 | Bunting Tax Ditch Prong 2 Bank Stabilization | Approx. 1,000' of bank stabilization and culvert replacement under Line Road | Engineering | \$ 150,000.00 | 38 | 20 |
| 2012 | Crestfield / Fluharty / Valentine Drainage Improvements | Placeholder while project is developed | Planning | \$ 25,000.00 | 39 | 19 |
| 2012 | Iron Mine Tax Ditch Bank Stabilization | Bank Stabilization on Main of Iron Mine Tax Ditch | Scoping | \$ 750,000.00 | 35 | 18, 19 |
| 2012 | Governor Stockley Rd / McCray Drainage Improvements | Reconstruct approx. 1,500' of ditch | Scoping | \$ 21,000.00 | 41 | 19 |
| 2012 | Revel Road / DeIDOT Drainage Improvements | Approx. 500' of new ditch and culvert under road | Planning | \$ 100,000.00 | 41 | 20, 21 |
| 2012 | Dewey Beach Drainage Study | Drainage study | Scoping | \$ 35,000.00 | 14 | 6 |
| 2012 | Donovan Rd / Mifflin TD / DeIDOT Drainage Improvements | Extend Mifflin Tax Ditch or construct new ditch approx. 1,500' to Donovan Road | Scoping | \$ 25,000.00 | 37 | 19 |
| 2011 | Avalon Woods / Frank Jewell Drainage Improvements | Plan, design, and construct a drainage system in the development. | Land Rights | \$ 550,000.00 | 37 | 19 |
| 2011 | Teacher Rd / Cropper Drainage Improvements | Plan, design, and construct drainage system in Forest Park Mobile Home Park & reconstruct approx. 3,000' of ditch. | Scoping | \$ 150,000.00 | 41 | 20 |
| 2011 | Deep Creek Tax Ditch Bank Stabilization Phase 1 (Purdue) | Approx. 400' of bank stabilization on the right side of the Deep Creek Tax Ditch Main Channel, located 6,600' upstream of Old Furnace Road. | Engineering | \$ 55,000.00 | 35 | 19 |
| 2011 | Bacons Way / Shawnee Place / Bacon | Cleanout approximately 1,000' of road ditch and replace 3 driveway pipes | Scoping | \$ 16,000.00 | 35 | 18 |
| 2011 | Murphy Lane / Helen Carter Drainage Improvements | Approx. 1,000' of new ditch through woods into Redden Tax Ditch | Scoping | \$ 21,000.00 | 36 | 19 |
| 2011 | Oakridge Development (Rd 258) / Foley Drainage Improvements | Construct outlet for pre-stormwater infiltration pond | Scoping | \$ 126,000.00 | 20 | 6 |
| 2011 | S. Union Church / John Falk Drainage Improvements | Approx. 3,000' of storm drain | Scoping | \$ 160,000.00 | 35 | 18, 19 |
| 2011 | Scotland Rd / Sabatrie Singh Drainage Improvements | Approx. 1,000' of storm drain along Scotland Rd. | Scoping | \$ 63,000.00 | 40 | 21 |
| 2011 | Shawnee Rd / Donald Bolton Drainage Improvements | Approx. 4,000' of ditch reconstruction, 700' of storm drain, and 300' of new ditch | Scoping | \$ 60,000.00 | 35 | 18 |
| 2011 | Woods Drive / Carolyn Ludwig Drainage Improvements | Plan, design, and construct drainage system in development. | Scoping | \$ 210,000.00 | 14 | 6 |

Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|---|--|--------------|----------------------|-------------------------|---------------------|
| 2011 | Mirey Branch / Wan Yu Bank Stabilization | Approx. 150' of bank stabilization needed on the right side of Mirey Branch and nearby roadway. | Scoping | \$ 32,000.00 | 40 | 21 |
| 2011 | Atlanta Devonshire Development / Tveekrem Drainage Improvement | Approx. 1000' of new ditch in the development | Scoping | \$ 21,000.00 | 39 | 21 |
| 2011 | Sand Hill Rd / Thelam Folke Drainage Improvements | Approx. 6,000' of ditch reconstruction | Scoping | \$ 26,000.00 | 36 | 19 |
| 2011 | Marks Lane / Sally Marks Drainage Improvements | Approx. 5,280' of storm drain installation | Scoping | \$ 525,000.00 | 37 | 19 |
| 2011 | Neptune Rd / Luther Warren Drainage Improvements | Install approx. 600' of storm drain to tie DeDOT drainage into Redden Wood Development stormwater system | Scoping | \$ 80,000.00 | 36 | 19 |
| 2010 | Herring Branch Tax Ditch / Parson Bank Stabilization | Approx. 300' of bank stabilization of Herring Branch Tax Ditch Main below Rt 20 | Engineering | \$ 30,000.00 | 41 | 20 |
| 2010 | Sandy Branch Development / Clarke | Approx. 1,200' of bank stabilization | Scoping | \$ 205,000.00 | 41 | 20 |
| 2010 | Road 213 / Driscoll / Drainage Improvements | Approx. 2,500' of new ditch | Scoping | \$ 28,000.00 | 35, 36 | 18 |
| 2010 | Bay View Rd / Mahon Drainage Improvement | Approx. 100' of new storm drain and approx. 300' of ditch reconstruction | Scoping | \$ 35,000.00 | 14 | 6 |
| 2010 | Old Meadow Rd (Hanenfeld) | Approx. 2,500' of new ditch and regrade ditch | Scoping | \$ 22,000.00 | 39 | 19 |
| 2010 | Parker House Rd / Noble | Installation of culvert under Oak Street | Scoping | \$ 21,000.00 | 38 | 20 |
| 2010 | Stafford Tax Ditch Main Bank Stabilization / Hale | Approx. 100' of bank stabilization | Scoping | \$ 41,000.00 | 35 | 18 |
| 2010 | Walley Lane / Glen Jones Drainage Improvements | Approx. 3,000' of ditch reconstruction | Scoping | \$ 11,000.00 | 39 | 21 |
| 2010 | Woodenhawk Tax Ditch P4 Bank Stabilization / Lecates | Stabilization of tax ditch near Sawmill Road | Scoping | \$ 15,000.00 | 35 | 19 |
| 2010 | Chesapeake Bay Watershed Channel and Wetland Restoration Projects | Small channel and wetland restoration projects | Scoping | \$ 105,000.00 | 35, 36, 37, 39, 40, 41 | 18, 19, 20, 21 |
| 2010 | Morgan Branch Road / Davenport Drainage Improvements | Reconstruct approx. 1,000' of channel outlet | Scoping | \$ 30,000.00 | 39 | 21 |
| 2010 | Inland bays Atlantic Ocean Watershed Channel and Wetland Restoration Projects | Small channel and wetland restoration projects | Scoping | \$ 105,000.00 | 14, 20, 37, 38, 40, 41 | 6, 19, 20, 21 |
| 2010 | Delaware Bay Watershed Channel and Wetland Restoration Projects | Small channel and wetland restoration projects | Scoping | \$ 105,000.00 | 14, 20, 35, 36, 37 | 6, 18, 19 |
| 2010 | Town of Bethany North Pennsylvania Avenue Storm Drain | Restoration and reconstruction of storm drain on North Pennsylvania Ave. | Scoping | \$ 2,500,000.00 | 38 | 20 |
| 2010 | Doddtown Rd / Rich | Approx. 0.75 miles of storm drain installation and open ditch construction | Scoping | \$ 275,000.00 | 20 | 19 |
| 2010 | Webb Farm Road (594) / Rose | Clean out approx. 900' of ag ditch | Scoping | \$ 7,000.00 | 35 | 18 |
| 2009 | Chesapeake Bay Watershed VOP | Removal of debris from degraded drainage channels utilizing Violators of Probation (VOP) Program at the Sussex Community Correction Center | Construction | \$ 65,000.00 | 35, 40, 39, 37, 41, 36 | 18, 19, 20, 21 |
| 2009 | Delaware Bay Watershed VOP | Removal of debris from degraded drainage channels utilizing Violators of Probation (VOP) Program at the Sussex Community Correction Center | Construction | \$ 125,000.00 | 14, 20, 35, 36, 37 | 6, 18, 19 |
| 2009 | Inland bays Atlantic Ocean Watershed VOP | Removal of debris from degraded drainage channels utilizing Violators of Probation (VOP) Program at the Sussex Community Correction Center | Construction | \$ 167,000.00 | 14, 20, 37, 38, 40, 41 | 6, 19, 20, 21 |
| 2009 | Bee Branch Tax Ditch Restoration | Design and construct approx. 2,000' of Tax Ditch stabilization and restoration | Scoping | \$ 685,000.00 | 35 | 18 |
| 2009 | Sowbrise Rd / Hue Drainage Improvements | Cleanout approx. 2,000' of existing drainage ditch | Scoping | \$ 28,000.00 | 36 | 19 |
| 2009 | City of Rehoboth Country Club Estates Drainage Improvements | Design and install a storm septic upgrade to the existing storm drain. Reduce total suspended solids discharged to Silver Lake. | Scoping | \$ 190,000.00 | 14 | 6 |
| 2009 | Norman Eskridge Highway / Lowes | Cleanout outlet ditch of Del DOT storm drain | Scoping | \$ 70,000.00 | 39 | 21 |
| 2008 | Old Rauetmack / Malone Drainage Improvement Phase II | Westerlee Subdivision Development drainage improvements | Engineering | \$ 200,000.00 | 40 | 21 |
| 2008 | Rt. 24 / Harper Fox Hollow Drainage Improvement | Approx. 500' of new pipe for drainage improvements to Fox Hollow | Land Rights | \$ 70,000.00 | 14 | 6 |
| 2008 | Walker Mill Rd / Country Glenn Drainage Improvement | Drainage improvements in development | Scoping | \$ 150,000.00 | 35 | 19 |
| 2008 | Nanticoke River Tax Ditch Maintenance Dip Out Phase III | Maintenance of approx. 4 miles of tax ditch system. | Scoping | \$ 500,000.00 | 35, 30 | 18, 19 |
| 2008 | Morgan Branch Prong 1 / Fleetwood Drainage Improvements | Reconstruct approx. 8,000' of drainage ditch Includes Hasting Estates Drainage Improvements project | Scoping | \$ 70,000.00 | 39 | 21 |
| 2008 | Fawn Rd / Rantz Drainage Improvements | Reconstruct approx. 5,000' of existing ditch, approx. 500' of new storm drain, and approx. 1,000' of new ditch | Scoping | \$ 120,000.00 | 35 | 18, 19 |
| 2008 | Hudson Rd / Harvey Drainage Improvement | Regrade road ditch approx. 1,500' to stormwater pond and address culvert under road | Scoping | \$ 70,000.00 | 20 | 6 |

Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|------|--|---|-------------|----------------------|-------------------------|---------------------|
| 2008 | Cedar Corners Rd / Jones Drainage Improvement | Approx. 2,000' of new ditch North of intersection with Deer Forrest | Scoping | \$ 20,000.00 | 35 | 19 |
| 2008 | Baker Mill Rd / Massey Drainage Improvements | Approx. 800' of storm drain installation | Scoping | \$ 140,000.00 | 35 | 21 |
| 2008 | Bethany Forrest / Madavero Drainage Improvement | Reconstruct approx. 300' of existing ditch & approx. 800' of storm drain installation | Scoping | \$ 41,000.00 | 38 | 20 |
| 2008 | Hearns Pond Rd / Ensminger | Reconstruct approx. 8,000' of ditch and replace culvert under road | Scoping | \$ 45,000.00 | 39 | 19, 21 |
| 2008 | Brittingham Rd / Justice Drainage Improvement Project | Reconstruct approx. 1,000' of drainage ditch | Scoping | \$ 21,000.00 | 40 | 21 |
| 2008 | Concord Pond Rd / Hudson | Reconstruct approx. 5,000' of drainage ditch | Scoping | \$ 55,000.00 | 35, 39 | 19 |
| 2008 | Jefferson Bridge Rd / Chandross | Reconstruct approx. 1 mile of existing ditch | Scoping | \$ 27,500.00 | 38 | 20 |
| 2008 | Lawson Rd / Setzer Drainage Improvement | Approx. 4000' of new ditch | Scoping | \$ 35,000.00 | 37 | 19 |
| 2008 | Nat Turner Street / Lane Drainage Improvements | Approx. 600' of new ditch | Scoping | \$ 7,000.00 | 35 | 19 |
| 2008 | New Rd (391) / Higgs Drainage Improvement | Approx. 300' of ditch within woods | Scoping | \$ 14,000.00 | 38 | 20 |
| 2008 | Old Furnace Rd / Bull Drainage Improvements | Approx. 1,000' of storm drain | Scoping | \$ 137,500.00 | 39, 35 | 19 |
| 2008 | Rd. 350 / Gladwin Drainage Improvement | Reconstruct approx. 600' of existing ditch | Scoping | \$ 14,000.00 | 38 | 20 |
| 2008 | Rt. 10 / Dorharty Drainage Improvement | Approx. 400' of new ditch and approx. 1,100' of storm drain | Scoping | \$ 275,000.00 | 35, 39 | 21 |
| 2008 | Rt. 13A / Spicer Drainage Improvement | Approx. 1,000' of new storm drain | Scoping | \$ 105,000.00 | 39 | 21 |
| 2008 | Shingle Point Rd / Antonio Drainage Improvement | Reconstruct approx. 1,000' of drainage ditch | Scoping | \$ 21,000.00 | 20 | 6 |
| 2008 | Rt 13A / Skateworld | Approx. 500' feet of storm drain installation | Scoping | \$ 2,000.00 | 39 | 21 |
| 2008 | Meadow Branch Tax Ditch Maintenance Dip out | Dip out of Tax Ditch approx. 24 miles | Scoping | \$ 275,000.00 | 40 | 21 |
| 2008 | Marshyhope Tax Ditch Maintenance Dip out | Dip out of Tax Ditch approx. 13 miles | Scoping | \$ 140,000.00 | 35, 30 | 16, 19 |
| 2008 | River Rd / Clark Drainage Improvements | Approx. 1,500' of new ditch and replace 12 driveway pipes | Scoping | \$ 35,000.00 | 39 | 21 |
| 2007 | Rd 550 / Harry Simiomic Drainage Improvements | Proposed wetland/stormwater pond construction and approx. 4,500' of channel reconstruction. | Engineering | \$ 140,000.00 | 39 | 21 |
| 2007 | Rehoboth Beach Yacht & Country Club / Miller Drainage Improvements | Approx. 150' of pipe & catch basin installation | Scoping | \$ 50,000.00 | 14 | 6 |
| 2007 | Camp Arrowhead Rd / Angola Neck Park / Mangini Drainage Improvements | Approx. 2,000' of ditch maintenance | Scoping | \$ 16,000.00 | 14 | 6 |
| 2007 | Peppers Creek S1 of P10 Bank Stabilization | Approx. 100' of bank stabilization | Scoping | \$ 28,000.00 | 41 | 20 |
| 2007 | Peppers Creek Rd / Dogwood Acres / McNeill Drainage Improvements | Approx. 1,050' of storm drain and catch basin installation | Scoping | \$ 137,500.00 | 38 | 20 |
| 2007 | Rd 305 & Rd 296 / Mifflin Drainage Improvements | Approx. 2,000' of storm drain and catch basin installation | Scoping | \$ 205,000.00 | 37 | 19 |
| 2007 | Forrest Rd / Lewis Drainage Improvements | Approx. 2,500' of new ditch | Scoping | \$ 45,000.00 | 20 | 6 |
| 2007 | Doorman Rd / Holly Oaks Drainage Study | Drainage study to determine feasibility of drainage improvements in this watershed | Scoping | \$ 35,000.00 | 20 | 6 |
| 2007 | Route 9 / Britt Drainage Improvements | Approx. 1,000' of channel reconstruction | Scoping | \$ 14,000.00 | 40 | 19 |
| 2007 | Cotton Patch Hills Drainage Improvements | Installation of approx. 500' of storm drain to provide an outlet for Cotton Patch Hills and SR 1 | Scoping | \$ 75,000.00 | 38 | 20 |
| 2007 | Cool Spring Road / Swift Drainage Improvements | Reconstruct approx. 2,500' of an existing ditch that provides an outlet for Coolspring Road. | Scoping | \$ 21,000.00 | 37 | 18 |
| 2007 | Patty Cannon Estates drainage improvements | Provide outlet for existing residential development | Scoping | \$ 70,000.00 | 40 | 21 |
| 2007 | Deep Hole Tax Ditch Maintenance Dip out | Maintain approx. 3 miles of tax ditch | Scoping | \$ 115,000.00 | 38 | 20 |
| 2007 | Rehoboth Beach / Stockley Street | Ocean block of Stockley to King Charles | Scoping | \$ 975,000.00 | 14 | 6 |
| 2006 | Heritage Village / Harper | Connection of blind ditch within the Heritage Village Development to Atlanta Devonshire Tax Ditch and improvements if needed to the tax ditch system as the outlet. | Land Rights | \$ 90,000.00 | 39 | 21 |
| 2006 | Shawnee Road / Weldon | Reconstruction of existing ditch and replacement of pipes (DC Kovach) | Scoping | \$ 35,000.00 | 36 | 18 |
| 2006 | Ockels Dr / Neal Public Ditch | Reconstruct approx. 1,800' of ditches upstream of Ockels Drive south of Blades. | Scoping | \$ 35,000.00 | 39 | 21 |
| 2006 | Road 347 and 349 / Densmore | Approx. 2,200' of channel reconstruction and total disposal for drainage improvements to Whites Neck Village and West Ocean Farms | Planning | \$ 70,000.00 | 38 | 20 |
| 2006 | Memory Rd / Wilkens Public Ditch | Reconstruct approx. 3 miles of drainage ditches | Scoping | \$ 125,000.00 | 30 | 16 |
| 2006 | Rd 224 Baird Public Ditch | Install new pipe and catch basins to Maple Marsh Tax Ditch | Scoping | \$ 140,000.00 | 35 | 18 |
| 2006 | Route 26 / Lilly Public Ditch | Construction of new ditch | Scoping | \$ 21,000.00 | 38 | 20 |
| 2006 | Doddtown Road / Tice Public Ditch | Construction of approx. 5,000' of new ditch and pipe and catch basins | Scoping | \$ 275,000.00 | 20 | 19 |

Active Resource Conservation and Development Projects

21st Century Fund

Sussex County

| Year | Project | Remarks | Status | Estimated Total Cost | Representative District | Senatorial District |
|---|---|--|-------------|----------------------|-------------------------|---------------------|
| 2006 | Mayer Branch Public Ditch | Channel reconstruction of Mayer Branch where it outlets to Maryland | Scoping | \$ 210,000.00 | 40 | 21 |
| 2005 | North Drive / Doris Kowolski | Installation of approx. 1,000' pipe with catch basins | Scoping | \$ 105,000.00 | 35 | 19 |
| 2005 | Road 357 (Piney Point Dev.) / John Bauer | Approx. 200' pipe and catch basin installation & approx. 700' ditch maintenance | Land Rights | \$ 35,000.00 | 38 | 20 |
| 2005 | Sunset Branch T.D. Prong 1 Pipe | Install approx. 150' of pipe with inlet protection in Prong 1 of Sunset Branch Tax Ditch | Scoping | \$ 21,000.00 | 41 | 21 |
| 2005 | Bay City Mobile Home Park Drainage Study | Drainage study for community | Scoping | \$ 42,000.00 | 37 | 19 |
| 2005 | Cart Branch Main / Alan Pongratz | Bank stabilization project | Scoping | \$ 35,000.00 | 35 | 18 |
| 2005 | Rt. 24 (Millsboro) / Kathy McGinnis | Install approx. 1,500' of pipe and catch basins | Scoping | \$ 70,000.00 | 41 | 20 |
| 2005 | Road 442 / Jay Challman | Approx. 4,400' cleanout, minimal clearing, incorporate Rd. 74 Ciampo project | Scoping | \$ 135,000.00 | 40 | 21 |
| 2004 | Lewes Beach Drainage Improvements Phase 1 | Installation of 130' 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 | \$ 66,000.00 | 20 | 6 |
| 2004 | Rt. 5 & Rd. 290 / Cook Public Ditch | Creation of a new tax ditch to help intersection and adjoining drainage issues | Planning | \$ 400,000.00 | 20 | 6, 19 |
| 2004 | Rd. 283 A / Kosinski Public Ditch | Approx. 500' ditch construction | Scoping | \$ 75,000.00 | 14 | 6 |
| 2004 | Earnestine Hall Rd 569 nr Omar | Installation of an 18" x 250' pipe with 5 catch basins | Engineering | \$ 70,000.00 | 38 | 20 |
| 2004 | Rt. 9 / Mirey Branch / Tyndall | Approx. 4,500' of ditch reconstruction | Scoping | \$ 500,000.00 | 39, 40 | 21 |
| 2004 | Concord Pond Road / Jenkins | Approx. 1,500' of new ditch | Scoping | \$ 35,000.00 | 35 | 19 |
| 2004 | Collins Russell Rt 16 Milton | Infiltration system | Scoping | \$ 7,000.00 | 20, 36 | 19 |
| 2004 | Sr. 1 / Sea Colony | Outlet drainage for SR 1 in Bethany Beach | Scoping | \$ 215,000.00 | 38 | 20 |
| 2004 | Joe Dailey New Rd Lewes | Installation of 24" x 1,500' of pipe with catch basins | Scoping | \$ 25,000.00 | 20 | 6 |
| 2004 | Town of Georgetown | Drainage Projects within in the Town of Georgetown | Scoping | \$ 75,000.00 | 37 | 19 |
| 2003 | Jones Mill Branch | Stream restoration | Scoping | \$ 126,000.00 | 35 | 19 |
| 2002 | Route 13A (O'Neal Public Ditch) Phase III | Approx. 200' addition to storm drain system with catch basins. | Scoping | \$ 30,000.00 | 39 | 19, 21 |
| 2002 | Columbia Ave. (Rehoboth), Surf Ave. / Phase III | Extend the drainage system on Surf Avenue up Colombia Avenue to the intersection at First Street | Scoping | \$ 145,000.00 | 14 | 6 |
| 2001 | Bee Branch Bank Stabilization | Protection downstream of Rt. 13. | Scoping | \$ 60,000.00 | 35 | 18 |
| SUBTOTAL – 263 Sussex County Active Projects | | | | \$ 34,548,250 | | |

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**Appendix D:
Proposed FY 2022 RC&D Projects**

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Proposed FY 2022 Resource Conservation and Development Projects
21st Century Fund
New Castle County – 6/11/2021

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|--|----------------------|-------------------------|---------------------|
| 309 Howell School Road | Placeholder | \$ 20,000.00 | 15 | 12 |
| 670 McGovern Road | Placeholder | \$ 25,000.00 | 12 | 8 |
| 878 Bengé | Placeholder | \$ 25,000.00 | 12 | 8 |
| 1307 River Road | Placeholder | \$ 25,000.00 | 6 | 1 |
| 1586 Whittaker Road | Placeholder | \$ 20,000.00 | 25 | 10 |
| 2442 Grubb Road | Install gabion wall | \$ 167,000.00 | 7 | 5 |
| 2652 Grubb Road | Placeholder | \$ 25,000.00 | 10 | 5 |
| 6262 Summit Bridge Road | Clear and clean ditch | \$ 18,000.00 | 11 | 14 |
| Augustine Ridge - 2020 storm damage-downed tree removal | Placeholder | \$ 45,000.00 | 4 | 4 |
| Barkley - 2623 to 2627 Point Breeze Drive | Install closed drainage system | \$ 65,200.00 | 10 | 5 |
| Beech Hill - 2 & 4 Deer Track Lane | Grade lawn to drain | \$ 16,400.00 | 22 | 8 |
| Belltown Woods - Needleleaf Drive | Placeholder | \$ 25,000.00 | 27 | 10 |
| Betts Road Drainage | Replace failed pipe | \$ 16,000.00 | 9 | 14 |
| Birchwood Park - 102 Brownleaf Road | Placeholder | \$ 25,000.00 | 24 | 9 |
| Boothurst - 26 Edgewood Drive | Install closed drainage system | \$ 22,000.00 | 16 | 2 |
| Brackenville Woods - 36 Sage Way | Install closed drainage system | \$ 39,000.00 | 12 | 4 |
| Bristol Place Open Space Drainage | Install closed drainage system | \$ 18,600.00 | 27 | 12 |
| Brookhill Drive Drainage | Placeholder | \$ 25,000.00 | 26 | 11 |
| Cambridge Gardens - 10 Beacon Lane | Install closed drainage system | \$ 23,800.00 | 5 | 13 |
| Caravel Farms - 318 Manubay Court | Regrade and stabilize ditch | \$ 19,400.00 | 27 | 12 |
| Caravel Farms - 500-502 West Savannah Drive | Placeholder | \$ 40,000.00 | 27 | 12 |
| Caravel Hunt - Rice Drive | Install closed drainage system | \$ 64,500.00 | 15 | 12 |
| Caravel Woods - 106 Wortham Lane | Placeholder | \$ 20,000.00 | 27 | 12 |
| Cedar Farms - 39 Cedar Farms Drive | Placeholder | \$ 75,000.00 | 26 | 11 |
| Centennial Village - 15 Warren Place | Grade lawn to drain | \$ 12,000.00 | 5 | 13 |
| Centerville Point - Centerville Terrace | Install closed drainage system | \$ 41,500.00 | 4 | 7 |
| Chalfonte - 2522 Eaton Road | Grade area to drain | \$ 33,600.00 | 10 | 5 |
| Chatham - 1035 Graylyn Road | Streambank stabilization. | \$ 29,500.00 | 6 | 5 |
| City of New Castle - 26 E. 4th Street | Placeholder | \$ 1,000.00 | 17 | 12 |
| City of New Castle - 115 and 117 West Ninth Street | Install closed drainage system | \$ 25,000.00 | 16 | 12 |
| City of Newark - 32 Old Oak Road | Install closed drainage system | \$ 30,400.00 | 23 | 8 |
| Clairborn at Lexington Farms - 56 Eaton Place | Install underdrain and swale | \$ 25,000.00 | 27 | 10 |
| Club Lane | Repair junction box | \$ 8,000.00 | 10 | 5 |
| Coverdale Farm Stormwater Project | Stormwater system upgrade in parking lot | \$ 60,000.00 | 12 | 4 |
| Deer Valley - 159 Deer Valley Lane | Placeholder | \$ 40,000.00 | 12 | 4 |
| Deerbourne Woods - Dalton Drive | Placeholder | \$ 25,000.00 | 27 | 10 |
| Dickerson Farm - East Dickerson Lane | Placeholder | \$ 20,000.00 | 9 | 10 |
| Drummond North - 23 Barnard Street | Placeholder | \$ 25,000.00 | 22 | 4 |
| Eagle Trace - 335 Norman Drive | Placeholder | \$ 20,000.00 | 27 | 10 |

Proposed FY 2022 Resource Conservation and Development Projects
21st Century Fund
New Castle County – 6/11/2021

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|--------------------------------|----------------------|-------------------------|---------------------|
| Estates at Dove Run - 906 Benalli Drive | Install closed drainage system | \$ 28,100.00 | 8 | 10 |
| Evergreen Farms - 420 Marcus Road | Install closed drainage system | \$ 18,000.00 | 9 | 14 |
| Fairfax - 2214 Foote Road | Placeholder | \$ 25,000.00 | 12 | 4 |
| Fairview Farms Stormwater Pond | Pond restoration | \$ 85,000.00 | 8 | 10 |
| Fairway Falls - 3232 Champions Drive | Placeholder | \$ 20,000.00 | 21 | 4 |
| Fairways at Vandegrift Stormwater Pond | Pond restoration | \$ 83,000.00 | 9 | 14 |
| Foulk Woods - 2617 Longwood Drive | Placeholder | \$ 25,000.00 | 10 | 5 |
| Foulk Woods - Old Wood Road | Placeholder | \$ 25,000.00 | 10 | 5 |
| Four Seasons - 102 Britain Court | Placeholder | \$ 25,000.00 | 25 | 10 |
| Four Seasons - Thanksgiving Drive | Drainage study | \$ 22,500.00 | 25 | 10 |
| Foxmeadow Farm - 32 Belmont Drive | Placeholder | \$ 25,000.00 | 12 | 8 |
| Great Oak Farms - Acorn Drive | Placeholder | \$ 25,000.00 | 9 | 14 |
| Green Acres - 1402 Bucknell Road | Placeholder | \$ 25,000.00 | 6 | 5 |
| Greenridge Road | Placeholder | \$ 75,000.00 | 4 | 4 |
| Greylag - 405 Virginia Drive | Placeholder | \$ 25,000.00 | 9 | 12 |
| Heritage Park - 2643 & 2645 Drayton Drive | Install closed drainage system | \$ 33,500.00 | 21 | 9 |
| Heritage Park - 2003 Gheen Road | Placeholder | \$ 30,000.00 | 21 | 9 |
| Hickory Woods - 328 Shagbark Court | Regrade and stabilize ditch | \$ 128,300.00 | 27 | 12 |
| Highlands of Heritage Park - 2700 Keswick Court | Install closed drainage system | \$ 35,500.00 | 21 | 9 |
| Highland Woods - 14 Chestnut Street | Placeholder | \$ 25,000.00 | 7 | 5 |
| Hockessin Valley Falls - 120 Peoples Way | Placeholder | \$ 25,000.00 | 22 | 4 |
| Hockessin Valley Falls - 125 Peoples Way | Placeholder | \$ 2,500.00 | 22 | 4 |
| Indian Field - 62 Indian Field Road | Grade yard to drain | \$ 45,000.00 | 7 | 5 |
| Ironside Road Drainage | Placeholder | \$ 25,000.00 | 25 | 10 |
| Kimberly Chase - Private Open Space | Install closed drainage system | \$ 17,900.00 | 10 | 5 |
| Lea Earra Farms - Stormwater Ponds | Pond restoration | \$ 60,000.00 | 9 | 10 |
| Lakeside River End - 106 Curie court | Placeholder | \$ 25,000.00 | 18 | 11 |
| Lamatan II Drainage Study | Placeholder | \$ 30,000.00 | 22 | 8 |
| Liftwood - 4660 Dartmoor Drive | Placeholder | \$ 50,000.00 | 6 | 5 |
| Lighthouse Apartment Drainage | Placeholder | \$ 1,000.00 | 6 | 1 |
| Lindamere - 120 and 122 South Road | Install closed drainage system | \$ 37,500.00 | 6 | 1 |
| Lindamere - 202 South Road | Install closed drainage system | \$ 8,300.00 | 6 | 1 |
| Lindamere - North Road | Install closed drainage system | \$ 60,800.00 | 6 | 1 |
| Linden Ridge - Ridge Boulevard | Clean and reshape ditch | \$ 26,000.00 | 22 | 4 |
| McDaniel Crest - 2121-2123 Largo Rd | Placeholder | \$ 28,000.00 | 10 | 5 |
| Meadowdale Drainage Study | Placeholder | \$ 50,000.00 | 22 | 8 |
| Meadowdale - Meadowdale Drive | Placeholder | \$ 25,000.00 | 22 | 8 |
| Meeting House Hill - 20 Tysons Ford Road | Install closed drainage system | \$ 35,000.00 | 22 | 4 |
| Meeting House Meadows - Dandelion Drive | Install closed drainage system | \$ 25,000.00 | 12 | 4 |
| Midvale - 101 Second Avenue | Placeholder | \$ 45,000.00 | 5 | 13 |
| Misty Vale Farms - 302 West Bradford Court | Placeholder | \$ 20,000.00 | 9 | 12 |
| Montrose Terrace - 1005 Prospect Avenue | Remove trees and clean ditch. | \$ 23,250.00 | 6 | 1 |

Proposed FY 2022 Resource Conservation and Development Projects
21st Century Fund
New Castle County – 6/11/2021

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|---|----------------------|-------------------------|---------------------|
| Morningside - 14 Sunrise Drive | Repair damage rip rap channel | \$ 14,500.00 | 22 | 4 |
| Nordic Dell - Carriage Way | Placeholder | \$ 25,000.00 | 6 | 5 |
| Northridge - 803 Naudain Avenue | Placeholder | \$ 25,000.00 | 7 | 1 |
| Norwegian Woods - Savoy Road | Placeholder | \$ 35,000.00 | 26 | 11 |
| Odessa National Southernness - Glenturret Way | Placeholder | \$ 30,000.00 | 9 | 14 |
| Odessa National Southernness - 563 - 569 Stonehaven Dr. | Placeholder | \$ 30,000.00 | 9 | 14 |
| Old Mill Manor - 34 Millwright Drive | Clean, grade, and stabilize channel | \$ 39,600.00 | 24 | 9 |
| Parkridge Condos | Placeholder | \$ 1,000.00 | 6 | 1 |
| Penarth - 31 Paxon Drive | Placeholder | \$ 25,000.00 | 6 | 5 |
| Pencader Cemetery Drainage | Placeholder | \$ 30,000.00 | 27 | 10 |
| Pepper Ridge - 5812 Tupelo Turn | Install closed drainage system | \$ 21,000.00 | 22 | 4 |
| Piermont Woods - 401 West Hanna Drive | Placeholder | \$ 25,000.00 | 26 | 11 |
| Piersons Ridge - 669 Southwood Road | Placeholder | \$ 20,000.00 | 12 | 8 |
| Pigeon Point Road - Port Contractors | Drainage system repair and replacement | \$ 1,580,000.00 | 16 | 2 |
| Porter Square - 111 Worthy Down Avenue | Install closed drainage system | \$ 24,700.00 | 27 | 12 |
| Red Lion Road Drainage | Placeholder | \$ 75,000.00 | 15 | 12 |
| Restoration of rear drainage at 800 Berkeley Road | Remove trees to restore natural drainage | \$ 22,500.00 | 4 | 4 |
| Riddle Avenue Slope Stabilization | Stabilize slope with rock drape | \$ 68,750.00 | 4 | 1 |
| Rockland Mills Retaining Wall | Replace failed wall | \$ 400,000.00 | 4 | 4 |
| Rockwood Woods - 4619 Big Rock Drive | Install closed drainage system | \$ 46,500.00 | 1 | 1 |
| Rutledge - 26 Grady Lane | Install closed drainage system | \$ 50,500.00 | 5 | 13 |
| Rutherford – 115 Greenfield | Placeholder | \$ 20,000.00 | 18 | 9 |
| Salem Woods - 1 Berley Court | Connect sump pump discharge to Del DOT system | \$ 15,000.00 | 26 | 11 |
| Sharpley - 406 Whitby Drive | Placeholder | \$ 25,000.00 | 12 | 4 |
| Sharpley - 306 Whitby Drive | Install closed drainage system | \$ 37,700.00 | 12 | 4 |
| Sherwood Forest - 118 Stature Drive | Placeholder | \$ 25,000.00 | 24 | 9 |
| Snuff Mill Road Drainage | Install closed drainage system | \$ 55,000.00 | 12 | 4 |
| Spring Valley - Deer Run Drive | Replace pipe | \$ 48,000.00 | 12 | 4 |
| Stonebridge - Stonebridge Blvd. Drainage | Placeholder | \$ 30,000.00 | 5 | 13 |
| Stonehurst - West Highland Avenue | Install a closed drainage system | \$ 43,000.00 | 19 | 9 |
| Surrey Park - 22 Stable Court | Placeholder | \$ 25,000.00 | 6 | 5 |
| Sycamore Farms - 107 Meadow Lane | Placeholder | \$ 25,000.00 | 9 | 14 |
| Terrace's on Iron Hill - 505 Summerbreeze Drive | Install a closed drainage system | \$ 41,700.00 | 25 | 10 |
| The Legends - 3-7 McCumber Lane | Regrade and stabilize ditch | \$ 20,000.00 | 8 | 10 |
| Thornwood - 13 Alanrose Court | Install closed drainage system | \$ 15,000.00 | 27 | 10 |
| Timber Farms - 503 W. Hummock Lane | Install closed drainage system | \$ 30,000.00 | 26 | 11 |
| Timber Farms - 530 W. Hummock Lane | Placeholder | \$ 25,000.00 | 26 | 11 |
| Townsend - 204 Eagles Nest Landing Road | Placeholder | \$ 15,000.00 | 9 | 14 |
| Valley View Drainage | Placeholder | \$ 25,000.00 | 12 | 4 |
| Valley View- 810 Summerset Drive | Install closed drainage system | \$ 67,000.00 | 12 | 4 |

| | | | | |
|----------------------------------|-------------|--------------|----|---|
| Walnut Ridge - Walnut Ridge Road | Placeholder | \$ 50,000.00 | 12 | 4 |
|----------------------------------|-------------|--------------|----|---|

Proposed FY 2022 Resource Conservation and Development Projects
21st Century Fund
New Castle County – 6/11/2021

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|--------------------------------|----------------------|-------------------------|---------------------|
| Webster Farm - 122 Marcella Road | Placeholder | \$ 20,000.00 | 6 | 5 |
| Webster Farms - 1131 Webster Drive | Install closed drainage system | \$ 16,500.00 | 11 | 4 |
| Webster Farms - 1405 Stoneleigh Road | Install closed drainage system | \$ 35,000.00 | 6 | 5 |
| Webster Farms - 1408 Stoneleigh Road | Install closed drainage system | \$ 72,300.00 | 6 | 5 |
| Wellington Hills - 4 Pierson Drive | Grade yard to drain | \$ 40,600.00 | 12 | 8 |
| Wellington Meadows - Sir Thomas Lane | Clean and reestablish swale | \$ 12,000.00 | 26 | 11 |
| Westover Hills - 700 Hopeton Road | Placeholder | \$ 25,000.00 | 4 | 4 |
| Wilmington & Western Railroad - Debris Removal | Remove debris from bridges | \$ 90,000.00 | 19 | 9 |
| Wilton - 56 Lanford Road | Placeholder | \$ 25,000.00 | 5 | 13 |
| Woodland Village - 326 Evergreen Drive | Placeholder | \$ 25,000.00 | 27 | 10 |
| York Farms - Cornwell Drive | Install closed drainage system | \$ 33,000.00 | 15 | 12 |
| SUBTOTAL -New Castle County FY22 New Projects | 133 Projects | \$ 6,330,900 | | |
| SUBTOTAL - New Castle County FY22 New Projects 21st Century Funds Required | | \$ 5,697,810 | | |

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Proposed FY 2022 Resource Conservation and Development Projects
21st Century Fund
Kent County – 6/11/2021

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|--|--|----------------------|-------------------------|---------------------|
| 5099 Dupont Hwy. / Welcome | 2,500 linear feet of ditch maintenance | \$ 50,000.00 | 29 | 15 |
| Millington Road / Hamilton | 2,500 linear feet of a ditch maintenance | \$ 50,000.00 | 11 | 15 |
| Carriage Lane / Mules | Child Protector on culvert inlet | \$ 5,000.00 | 34 | 16 |
| Lords Corner Road / Malago | 1,000 linear feet of ditch maintenance and bank repair | \$ 20,000.00 | 30 | 15 |
| East Dover Hundred Tax Ditch / Cranbury Run / Cole | Bank Stabilization approximately 75 linear feet | \$ 95,000.00 | 31 | 17 |
| Pearsons Corner Road / Groomes | 2,500 linear feet of ditch maintenance | \$ 50,000.00 | 29 | 15 |
| 5 N. Layton Avenue / Tanner | 600 linear feet of a new swale | \$ 10,000.00 | 34 | 17 |
| Irish Hill Road / Radovich | 1,000 linear feet of ditch maintenance | \$ 20,000.00 | 34 | 15 |
| Blackiston Road / Davis | 1,600 linear feet of ditch maintenance | \$ 25,000.00 | 29 | 15 |
| Hartly Road / Campbell | 2,000 linear feet of ditch maintenance | \$ 30,000.00 | 29 | 15 |
| 7385 S. Dupont Highway / Hickman | 2,000 linear feet of ditch maintenance | \$ 30,000.00 | 34 | 15 |
| Polytech High School | 4,000 linear feet of ditch maintenance | \$ 40,000.00 | 34 | 15 |
| Kersey Road / Steeves | 8,000 linear feet of ditch maintenance | \$ 80,000.00 | 34 | 15 |
| Millchop Lane / Peachtree Run Drainage Study | Drainage Study | \$ 100,000.00 | 34 | 16 |
| S. Caesar Rodney Avenue. / Town of Wyoming | 1,500 linear feet of open ditch | \$ 25,000.00 | 34 | 17 |
| 312 Seeneytown Road / Mitchell | 800 linear feet of tile system | \$ 10,000.00 | 11 | 15 |
| Kentbourne / Emerson | 300 linear feet of open ditch | \$ 5,000.00 | 11 | 15 |
| Woodland Beach Road / Sethman | Rip-rap bank stabilization | \$ 8,000.00 | 28 | 14 |
| Chance Road / Sammons | 4,000 linear feet of open ditch | \$ 60,000.00 | 11 | 15 |
| Corn Crib Road / Mead | 1,500 linear feet of open ditch | \$ 10,000.00 | 30 | 18 |
| Nuisance Beaver Removal | Nuisance Beaver removal if flooding damage is caused | \$ 5,000.00 | Kent County | Kent County |
| Emergency Repair | Repairs to existing infrastructure that's considered a threat to public safety | \$ 300,000.00 | Kent County | Kent County |
| Ironmine Road / Vakasy Project | Clear ROW for Tax Ditch | \$ 10,000.00 | 30 | 15 |
| SUBTOTAL - Kent County FY22 New Projects | 23 Projects | \$ 1,038,000 | | |
| SUBTOTAL - Kent County FY22 New Projects | | \$ 934,200 | | |
| 21st Century Funds Required | | | | |

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Proposed FY 2022 Resource Conservation and Development Projects
21st Century Fund
Sussex County – 6/11/2021

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|---|----------------------|-------------------------|---------------------|
| Banks Harbor Retreat / Malizia | Swale maintenance and replace crossroad pipe. | \$ 45,000.00 | 38 | 20 |
| Double Fork Rd / Rivera | New drainage ditch (approximately 500 linear feet) to outlet into Double Fork Marshyhope Tax Ditch | \$ 12,000.00 | 35 | 18 |
| Little Meadows / Donahue | Swale Maintenance and re-route a closed drainage system | \$ 80,000.00 | 39 | 21 |
| Sabrina Drive / Lambert | Address erosion issues and provide an improved drainage outlet | \$ 125,000.00 | 14 | 6 |
| Silver Lake Manor Drainage Improvement Project | Improve and replace closed drainage system | \$ 300,000.00 | 14 | 6 |
| Walker Acres/Zeitler Drainage Improvement Project | Improve stormwater system and provide an outlet to Ellendale Gravelly Branch | \$ 90,000.00 | 35 | 18 |
| Town of Laurel Washington Street | Install closed system to outlet into the Town of Laurels existing stormwater system | \$ 125,000.00 | 40 | 21 |
| Bucks Branch Prong 5 / Bell | Repair failing concrete wall, ditch maintenance, stream restoration | \$ 129,400.00 | 39 | 19 |
| Concord Road / Waller | Repair failing closed system that provides an outlet to the Nanticoke River for drainage on State maintained roads | \$ 100,000.00 | 39 | 21 |
| Delmar Road / Igo | Ditch maintenance | \$ 80,000.00 | 40 | 21 |
| White Horse Farm / Sommers | Install approximately 700 linear feet of a new open swale, maintenance of approximately 3,000 linear feet of an existing ditch, install a new crossroad pipe. | \$ 75,000.00 | 20 | 19 |
| Peterkins Branch / Larson | Approximately 10,000 linear feet of ditch maintenance and the replacement of 2 culverts. | \$ 80,000.00 | 37 | 19 |
| Holly Ridge Terrace / Kramer | Approximately 300 linear feet of ditch maintenance, approximately 700 feet of a new ditch/swale, replacement of a crossroad pipe, and the repair of an outfall. | \$ 100,000.00 | 38 | 20 |
| S. Union Church / Eisenbray | New ditch construction approximately 300 linear feet | \$ 25,000.00 | 35 | 18 |
| Rt.30 / Couchman | Ditch maintenance and reconstruction of approximately 5,000 linear feet of an existing feature. | \$ 100,000.00 | 20 | 6 |
| Ricland Heights / Mulrine | Ditch maintenance of 700 linear feet and the replacement of a crossroad pipe | \$ 60,000.00 | 39 | 19 |
| Conrail Road / Andrews | Ditch maintenance of 2600 linear feet | \$ 26,000.00 | 39 | 21 |
| Blueberry Road / Jahnigen | Ditch Maintenance of 2,000 linear feet | \$ 20,000.00 | 41 | 21 |
| Memory Road / Sam Yoder & Son | Ditch maintenance and installation of new ditches | \$ 75,000.00 | 35 | 18 |
| Dukes Job Main Bank Stabilization | Stabilize approximately 500 linear feet | \$ 65,000.00 | 40 | 21 |
| Emergency Repair | Use funds to complete emergency repairs to existing infrastructure that's considered a threat to public safety at the discretion of DNREC and SCD | \$ 300,000.00 | Sussex | Sussex |

Proposed FY 2022 Resource Conservation and Development Projects
21st Century Fund
Sussex County – 6/11/2021

| Project | Remarks | Estimated Total Cost | Representative District | Senatorial District |
|---|---|-----------------------------|--------------------------------|----------------------------|
| Rt. 24 / Pugh Poultry Farm | Redirect stormwater flow from Rt.24 | \$ 25,000.00 | 40 | 21 |
| Wilson Hill Road / L and W Country Estates | Improve community stormwater | \$ 25,000.00 | | |
| Deer Forest Road / West | Install new swales and ditch maintenance | \$ 20,000.00 | 35 | 19 |
| Route 9 / McGowan | 300 linear feet of new ditch and maintenance to Sub 3 Prong 1 of Dukes Job TD | \$ 40,000.00 | 39 | 21 |
| Holiday Pines / Ferrell | Drainage Improvements to the Holiday Pines community | \$ 75,000.00 | 37 | 19 |
| Wilson Hill Road / Juarez | 100 linear feet of ditch maintenance and the installation of a drainage tile | \$ 8,000.00 | 35 | 19 |
| Town of Dagsboro Drainage Improvements | Drainage Improvements to open ditches and failed closed stormwater systems | \$ 125,000.00 | 41 | 20 |
| Holly Oak Road Crossing Repairs | Upgrade two road crossings within the community and evaluate two road crossings on Dorman road. | \$ 150,000.00 | 20 | 6 |
| Nuisance Beaver | Nuisance Beaver removal if flooding damage occurs | \$ 5,000.00 | Sussex | Sussex |
| Middlesex Beach / Hall | Convert portions of a closed system to and open swale/ditch and replace several driveway culverts | \$ 150,000.00 | 38 | 20 |
| Eagle Crest Road / Kean | New swale directed to Prong 1 of Hudson Road TD | \$ 25,000.00 | 20 | 6 |
| Old Church Landing / Willoughby | Roadside drainage and pipe replacements | \$ 25,000.00 | 40 | 21 |
| Taylor Mill Road / Middleton | New swale and crossroad pipe | \$ 35,000.00 | 40 | 21 |
| Keenwick West / Welch | Replace several closed system outfall pipes to lagoons | \$ 30,000.00 | 38 | 20 |
| SUBTOTAL - Sussex County FY22 New Projects | 35 Projects | \$ 2,750,400 | | |
| SUBTOTAL - Sussex County FY22 New Projects 21st Century Funds Required | | \$ 2,475,360 | | |



DELAWARE DEPARTMENT OF
**NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**



2021

Tax Ditch Modernization Workgroup Report

A compilation of findings from the Workgroup related to improving the effective function, design and practices around Delaware's tax ditches.



Department of Natural Resources
and Environmental Control
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Dover, DE 19901
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Cover Photos (Left to Right): Delaware Department of Natural Resources and Environmental Control (DNREC) staff assisting with an officer training (DNREC), Cleaning out a tax ditch channel through a wooded area (New Castle Conservation District), A view of a tax ditch in an agricultural setting (DNREC), Stabilizing the bank of a tax ditch (DNREC)

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TAX DITCH MODERNIZATION KEY THEMES

EDUCATION AND OUTREACH

Increased efforts are needed to educate the public about tax ditches and their function



INCREASE FUNDING

Increased funding is needed to improve tax ditch design and maintain existing drainage functions while providing for a more sustainable future

DESIGN CHANGES

Tax ditch systems need to be adaptable to changing land uses and environmental factors



UPDATING DELAWARE LAW

Tax Ditch Law was created in the 1950s, as such, modernizations are needed in order for tax ditches to function effectively in today's society

Key Findings and Recommendations

Delaware has 234 individual tax ditch organizations which manage over 2,000 miles of channel 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 (7 Del. Code, c. 41), was passed in 1951 to create a system of watershed-based organizations to maintain drainage ditches throughout the state in perpetuity.

Delaware has changed a lot in the last 70 years and approximately 90% of tax ditch systems are at least 35 years old. The historic intention of tax ditch organizations and their designs versus current expectations and conditions has resulted in confusion as to the purpose of these ditches or concerns with the legally defined operations of tax ditches today.

To fully identify and address issues relating to these concerns, the Delaware Department of Natural Resources and Environmental Control (DNREC) Tax Ditch Program with support from the Office of the Secretary hosted a Tax Ditch Modernization Workgroup to garner feedback related to the following topics: operational issues, changing land use, insufficient funds, and tax ditch officer retention and turnover.

The workgroup brought together over 50 key tax ditch stakeholders from Kent, New Castle and Sussex counties that either had a long history of working with tax ditches or their agency's operations impact tax ditch processes.

Across all workgroup sessions, common themes identified included increased efforts for education and outreach to the public and

partner agencies regarding responsibilities, an increase in funding sources for sustaining and improving tax ditches and their rights-of-way, a need for design changes to tax ditch systems to account for today's land uses and environmental factors, and changes in Delaware Law to simplify the ability for partner agencies to assist tax ditch organizations in their operations.

The following tables summarize recommendations made from the key findings of the Tax Ditch Modernization Workgroup sessions. Please note that the thoughts and comments depicted throughout this report do not necessarily reflect the views of the DNREC.

Recommendations were grouped based on the common themes identified: education and outreach, funding changes, design changes, and law changes. Each table includes the primary objective with a summary of individual goals or tasks needed to achieve said objective. Supporting evidence from the workgroup sessions for each recommendation can be found within the report by referencing the corresponding finding(s) noted in the tables. Actions required are the steps necessary to achieve the goal or task, and note partner agencies whenever applicable, as well as an anticipated timeframe to complete these items.

The hope is that this document will serve as guidance for tax ditch improvements for all agencies and partners working to better tax ditches for the health and safety of the public. If you are interested in becoming a partner on a recommendation noted in the tables below, please contact the DNREC Tax Ditch Program at (302) 855-1930 or email us at DNREC_Drainage@delaware.gov.



Education and Outreach

| Key Findings and Recommendations: <i>Education and Outreach (E&O)</i> | | | | |
|---|--|--|---|--|
| ID | Summary | Supporting Evidence | Action(s) Required | Goal Range |
| E&O.1 | Designate a DNREC Tax Ditch Program staff position as a Communications & Outreach Coordinator. | | | |
| | Hire a Planner position in the DNREC Tax Ditch Program with primary job duties of education, outreach, and marketing. | Findings: 1.0, 1.1, 2.1, 3.0, 3.1, 4.1, 4.2, 4.3, 5.0, 5.1, 6.0 | <ul style="list-style-type: none"> Fill open DNREC Drainage Program Planner II position by the end of the 2021 calendar year (DNREC) | Short Term |
| E&O.2 | Perform outreach to stakeholders. | | | |
| E&O.2.1 | Develop a marketing strategy to increase awareness of tax ditches. | Findings: 3.1, 5.0, 6.0 | <ul style="list-style-type: none"> Fulfillment of E&O.1 | Medium Term |
| E&O.2.2 | Coordinate with the Office of State Planning Coordination (OSPC) to add tax ditch items to the Land Use and Comprehensive Planning Process Checklist(s). | Findings: 3.0, 3.1, 3.2, 6.2, 6.8 | <ul style="list-style-type: none"> Share comments or items to be included on checklist to OSPC State Planning Director (DNREC) | Medium Term |
| E&O.2.3.1 | Develop a Tax Ditch Officer Recruitment and Retention Strategy. | Findings: 1.0, 3.0, 3.1, 9.0 | <ul style="list-style-type: none"> Fulfillment of E&O.1 Finalize Officer Recruitment and Retention Strategy shared during the workgroup (DNREC) | Short Term |
| E&O.2.3.2 | Implement the Tax Ditch Officer Recruitment and Retention Strategy. | Findings: 1.0, 3.0, 3.1, 9.0 | <ul style="list-style-type: none"> Fulfillment of E&O.1 Produce resources, materials, trainings, and events required to implement strategy (DNREC) Determine annual funding needed to support strategy and identify funding source(s). | Medium Term Implemented continually |

| E&O.3 | | | | |
|--|---|--|---|-------------|
| Develop printed materials to target specific audiences. | | | | |
| E&O.3.1 | <i>For Tax Ditch Officers</i> – Develop a resource that provides primary points of contact and a checklist of items to address prior to, during, and after completion of maintenance or improvement projects. | Finding: 3.1 | <ul style="list-style-type: none"> • Fulfillment of E&O.1 • Prepare material in consultation with colleagues (DNREC/Partner) • Distribute material to county conservation districts for sharing and make available online (DNREC) | Medium Term |
| E&O.3.2 | <i>For Regulatory & Permit Approval Stakeholders</i> – Develop checklist and instructions for external agencies to review requests received for potential tax ditch impacts. | Findings: 3.0, 3.1, 3.2, 3.3, 5.1, 6.0, 6.1 Workgroup Recommendation: D.3 | <ul style="list-style-type: none"> • Fulfillment of E&O.1 • Prepare material in consultation with colleagues (DNREC/Partner) • Distribute materials to identified stakeholders and make available online (DNREC) | Medium Term |
| E&O.3.3.1 | <i>For General Public</i> –Standardized signage that can be placed along tax ditches in public locations, such as near highway/bridge crossings. | Findings: 3.0, 5.0, 6.9 | <ul style="list-style-type: none"> • Fulfillment of E&O.1 • Develop signage (DNREC/Partner) • Identify source of funding to implement signage effort • Promote/advertise installation of signage by tax ditch organizations (DNREC/Partner) | Medium Term |
| E&O.3.3.2 | <i>For General Public</i> –Periodic state/local news articles highlighting tax ditches | Findings: 3.0, 3.1, 3.2, 5.0, 6.9, 9.0 | <ul style="list-style-type: none"> • Fulfillment of E&O.1 • Develop strategy including (DNREC): <ul style="list-style-type: none"> ○ Identify applicable outlets ○ Anticipated frequency ○ Anticipated costs ○ Relevant content and partners ○ Process to implement | Medium Term |

| E&O.4 | | Develop trainings to target specific audiences. | | |
|------------------|---|--|---|-------------------------------------|
| E&O.4.1 | <i>Introduction for Officers Course</i> – Develop a training to assist new or existing Tax Ditch Officers. | Findings: 1.0, 1.1, 3.0, 3.1, 4.2, 6.1 | <ul style="list-style-type: none"> • Fulfillment of E&O.1 • Develop an “Onboarding” Manual for new officers (DNREC) • Archive helpful videos for officers (DNREC) • Create new/update digital training as appropriate with assistance from the Delaware Association of Conservation Districts (DNREC/Partner) | Short Term Implemented continually |
| E&O.4.2.1 | <i>Stakeholder Specific Trainings</i> – Develop presentations to increase awareness of tax ditches and improve coordination across agencies due to associated processes affecting tax ditches. Prioritized Stakeholder Group: Delaware Building and Planning Commissions. | Findings: 1.0, 1.1, 3.0, 3.1, 3.2, 3.3, 4.2, 4.3, 5.1, 6.1, 6.2, 6.7, 6.8 | <ul style="list-style-type: none"> • Fulfillment of E&O.1 • Prepare strategy and develop trainings for stakeholders highlighted in this effort (DNREC) • Provide presentations as requested. (DNREC) | Medium Term Implemented continually |
| E&O.5 | | Tax ditch maintenance planning reference materials and resources | | |
| E&O.5.1 | Develop a digital/GIS based tax ditch infrastructure and conditions inventory that can be easily shared, including reports provided, to officers and maintenance contractors. Include clearly defined responsibilities for infrastructure in tax ditches. | Findings: 2.0, 3.1, 4.0, 4.3 Workgroup Recommendation: F.1 & F.6 | <ul style="list-style-type: none"> • Determine funding needed to complete this effort (DNREC/Partner) • Secure funding (DNREC/Partner) • Prepare and solicit Request for Proposals (RFP) (DNREC/Partner) | Long Term |
| E&O.5.2 | Develop and maintain list of Homeowners, Condominium Associations, and Property Management companies with points of contact for those located within a tax ditch watershed. | Findings: 5.0, 9.0 | <ul style="list-style-type: none"> • Consult with County Councils to obtain information requested (DNREC/Partner) • Fulfillment of E&O.1 • Compile list for those located within tax ditch watersheds and distribute to officers • Update information annually (County Councils/DNREC) | Medium Term Implemented continually |



Funding Changes

| Key Findings and Recommendations: <i>Funding Changes</i> | | | | |
|--|---|--|---|-------------|
| ID | Summary | Supporting Evidence | Action Item(s) | Goal Range |
| F.1 | Increase funding provided to tax ditches under Del. Code Title 7 Chapter 39 § 3921. | | | |
| | Reconvene respective members of the workgroup to evaluate opening Del. Code Title 7 Chapter 39 with the intent to equitably increase allocations noted in § 3921. | Findings: 7.0, 7.3, 7.4, 8.0, 8.1 Workgroup Recommendation: L.5 | <ul style="list-style-type: none"> • Determine participants of workgroup (DNREC/workgroup) • Determine, by county, the cost of annual tax ditch expenses (administrative and operational) based on a repeatable unit of measure. (DNREC/county conservation districts) • Determine annual supplemental funds, by county, to support tax ditch maintenance match requests. (DNREC/county conservation districts) • Propose changes as appropriate (workgroup) • Determine how to implement change (workgroup) | Short Term |
| F.2. | Combine tax ditch organizations to help achieve economies of scale. | | | |
| F.2.1 | Coordinate with tax ditch organizations that are eligible to be combined following the process outlined in Tax Ditch Law. | Findings: 7.5, 8.1 | <ul style="list-style-type: none"> • Identify eligible tax ditch organizations (Table 3) • The DNREC Tax Ditch Program to consult and promote combination of identified tax ditch organizations with the respective officers. • The DNREC Tax Ditch Program assist in preparation of materials and coordination of special or annual meeting if combination is desired. • The DNREC Tax Ditch Program attend meeting to assist as needed. • The DNREC Tax Ditch Program with respective officers complete paperwork and follow-up steps based on outcome of meeting. | Medium Term |
| F.2.2a | Identify tax ditch organizations that may be benefited by combining based on proximity, limiting assessment bases, and/or officer recruitment and retention issues. | Findings: 7.0, 7.1, 8.1 Workgroup Recommendation: L.6 | <ul style="list-style-type: none"> • Identify suggested tax ditch organizations based on evaluation of these 3 criteria (DNREC): <ul style="list-style-type: none"> ○ Physical location to surrounding tax ditch systems ○ Assessment Base and maximum revenue that could be levied <ul style="list-style-type: none"> ▪ Compare this to anticipated annual expenses for tax ditch in corresponding county (F.1) ○ Officer recruitment and retention issues | Medium Term |

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|------------|--|---|---|-------------|
| F.2.2b | Consult with legal counsel on combination of identified tax ditch organizations and process to proceed which may require changes to the Tax Ditch Law. | Findings: 7.0, 7.1 Workgroup Recommendation: L.6 | <ul style="list-style-type: none"> • Fulfillment of F.2.2a (DNREC/DAG) | Long Term |
| F.3 | Perform reassessment of tax ditch assessment bases across the state to reflect the benefit provided by the systems today. | | | |
| F.3.1a | Consult with legal counsel to determine if reassessment of tax ditch organizations is possible. | Finding: 7.1 Workgroup Recommendation: L.6 | <ul style="list-style-type: none"> • Prepare and submit a legal request for evaluation of this recommendation to the Delaware Attorney General's Office (DAG) (DNREC) • Follow-up as necessary and if appropriate proceed with F.3.1b (DNREC/DAG) | Medium Term |
| F.3.1b | Determine methodology to reassess taxable properties. | Findings: 7.1, 7.4 Workgroup Recommendation: L.6 | <ul style="list-style-type: none"> • Fulfillment of F.3.1a (DAG/DNREC) • Additional Geographic Information System (GIS) support would be needed to complete this effort. • Calculate current assessment bases in today's dollars to address inflation. • Determine methodology and implement to calculate relative benefit provided to properties today by the tax ditch systems. • Determine how to address properties that have no assessment base. • Propose new assessment values and proceed as directed by DAG. | Long Term |
| F.4 | Determine how tax ditch organizations can obtain back taxes. | | | |
| | Consult with County Treasury Offices to pursue back taxes. | Finding: 7.2 | <ul style="list-style-type: none"> • Identify points of contact at each County Treasury Office (DNREC) • Schedule meeting to discuss back tax issue for tax ditch organizations and determine path forward for resolution (DNREC/County Treasury) | Medium Term |

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|------------|--|---|--|-------------------------------------|
| F.5 | Create emergency drainage funding sources to assist tax ditches with no officers. | | | |
| | Identify funding sources and cost recovery for emergency situations when a tax ditch organization has no officers. | Finding: 9.1 | <ul style="list-style-type: none"> In Spring of 2022 evaluate if the “Emergency Repair” Project on the RC&D List was sufficient in addressing these situations on tax ditch systems (DNREC/county conservation districts) Determine process for cost recovery of utilized funds. Identify funding sources based on anticipated need. | Short Term Implemented continually |
| F.6 | Improve warrant rate recommendations to better reflect anticipated maintenance of the tax ditch system. | | | |
| F.6.1 | Develop a tool to estimate and project future routine expenses to determine appropriate annual warrant rates. | Findings: 1.1, 7.0, 7.3, 7.4, 8.1, 9.0 Workgroup Recommendation: E&O.5.1 | <ul style="list-style-type: none"> Develop tool and document assumptions (DNREC/Partner) Share tool with tax ditch officers and county conservation districts for use. (DNREC/Partner) Provide training as needed (DNREC/Partner) Evaluate and update tool based on expenses every other year (DNREC/county conservation districts) | Medium Term Implemented continually |
| F.6.2 | Calculate and provide suggested warrant rates ahead of annual meetings for officer and taxable consideration. | Findings: 1.1, 7.0, 7.4, 8.0, 8.1, 9.0 Workgroup Recommendation: F.1 & E&O.5.1 | <ul style="list-style-type: none"> Fulfillment of F.6.1 (DNREC/county conservation districts) Calculate and provide warrant rate suggestion and associated paperwork for officers ahead of annual meeting (DNREC/county conservation districts) Consider whether collecting an appropriate warrant rate should be an eligibility criterion for tax ditch matching funds (county conservation districts) | Medium Term Implemented continually |



Design Changes

| Key Findings and Recommendations: <i>Design Changes</i> | | | | |
|---|--|---|---|-----------------------------------|
| ID | Summary | Supporting Evidence | Action Item(s) | Goal Range |
| D.1 | Consider modern and future factors during the design of new or changes to existing tax ditches. | | | |
| D.1.1 | Develop specifications to incorporate factors identified in Figure 3 when producing designs and details for tax ditch maintenance and/or improvement projects. | Findings: 2.0, 2.1, 4.2 | <ul style="list-style-type: none"> Review list of factors identified and set parameters of improvement given tax ditch constraints (DNREC/Partner). Prepare technical specifications and standard details for implementation (DNREC/Partner) Implement specifications and standards (DNREC/tax ditch organizations/taxables) | Long Term Implemented continually |
| D.1.2 | Establish regulatory requirements for tax ditch maintenance and/or improvement projects as identified in Figure 3. | Findings: 2.0, 3.0, 3.1, 3.3, 4.0, 6.1, 6.3, 6.4, 6.5, 6.9 | <ul style="list-style-type: none"> Consult with legal counsel to determine if regulatory requirements can be implemented (DNREC/DAG) If appropriate, draft and publish regulatory requirements (DNREC/DAG) As appropriate, Revisit D.1.1 and “Land Development Request”, “Tax Ditch ROW Change Request”, and “Tax Ditch Guidelines for Land Development Plans” to update accordingly (DNREC) | Long Term Implemented continually |

| | | | | |
|------------|--|---|---|---|
| D.2 | Implement projects and practices that address tax ditch maintenance while improving environmental quality. | | | |
| | Update and/or develop a Tax Ditch Best Management Practice (BMP) handbook. | Findings: 2.0, 2.1, 4.0, 4.1, 4.3 | <ul style="list-style-type: none"> • Review existing Drainage Best Management Handbook (DNREC/Partner) • Look for partner(s) and resources such as the Nanticoke Watershed Alliance (NWA) or Delaware Center for Inland Bays (CIB) and Chesapeake Bay Implementation Grant (CBIG) to complete task. • Update existing details and specifications to include operation and maintenance details (DNREC/Partner) • Add additional details and specifications with operation and maintenance details that can be replicated across tax ditch channels to address common maintenance issues (DNREC/Partner) • Finalize handbook (DNREC) • Develop quick reference sheets for each practice for tax ditch officers and/or landowners (DNREC/Partner) • Distribute handbook to tax ditch officers, partner agencies, and make it available online. Development of Handbook and Summary Sheet for Tax Ditch Officers (DNREC) | Medium Term Implemented continually Updated every 5 years |
| D.3 | Improve coordination amongst the DNREC Tax Ditch Program and jurisdictional and/or delegated agencies. | | | |
| | Coordinate with jurisdictional agencies to ensure tax ditch considerations are made prior to entities issuing approvals. | Findings: 2.0, 3.0, 3.1, 3.2, 3.3, 4.1, 5.0, 5.1, 6.1, 6.2, 6.3, 6.4, 6.5, 6.7, 6.8 Workgroup Recommendation E&O.3.2 | <ul style="list-style-type: none"> • Fulfillment of E&O.1 (DNREC) • Identify points of contact for Regulatory Stakeholders identified in Table 1 (DNREC) • Fulfillment of E&O3.2 (DNREC) • Distribute materials and if needed coordinate meeting with agency staff for instructions and/or further coordination (DNREC/Jurisdictional Agencies) • Consider legislative changes to resolve concern. | Short Term Implemented continually |



Law Changes

| Key Findings and Recommendations: <i>Law Changes</i> | | | | |
|--|--|---------------------|--|------------|
| ID | Summary | Supporting Evidence | Action Item(s) | Goal Range |
| L.1 | Improve process outlined under Del. Code Title 7 Chapter 41 §4161 (10) to transfer authority. | | | |
| L.1.1 | Add additional State or Local government agencies in the Tax Ditch Law that a tax ditch organization may elect to transfer its authority. | Finding: 9.1 | <ul style="list-style-type: none"> Identify State and/or Local government agencies that may be appropriate for transferring authority (DNREC/Identified Entities) Fulfillment of F.6.1 (DNREC/county conservation districts) Determine anticipated staffing and/or funding for an agency to be in the position to accept a tax ditch organization’s authority (DNREC/Identified Entities) Propose method to achieve needs identified (DNREC/Identified Agencies) Obtain approval by the DNREC Cabinet Secretary to explore opening the Tax Ditch Law with this intent (DNREC) Follow-up as necessary (DNREC/DAG/Identified Entities) | Long Term |
| L.1.2 | Update Tax Ditch Law to improve likelihood of a tax ditch organization successfully meeting the requirements to transfer authority if desired. | Finding: 9.1 | <ul style="list-style-type: none"> Fulfillment of F.6.1 (DNREC/county conservation districts) Determine anticipated staffing and/or funding for an agency to be in the position to accept a tax ditch organization’s authority (DNREC/Identified Entities) Propose method to achieve needs identified (DNREC/Identified Entities) Obtain approval by the DNREC Cabinet Secretary to explore opening the Tax Ditch Law with this intent (DNREC) Follow-up as necessary (DNREC/DAG) | Long Term |
| L.1.3 | Create a state-run opt-in Tax Ditch Maintenance Program. | Finding: 8.1 | <ul style="list-style-type: none"> Fulfillment of F.6.1 (DNREC/county conservation districts) Research and develop program for tax ditches similar to Kent County Stormwater Maintenance Districts Determine anticipated staffing and/or funding for the State to enact Program (DNREC). Obtain approval by the DNREC Cabinet Secretary to explore opening the Tax Ditch Law with the intention to add this option to the Tax Ditch Law (DNREC) Follow-up as necessary (DNREC/DAG) | Long Term |

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|------------|--|--|---|-------------|
| L.2 | Consider the dissolution of inactive tax ditch organizations. | | | |
| | Consult with legal counsel to establish procedures to address inactive tax ditch organizations. | Finding: 9.1 | <ul style="list-style-type: none"> Propose definition of an “inactive” tax ditch organization (DNREC/DAG) Develop protocol for addressing “inactive” tax ditch organizations (DNREC/DAG) | Long Term |
| L.3 | Improve disclosure of tax ditch rights-of-ways and/or Court Order Changes (COC) affecting a property to prospective buyers. | | | |
| | Development of a Tax Ditch Real Estate Disclosure Form and/or other disclosure improvements. | Finding: 6.0, 6.5, 6.6 Workgroup Recommendation: E&O.2 | <ul style="list-style-type: none"> Review applicable real estate laws (DNREC/DAG) Determine ineffectual items in current process (DNREC/DAG) Develop potential solutions (DNREC/DAG) Work with corresponding agencies to propose the enactment of improvements determined (DNREC/DAG/Applicable Agencies) Follow-up as necessary (DNREC/Applicable Agencies) | Long Term |
| L.4 | Improve Tax Ditch Law and right-of-way enforcement. | | | |
| L.4.1 | Increase the fine issued for tax ditch damages and/or right-of-way obstruction issues under Title 7 Chapter 41 § 4186. | Finding: 6.5 Workgroup Recommendations: E&O 2.3.1, E&O 2.3.2, and E&O 4.1 | <ul style="list-style-type: none"> Obtain approval by the DNREC Secretary to explore opening the Tax Ditch Law with this intent (DNREC) Consult with legal counsel to proceed (DNREC/DAG) Follow-up as necessary to enact change (DAG) | Medium Term |
| L.4.2 | Turn over enforcement of tax ditch damages and right-of-way issues to DNREC | Finding: 6.5 Workgroup Recommendations: E&O 2.3.1, E&O 2.3.2, and E&O 4.1 | <ul style="list-style-type: none"> Develop an internal process to achieve this recommendation (i.e. funding, staffing, materials, etc.) (DNREC) Approval needed from the DNREC Cabinet Secretary to explore this item (DNREC). Consult with legal counsel to proceed (DNREC/DAG) Follow-up as necessary to continue. | Long Term |

Workgroup Details

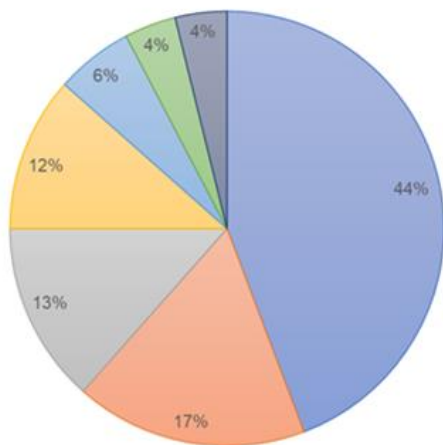
Overview of Workgroup Tasks

The DNREC, Division of Watershed Stewardship (DWS), Conservation Programs Section (CPS), Tax Ditch Program established the Tax Ditch Modernization Workgroup to discuss concerns regarding tax ditch operational issues. These issues include funding, officer recruitment and retention, and impacts from external pressures such as changing land use. Workgroup participants identified causes of these concerns and issues, determining existing processes, and proposing potential solutions that would benefit the diverse range of stakeholders. Stakeholders were determined based upon their knowledge and/or responsibilities within the tax ditch discussion. The first two and last workgroup sessions were informational and open to all participants. All other workgroup sessions were structured into focus groups to allow for intimate discussion and input.

Operational Issues

Two introductory sessions were held virtually to ensure all participants had the same foundational knowledge regarding operations of tax ditch organizations and systems: Tax Ditch Law 101 and Tax Ditch Function 101. These sessions were held on Wednesday June 9 and June 23, 2021, respectively. All members of the Tax Ditch Modernization Workgroup (Appendix A) were asked to attend these two sessions (Figure 1).

Tax Ditch Modernization Workgroup Session 1 Audience Breakdown



Tax Ditch Modernization Workgroup Session 2 Audience Breakdown

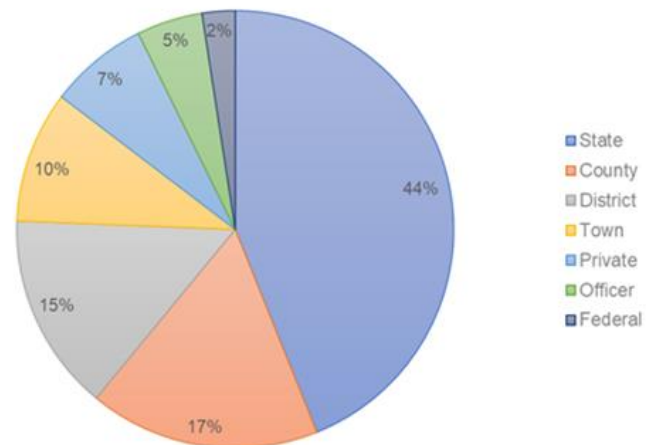


Figure 1. Tax Ditch Modernization Workgroup sessions 1 & 2 audience by affiliation.

Session 1: Tax Ditch Law 101

Workgroup Finding 1.0: Tax Ditch Law 101 presentation to be posted on the DNREC Tax Ditch Program webpage and incorporated into staff and new officer training to increase education and outreach.

Workgroup Finding 1.1: The DNREC Tax Ditch Program to provide personalized trainings to officers and associated agencies to ensure roles and responsibilities of all are clear.

A total of 57 individuals attended the Tax Ditch Law 101 session. This session provided an overview of DE Code Title 7, Chapter 41 Agricultural and Soil Conservation; Drainage and Reclamation of Lowlands or the “Tax Ditch Law” to review fundamental operating and management principles, including limitations of tax ditch organizations ([DNREC, June 2021](#)). Tax ditch organizations operate with the assistance and/or supervision of multiple agencies. Consequently, tax ditch entities are not well understood (Figure 2).

How comfortable are you in your role as it relates to tax ditch issues?

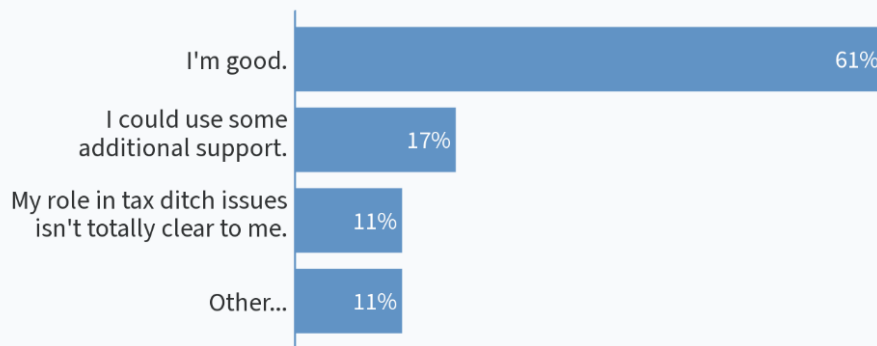


Figure 2. Results of polling question regarding workgroup attendees' comfort with their role in tax ditches.

The information presented during this session was shared to clarify roles and responsibilities as defined by the Tax Ditch Law including those of the tax ditch organizations, officers, taxables or the landowners who comprise the organization, and the most closely affiliated partner agencies like the DNREC and county conservation districts. This presentation was recorded and will be shared and utilized as a training resource for new hires to the DNREC Drainage Program, partner agencies, and those who are new or interested in becoming tax ditch officers ([DNREC, June 2021](#)).

Members of the workgroup were also solicited for feedback regarding any missing challenges facing tax ditch organizations that were not included in the topics for discussion through the workgroup effort. The

attendees offered the following concerns and/or questions which were then incorporated and addressed in subsequent workgroup sessions.

- Are landowners being taxed by the county on tax ditch rights-of-way? If the tax ditch association “owns” the right to construct or maintain a ditch the landowner’s ability to use that right-of-way is reduced but may be paying property tax?
- You have already identified lack of resources/funding and ditch maintenance as two challenges, yet the DNREC has recently implemented a permit fee for tax ditch organizations to perform dipouts that maintain the ditches. This is clearly counterproductive.
- Right-of-way issues like tree planting
- Rights-of-way that were infringed upon causing lack of maintenance
- Infrastructure best practices
- Creating new tax ditches to cure private drainage insufficiencies
- Design specifications (designing to 10-year storm) vs stormwater needs including impervious surface
- DeIDOT coordination
- General public awareness of tax ditches
- Changing land use- they are no longer agricultural
- Officer recruitment and retention
- Capacity of systems

Session 2: Tax Ditch Function 101

A total of 46 individuals attended the Tax Ditch Function 101 workgroup session. This session provided an overview of tax ditch design criteria, considerations, and assumptions; an overview of tax ditch considerations for permit agencies; and covered tax ditch maintenance practices and activities ([DNREC, June 2021](#)). Through this session any additional ideas or considerations for improvements to tax ditch designs, permitting coordination, and maintenance responsibilities were encouraged and received.

Design

Workgroup Finding 2.0: Develop a plan to consider modern and future factors when designing or changing tax ditches.

Workgroup Finding 2.1: Update and/or create a Tax Ditch Best Management Practice (BMP) handbook. The handbook should include design details that can be replicated to address tax ditch maintenance issues under typical tax ditch site conditions. The handbook must provide operation and maintenance details for each practice for clarity of expectations.

Delaware's environment has changed drastically since the inception of tax ditch organizations. However, the methodology of designing new tax ditch channels and/or making improvements to existing tax ditch channels has been changing at a much slower pace. Throughout the discussion many factors were suggested for incorporation into tax ditch designs (Figure 3). The factors that are not currently considered are noted below for future incorporation in project planning and tax ditch design.

- Design for 100-year storm
- Climate change
- Water quality
- Wildlife habitat
- Riparian corridor planning
- Anticipated land development and/or landuse changes.

Are there other factors that should be included in tax ditch design?



Figure 3. Results of polling question regarding other factors that should be included in tax ditch design.

To further explore some of the tax ditch design factors, a portion of session 2 highlighted the natural design practices and approaches that can be used to address tax ditch maintenance issues ([DNREC, June 2021](#)). These types of techniques help to improve environmental and water quality, reduce the frequency of tax ditch maintenance activities, and typically allow for the leveraging of additional sources of funding for implementation. The workgroup was asked, “would you like to see more natural techniques installed in your tax ditch systems?” with a unanimous response of “yes.” As a follow-up question, the workgroup members were asked, “what benefit of natural techniques is most important to you?” (Figure 4). Changes to improve water quality was the most desired reason for the implementation of natural design techniques. These results will be utilized to prioritize standards and designs in the recommended update and development of a Tax Ditch Best Management Practice (BMP) handbook.

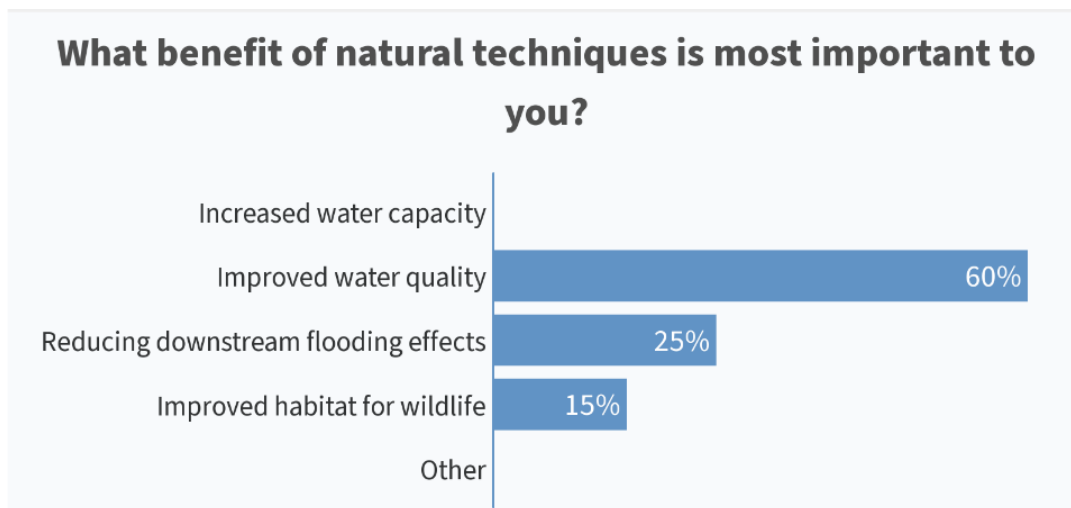


Figure 4. Results of polling question regarding the benefit of natural design techniques that is most important.

Tax Ditch and Development Impacts

Workgroup Finding 3.0: *Share guidance for utilizing the tax ditch map application.*

Workgroup Finding 3.1: *Ensure that the location of digital tax ditch data is easily accessible and marketed to appropriate agencies.*

Workgroup Finding 3.2: *Recommend external agencies have tax ditch data “on” by default for use in their web-based mapping applications.*

Workgroup Finding 3.3: *Distribute printed copies of the “Land Development Request Form” and “Tax Ditch Right-of-Way Change Request” to the agencies requested for participation in the workgroup that issue permits and approvals.*

Accounting for tax ditch impacts prior to issuing permits or approvals is inconsistent across government entities. As a result, the Workgroup members were asked, “What does your agency need to better account for tax ditch impacts?” and the following items were noted:

- Clarity on what is within their jurisdiction
- Clear guidance regarding what and how to review submittals
- Education/training of those performing the reviews
- Enforcement with a specific suggestion that this be provided by the DNREC

The simplest thing that external agencies can do prior to issuing approvals on requested projects is to determine whether the property in question contains a tax ditch channel and/or right-of-way (ROW). To assist with this determination, the web-based application found here: de.gov/taxditchmap can be searched by tax parcel ID and/or street address. Tax ditch channel and right-of-way data are available for digital download for use in external agency applications through Delaware First Map, these datasets are regularly updated as changes are frequently processed.

If a tax ditch channel and/or right-of-way are found on a property with a proposed activity, the requestor should be forwarded to the DNREC Tax Ditch Program for consultation. This ensures the activity will not result in negative tax ditch impacts. To limit confusion, it is suggested that agencies do not issue approvals until concurrence is obtained from the DNREC Tax Ditch Program.

The DNREC Tax Ditch Program has developed a “Land Development” Plan Review process, guidance document, and submission form made available on the Program’s webpage; de.gov/taxditch. These documents help landowners and government agencies in obtaining concurrence from the Program. The process developed was reviewed during the session to educate the workgroup members of this resource. Utilization of these resources by external agencies prior to issuing approvals should limit the need for enforcement actions taken by tax ditch organizations to address access, channel obstructions, and damages.

Maintenance

Workgroup Finding 4.0: *Development of a digital tax ditch infrastructure and conditions inventory.*

Workgroup Finding 4.1: *Development of a checklist and/or timeline for tax ditch officers and contractors of items that must be addressed for various maintenance activities to occur.*

Workgroup Finding 4.2: *Tax Ditch Function 101 presentation to be shared and used as a training resource for staff, partner agencies, and tax ditch officers who are interested.*

Workgroup Finding 4.3: *Develop training for officers and contractors on natural tax ditch designs and maintenance.*

To conclude Session 2, an overview of tax ditch maintenance activities was presented. The overview highlighted how tax ditch organizations determine their “Program of Operations”, typical maintenance activities completed, and the recommended frequency of maintenance to ensure adequate drainage is maintained ([DNREC, June 2021](#)). Workgroup members identified limited availability of contractors as a challenge to tax ditch maintenance. To address this issue, workgroup participants were asked, “Do you have any suggestions for additional/improved resources for contractors?” The responses are below:

- Updated Geographic Information System (GIS) resources
- Maintenance plans
- Past maintenance scheduled with reviews of scope of work completed
- Checklist or step by step guide for process of getting work approved and ready for implementation
- Training on following what’s on a plan
- Training on natural design
- Certification for performing work

To improve the understanding of how tax ditches are functioning in today’s landscape (Figure 5), the DNREC Tax Ditch Program is working on a digital “tax ditch inventory.” This effort will improve the GIS resources available to better assist tax ditch officers and partner agencies in developing maintenance plans. This inventory will expand on existing tax ditch channel and right-of-way (ROW) data to include, but not limited to, the following: designation of minor ROWs; obstruction and damage locations; pipe crossing locations; designation of maintenance responsibility of features/infrastructure as assigned at formation or through subsequent Court Order Changes (COC); and the date of the last known maintenance activity.

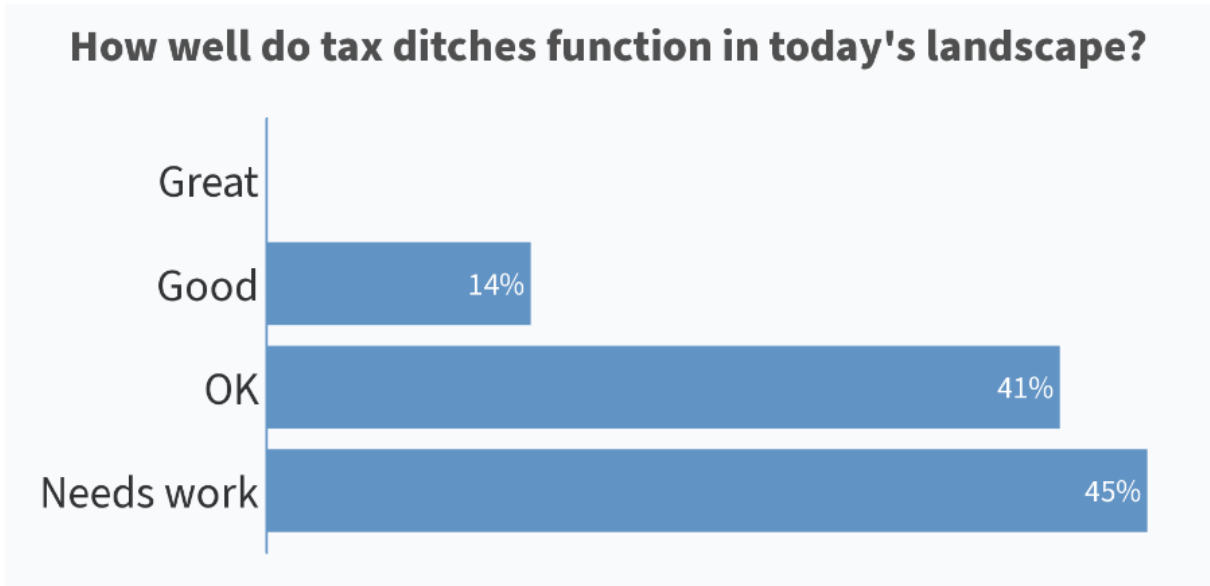


Figure 5. Results of polling question to garner thoughts on how well tax ditches function in today's landscape.

The DNREC Tax Ditch Program will create a resource for tax ditch officers and contractors to ensure all items are addressed and permit coverages are obtained for improved efficiency in scheduling desired maintenance activities. The DNREC Sediment and Stormwater Program's Bluecard and Certified Construction Reviewer (CCR) Courses are training opportunities for contractors to learn more about how to follow the details on a typical tax ditch maintenance plan. The dates of these trainings are posted on the DNREC Sediment and Stormwater webpage; <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/training/>.

This presentation was also recorded and will be shared and used as a training resource for staff of the DNREC Tax Ditch Program, partner agencies, and those who are new or interested in becoming tax ditch officers ([DNREC, June 2021](#)).

Changing Land Use

Two Tax Ditch Modernization Workgroup sessions; Tax Ditch Right-of-Way Issues and Tax Ditch & External Agency Approvals were held virtually to discuss challenges of tax ditches in relation to changing land use. Delaware is experiencing a high rate of development from simple pole barn additions to 2,000+ home development projects. These changes are creating additional pressures on tax ditch systems from access issues to increased volume or concentrated water discharges. As tax ditches do not have a formal regulatory operation, confusion remains as to who has the authority to enforce right-of-way obstructions or damages, consider tax ditch system capacity, and whose responsibility it should be to notify of potential tax ditch impacts.

Session 3: Tax Ditch Right-of-Way Issues

***Workgroup Finding 5.0:** Increase education and outreach to the public on tax ditches and rights-of-way. Have resources readily available for agencies involved with tax ditches.*

***Workgroup Finding 5.1:** Develop guidance for regulatory/approval agencies when considering tax ditch impact requests.*

Session 3, Tax Ditch Right-of-Way Issues, was held virtually on July 14, 2021. Fifty-three (53) attendees participated from the DNREC Tax Ditch Program, county conservation districts, municipalities, delegated agencies, and tax ditch organizations. The material covered in session 3 provided an overview of tax ditch rights-of-way (ROW), their designated uses, and typical obstructions or damages erected within them ([DNREC, July 2021](#)). Additionally, the current process for tax ditch officers to resolve tax ditch obstructions and damages was shared. The discussion of this workgroup session focused on potential solutions to existing tax ditch right-of-way obstructions and damage issues and explored ways to avoid these issues.

To facilitate the discussion, a pre-session survey was sent to participants. The survey asked the workgroup members, “Does your agency/organization provide approvals or permits in general development impacts (buildings, fences, utilities, drainage, large developments, etc.?) and “If yes, does your agency/organization take tax ditches into consideration before providing an approval/permit?”. The results to these pre-session survey questions are shown in Figures 6 and 7, respectively. Approximately 65% of workgroup respondents said they do provide some form of approval process (Figure 6), and of those respondents, 60% stated that they considered tax ditch impacts in their reviews with the rest saying “no” or “unsure” (Figure 7).

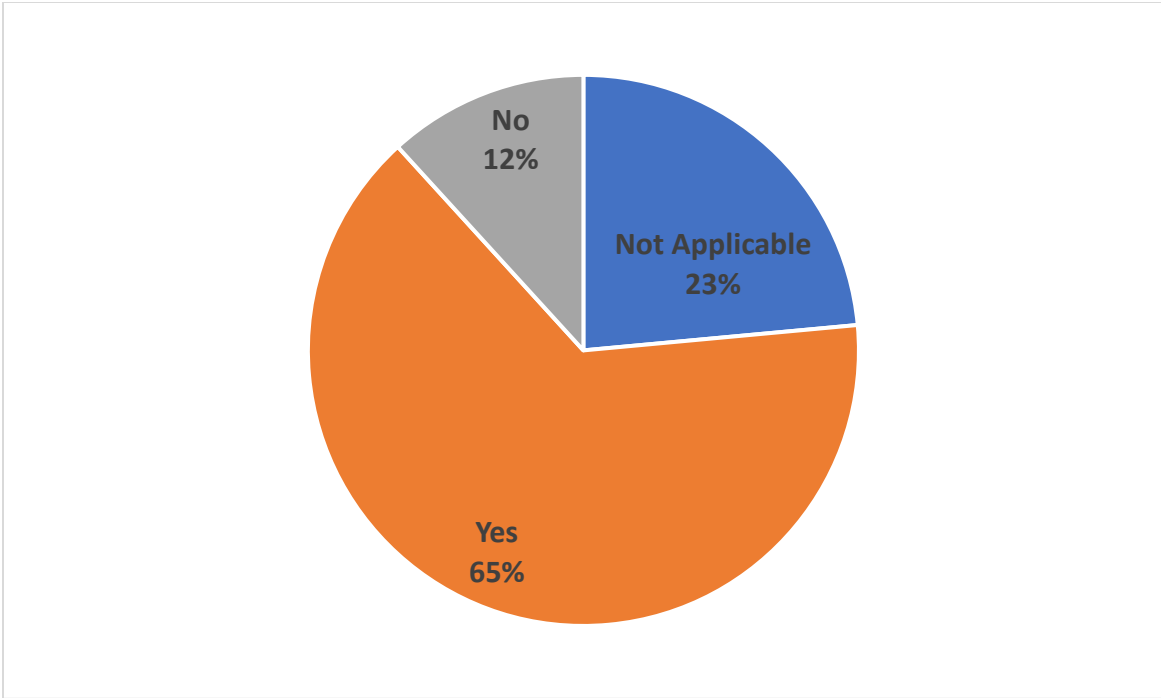


Figure 6. Results from the pre-session survey regarding the question "Does your agency/organization provide approvals or permits in general development impacts?"

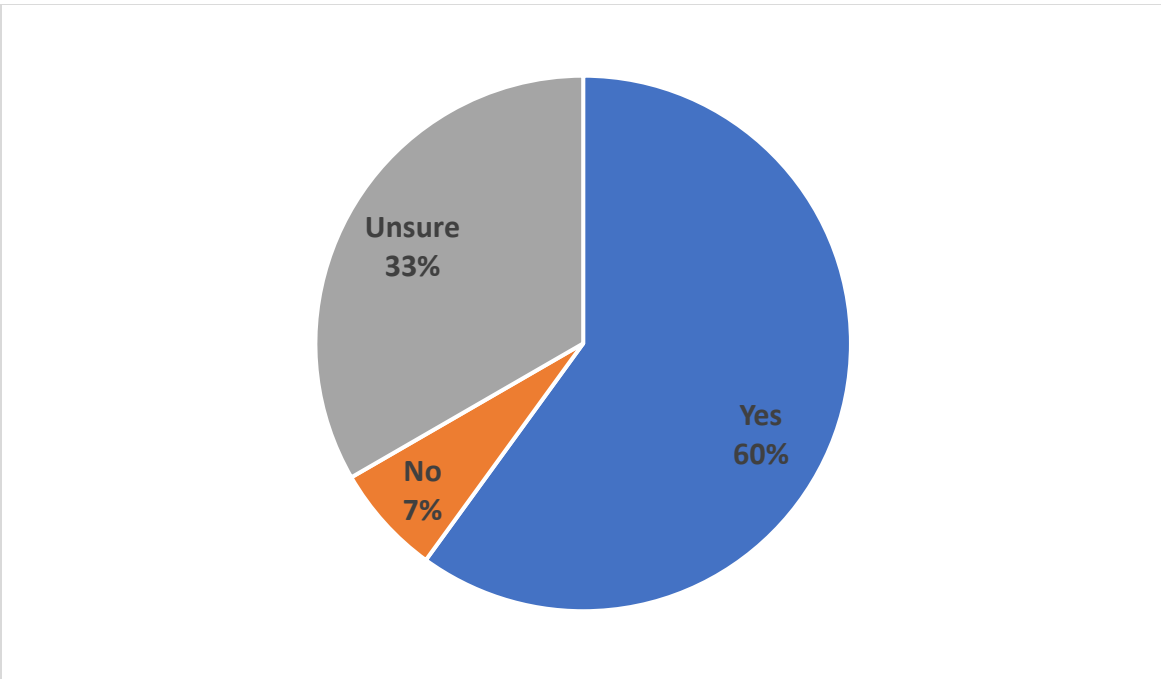


Figure 7. Results from the pre-session survey regarding the follow-up question to Figure 6, "If yes, does your agency/organization take tax ditches into consideration before providing an approval/permit?"

Most of the workgroup members (60%) who participated indicated that the agency/organization they represent does issue permits for structures or features that could be an obstruction to a tax ditch channel or right-of-way. While 40% of respondents indicated that they did not or were unsure if they did.

Background information was provided and solicited from the audience. Workgroup attendees were encouraged to provide their experiences with rights-of-way and obstructions including the type of obstructions they were familiar with (Figure 8). Other types of features that may cause right-of-way issues that were mentioned in the workgroup included hay bales, overhead lines, down trees, beaver dams, and utilities.

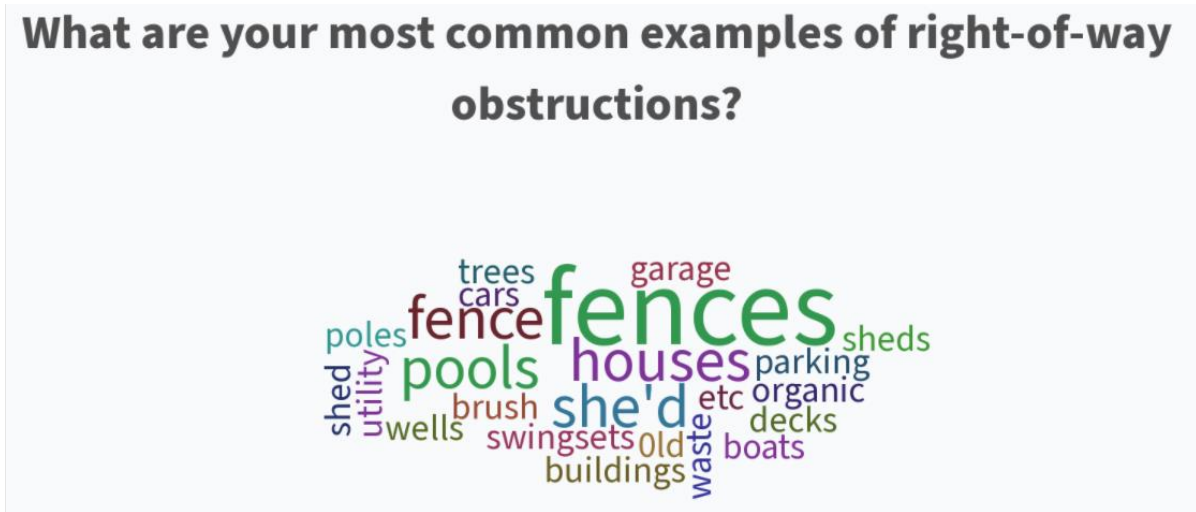


Figure 8. Image of the responses from participants to the question "What are your most common examples of right-of-way obstructions?" The larger the word, the more times it was mentioned.

Workgroup members were divided into seven smaller groups to analyze seven different examples of tax ditch right-of-way obstruction scenarios (Figure 9). These break-out groups assisted in creating the conversation surrounding right-of-way issues, preventative measures regarding obstructions, and options officers could pursue to resolve the obstruction. A common theme suggested in each of the break-out group sessions regardless of obstruction was to increase education and outreach regarding tax ditch rights-of-way and coordination with approval agencies for the features noted as obstructions.

Scenario A

Site Conditions:

Tax Ditch Right of Way is 127.5' from centerline (CL) along both banks of the channel.

- Question 1: Is there an issue?
- Question 2: How could this have been prevented?
- Question 3: What should the officers do?



Figure 9. Screenshot of session 3 presentation slide, providing an example of the scenarios presented.

Through this workgroup session, stakeholders who may impact tax ditch rights-of-ways based on their requests and/or approvals were identified (Table 1). Increasing outreach, communication, and coordination efforts between the DNREC Tax Ditch Program and the entities noted in Table 1 can help to reduce negative impacts to tax ditch systems. Ideas to achieve this goal included the preparation of guidance material(s) and/or trainings for reviewing submitted requests and/or site plans for tax ditch impacts. Additionally, it was recommended that agencies ensure digital tax ditch data is incorporated into their respective review tools and “on” by default to use as a screening tool. The DNREC Tax Ditch Program staff also encouraged attendees to contact the Tax Ditch Program regarding potential impacts if there are any questions and until the resources suggested could be developed.

Table 1 Key stakeholders for the DNREC Tax Ditch Program to increase tax ditch education, outreach, and coordination of approval efforts.

| Regulatory Stakeholders | General Stakeholders |
|-------------------------|---|
| Counties | Utility Companies - Power, Cable, Phone, Water, Gas |
| Municipalities | Well Drillers |
| DeIDOT | Septic Designers & Installers |
| DNREC Septics | Land Surveyors |
| DNREC Wells | Public & Tax Ditch Landowners |
| | Home & Building/Shed/Deck/Pool Builders |
| | Fencing and Landscaping Companies |
| | Realtors and Real Estate Attorneys |

The process for tax ditch organizations to address tax ditch right-of-way obstructions and damages was reviewed (Appendix B). This process is lengthy and difficult as the only current path involves addressing the issue after it has been created, not prior to. To begin to think about how to prevent right-of-way obstructions, workgroup members were asked, “Think back to your permitting process. Are there additional opportunities to address ROW issues before they start?” The results indicated that external

agencies were open to ideas to address tax ditch right-of-way obstruction concerns in their own approval process to help prevent these issues from arising in the first place (Figure 10).

While most of the agencies represented indicated that they could better incorporate tax ditch considerations into their permit or approval process, 40% of the respondents indicated that they were unsure that adjustments to their process could be made (Figure 10). The DNREC Tax Ditch Program will work to provide guidance for reviewing tax ditch impacts and clarify expectations for permitting and/or regulatory entities identified in Table 1.

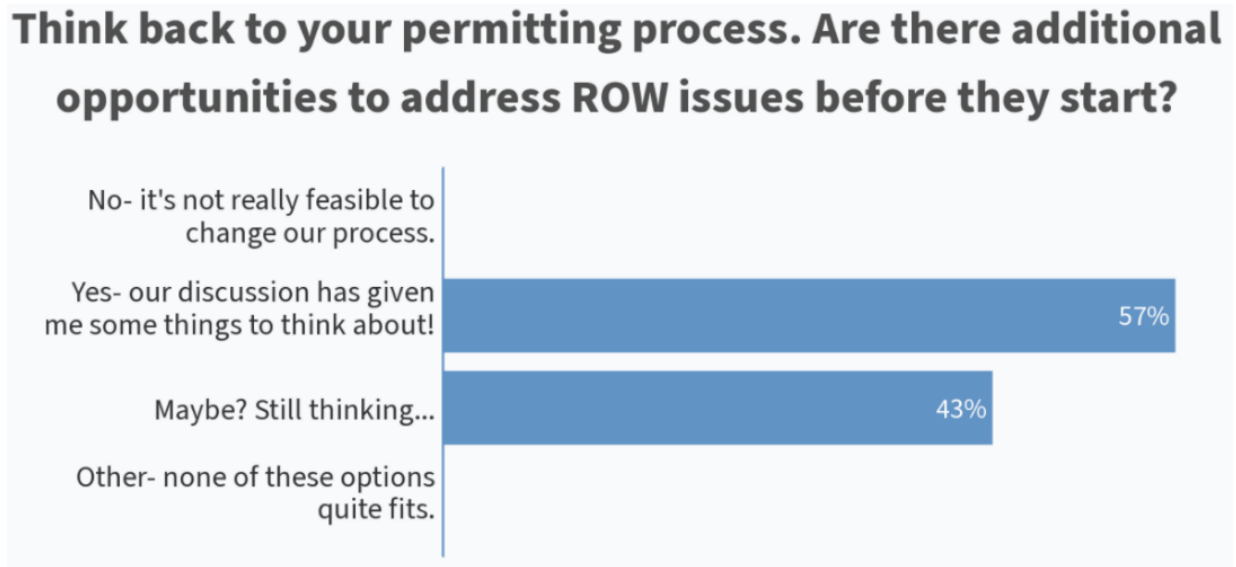


Figure 10. Responses during workgroup session 4 to the question posed: "Think back to your permitting process. Are there additional opportunities to address ROW issues before they start?"

Session 4: Tax Ditch & External Agency Approvals

Workgroup Finding 6.0: Determine method to improve awareness of Court Order Changes (COCs) processed on properties as property ownership changes.

Workgroup Finding 6.1: Distribute printed copies of the “Tax Ditch Guidelines for Land Development Plans” to the agencies requested to participate in the workgroup as a resource for their staff.

Workgroup Finding 6.2: Tax Ditches to be considered or made an element of the State/County/Municipal Comprehensive Planning and Review process.

Workgroup Finding 6.3: Preliminary comments issued by the DNREC Tax Ditch Program to note existing tax ditch conditions as well as feasibility of request based on previously processed changes.

Workgroup Finding 6.4: Review of plan/request submissions for tax ditch impacts should occur at preliminary and final stages of project planning and permitting/approval processes.

Workgroup Finding 6.5: Tax ditch channels and rights-of-way should not only appear on Property Deeds but also when applicable added as exhibits or attachments to Homeowners Association and/or Condominium documents.

Workgroup Finding 6.6: The DNREC Tax Ditch Program review the process for filing COCs and determine path forward to incorporate entire process of filing and recording COCs as a Program task.

Workgroup Finding 6.7: Target outreach efforts regarding tax ditches to the Delaware Building and Planning Commissions as well as surveying community.

Workgroup Finding 6.8: Planning and Zoning to advocate for tax ditch channels and rights-of-way across parcels to be areas of community and/or open space to minimize risk of tax ditch damages and obstructions.

Workgroup Finding 6.9: Design statewide signage to assist in raising awareness about the presence of tax ditches across the state.

Land Development Plan Review & Court Order Changes

Session 4 Tax Ditch & External Agency Approvals was held virtually on July 28, 2021, with 42 attendees participating from the DNREC Tax Ditch Program, county conservation districts, municipalities, delegated agencies, and tax ditch organizations. The material covered in Session 4 provided an overview of the review and approval processes of which the DNREC Tax Ditch Program is currently involved to determine tax ditch impacts ([DNREC, July 2021](#)). The review process conducted, and considerations made by the DNREC Tax Ditch Program regarding tax ditch impacts were shared. The discussion through this workgroup session focused on avenues to improve external agency processes and/or increase coordination for effective implementation of Tax Ditch Law.

Taking into consideration the list of possible right-of-way obstructions identified in Figure 8, the list of stakeholders in Table 1 was reviewed to confirm it was an inclusive list of audiences to target with increased coordination efforts. The workgroup members offered no additional stakeholders and/or features to add to this list.

The DNREC Tax Ditch Program currently performs plan reviews based on existing collaboration efforts with agencies like Sussex Conservation District, DelDOT, and landowners' submissions. The Program's procedure was shared and highlighted as a resource for other partner agencies who may review submitted requests for tax ditch impacts (Appendix C). In addition, the DNREC Tax Ditch Program shared the "Tax Ditch Guidelines for Land Development Plans" document which has been made available on the Program's webpage, de.gov/taxditch. This document was created to set expectations on what items must be shown on all building or development plans for potential tax ditch impacts to be determined. Following these guidelines has helped expedite the Program's ability to process review requests in a timelier manner and limits the number of comment letters sent back and forth between the submitter and Program.

To promote efficiency in project planning and approvals, the workgroup members were asked, "Where do tax ditch considerations best fit into the plan review process when an individual is seeking an agency's approval?" The resulting discussion denoted that tax ditch impacts and considerations should be made both at the preliminary and final approval stages of a project. It was highlighted that tax ditch items being considered at the preliminary stage could help to determine feasibility of the proposal and prevent processing delays.

Based on similar agency representation, the workgroup participants were split into groups to review their agency's plan or review process and discuss improvements based on the information shared. The representatives also highlighted the resources or support needed to achieve these improvements. After discussions the workgroup members reconvened and discussed the following items as improvements to help incorporate tax ditch considerations into plan review and approval processes.

- Tax ditch channels and rights-of-way should not only be on property deeds but, when applicable, added as exhibits or attachments to homeowner's association (HOA) and/or condominium documentation. This action has been added as a requirement in processed Court Order Changes for land development projects.
 - Further Consideration Required: Determine when homeowners/property/condominium owners association documents are filed because processing of plan reviews for tax ditch impacts may need to be adjusted to incorporate recommendation.

- Buyers should receive tax ditch information at settlement based on a title search conducted. However, title searches may not be occurring and/or individuals may not understand what is being shared.
 - Further Consideration Required: Development of a different method to share tax ditch information to buyers, such as a Real Estate Disclosure Form, to be brainstormed.
- Target tax ditch outreach efforts to the Delaware Building and Planning Commissions as well as surveying community.
- Planning and Zoning to make recommendations for avoiding tax ditch channel and rights-of-way impacts during development review process.

The DNREC Tax Ditch Program’s focus during plan reviews is to ensure that the integrity of tax ditch channels is preserved and the system can be maintained by the tax ditch organizations in the future. The result of the Program’s review includes comment letters requesting changes to the development plans to satisfy tax ditch needs and/or a “Letter of No Objection” when all commented items have been addressed. A comment made by the Program may be that a Court Order Change (COC) is needed to move forward with a proposed development. This occurs when a proposed project is considered feasible but a formal, legal change to the tax ditch channel, right-of-way(s), and/or watershed boundary must be documented and recorded. An overview of the COC procedure and process was shared to provide workgroup attendees an idea of processing time and considerations accounted for during the creation of the COCs. The land development review procedure and associated request forms that were shared are available on the Program’s webpage; de.gov/taxditch.

A workgroup participant asked how landowners know if a COC was executed on their property, particularly, if they were not the property owner at the time of the change. The workflow for processing COCs involves the DNREC Tax Ditch Program filing the signed document at the respective county Prothonotary Office. Then the landowner finishes the filing process by recording the COC in the county Recorder of Deeds office. However, there is nothing in place to ensure the landowner has completed their responsibilities in filing and recording COCs. If a COC is not filed with the Recorder of Deeds, this can create a challenge for a landowner to know if a COC affects their property. As a result, the DNREC Tax Ditch Program plans to determine if the Program can assist in filing the documentation to ensure the documents are filed and recorded correctly. The DNREC Tax Ditch Program can always be consulted to inform the landowner whether a COC has been processed on a property in question.

The Meaning of Tax Ditch Modernization

In session 4 all workgroup members were asked to participate and to describe what tax ditch modernization meant to them. This information was used to prioritize improvements and further discussions with the remainder of the workgroup sessions. The following thoughts were shared:

- Tax Ditch Funding
 - Tax ditch organizations were created to self-fund. However, the tax rate is difficult to increase and those organizations that have not been managed well have a difficult time getting back on track. Determination of funding mechanism(s) to get tax ditches in better working order needs to be addressed.
 - Address tax ditch assessment inequities.
 - § 3921 Funds provided by the state to supplement tax ditch maintenance should be distributed equitably across the 3 counties.

- Forming New Tax Ditches
 - Tax ditches may be the solution to drainage issues, however, the current process for forming a tax ditch in today's environment is not a quick or easy process. A suggestion was made to revisit the Tax Ditch Law or find more funding to invest in the construction of new drainage infrastructure.
- Tax Ditch Design and Maintenance
 - Higher set of design standards to account for the needs of the landscape today as well as anticipated challenges in the future. Consider what the area will look like 20-30 years from now.
 - Upgrade tax ditch systems.
 - The landscape of tax ditch rights-of-way has changed over time due to development and/or lack of consistent or routine maintenance. A plan is needed for how to maintain these systems moving forward.
 - Encourage buffers along tax ditch rights-of-way.
- Tax Ditch Officers
 - Recruit and retain officers for managing the tax ditch systems.
 - Appreciation events and develop mentorship program to train individuals to replace tax ditch officers ready to retire.
- Tax Ditch Awareness
 - Provide a standardized sign or logo for signage in and along tax ditches to spread awareness.
- Tax Ditch Enforcement
 - Tax ditch right-of-way obstructions should be handled and enforced by the DNREC not the tax ditch organizations.

Insufficient Funds

Two Tax Ditch Modernization Workgroup sessions; Financing Tax Ditches and § 3921 Funds were held virtually to discuss challenges of tax ditches in relation to insufficient funds for maintenance. Many tax ditch organizations across the state are not collecting adequate funds to perform necessary maintenance activities. The lack of funds available to address routine needs is only compounded when un-planned issues arise that require significant funding and effort. Bank erosion and control of invasive species are two examples of high cost and/or high effort issues tax ditch organizations face. The urbanization of tax ditch watersheds and climate change are some of the drivers that further contribute to these issues.

Session 5: Financing Tax Ditches

Workgroup Finding 7.0: Investigate whether tax ditch warrant rates can be levied to meet the needs for maintenance.

Workgroup Finding 7.1: Obtain legal opinion on how reassessing tax ditch assessments could be pursued.

Workgroup Finding 7.2: The DNREC Tax Ditch Program to schedule meeting with county Treasury Offices to discuss back tax issues significantly impacting tax ditch revenues.

Workgroup Finding 7.3: Develop and/or update warrant rate calculation tool based on current maintenance costs.

Workgroup Finding 7.4: Determine and/or update average cost of maintenance activities per measurable unit listed in Table 2 that is repeatable across tax ditch systems.

Workgroup Finding 7.5: Work with the tax ditch organizations identified in Table 3 to combine for more effective resource allocation.

On August 4, 2021, Session 5, Financing Tax Ditches was held with a total of 21 participants who attended virtually. This session provided an overview of how tax ditch organizations collect funds for maintenance and issues associated with back taxes. Additionally, tax ditch organizations with a small number of taxables, attributing to limited funds, was also highlighted. The current processes to combine and dissolve tax ditch organizations were shared to discuss these possibilities ([DNREC, August 2021](#)). This workgroup topic focused on the following items to consider whether tax ditch revenues can be raised to provide for the maintenance needs of today, and, if not, suggest a path forward to resolve.

- Review of current tax ditch assessment assignment and associated tax ditch revenues to determine if monies collected are sufficient for tax ditch maintenance.
- Review of tax ditch warrants and the process of changing rates to determine if warrant rates can be increased to cover routine maintenance costs.
- Back tax issues and concerns.
- Review the process of combining tax ditch organizations.

The individuals who attended Session 5 included members from the DNREC Tax Ditch Program, county conservation districts, county treasury offices, and tax ditch organization. Based on most of the participants having direct experience in managing or assisting in the management of tax ditches, the workgroup members were asked, “What is the most limiting resource for tax ditches to be effective?” While the majority of participants responded with money, participants also acknowledged that contractors, officer involvement, and technical expertise were also a limited resource. These results will be used to ensure that the recommendations noted by the workgroup will help address or improve these factors (Figure 11).

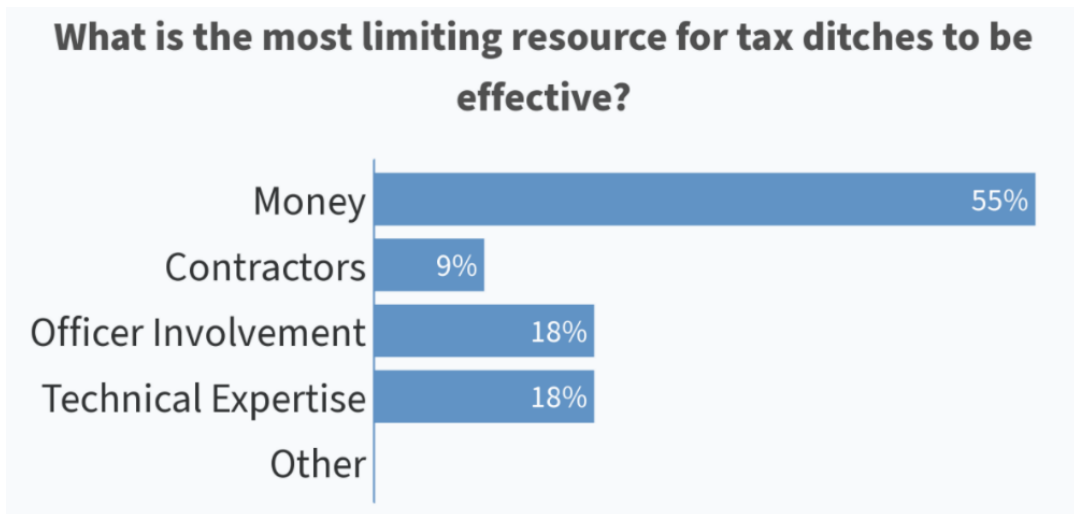


Figure 11. Results of polling question regarding the most limiting resource for tax ditch effectiveness

Since money was noted as the most limiting resource for tax ditches, the workgroup members were also asked, “Do individual tax ditches need more funds to be effective? If so, how much?” Workgroup participants noted that they either were not sure of an amount (25% of respondents) or that additional funding needs could be up to \$35,000 per Tax Ditch Organization. The needs of tax ditch organizations vary widely, and this should be acknowledged as one of the reasons respondents marked the “Not sure” category (Figure 12). This information will be used to for future investigations into whether tax ditch warrant rates can be levied to meet the needs for maintenance.

Do individual tax ditches need more funds to be effective? If so, how much?

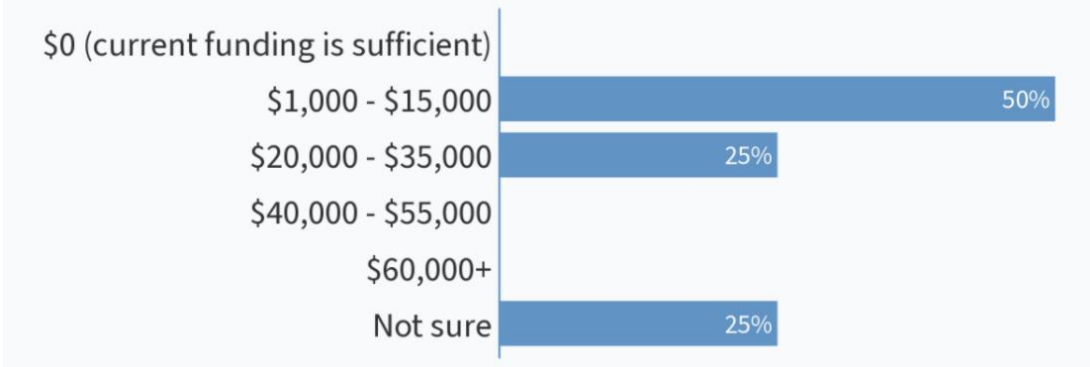


Figure 12. Results of polling question regarding how much more money do tax ditches need to be effective.

A thorough overview of how tax ditch assessments were assigned to properties located within a tax ditch watershed boundary was presented. There have been past concerns regarding the equity of tax ditch assessment assignment as land use and benefits change overtime. The protocol to assign assessments is determined at the formation of a tax ditch and for equity and fairness must be repeated in the same fashion as parcels split, combine, etc. Since the assessment based assigned and distributed across the parcels in the tax ditch watershed is based off the cost of construction when the tax ditch was formed (some dating back to the 1950's), considerations for reassigning tax ditch assessments has been suggested as an improvement for increasing funding. The workgroup was asked "What are your thoughts on re-evaluating assessment base allocations for tax ditch parcels?" Most participants thought this would be worth the time (Figure 13). Based on the results, a legal opinion on how this effort could be pursued is needed.

What are your thoughts on re-evaluating assessment base allocations for tax ditch parcels?

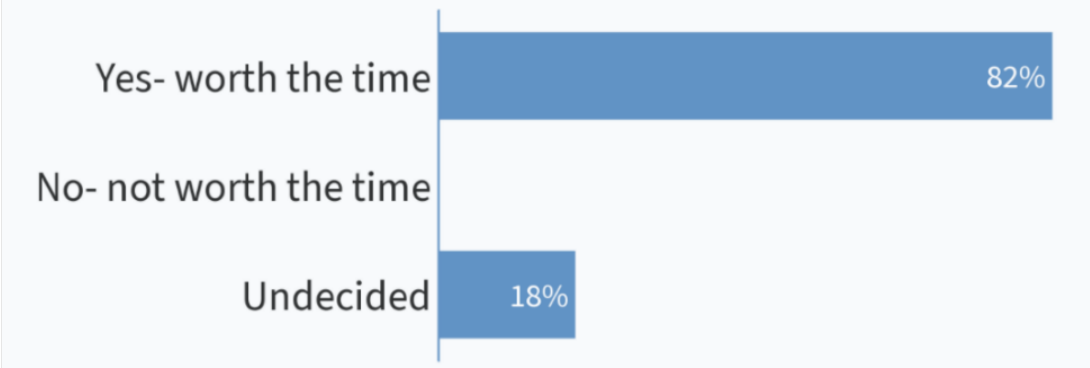


Figure 13. Results of the question "What are your thoughts on re-evaluating assessment base allocations for tax ditch parcels?"

Tax ditch officers have presented concerns over taxes that have not been paid and subsequent limitation of their available funds to perform scheduled maintenance activities. This was shared during the workgroup, however, no discussion ensued. The question remains regarding how tax ditch organizations should handle back tax issues and whether county treasury departments can be of any assistance.

To determine whether tax ditch organizations can collect sufficient funds for maintenance, typical maintenance expenses must be known. A list of routine tax ditch expenses was shared, and the workgroup members contributed additional items (Table 2). This list can be used to find average costs of these activities to calculate anticipated annual expenses for tax ditch systems.

Table 2 Routine tax ditch expenses

| Administrative | Operations |
|-----------------------------|----------------------------------|
| Bonding | Mowing |
| Meeting Notices/Advertising | Dipout |
| Audit Materials | Repairs (Bank or Infrastructure) |
| Bank Fees | Beaver Trapping |
| Meeting Facility Rentals | Beaver Dam Removal |
| Permit Fees - eNOI | Pipes (New or Replacements) |
| | Storm Damages/Cleanup |
| | Herbicide Application/Treatment |
| | Right-of-Way Clearing/Grubbing |

The workgroup members were also asked, “What resources are needed to assist tax ditch officers with financial planning for maintenance?” The following are their responses:

- Typical costs of maintenance activities per mile or foot of tax ditch by county
- Sharing and accepting of different methods of maintenance for resolving issues
- More technical assistance from field personnel
- Inventory of tax ditch conditions

These results support the comments made in previous sessions and further justify the tax ditch inventory effort that the DNREC Tax Ditch Program is working on as an integral starting point for effective maintenance planning. It also provides insight into how estimating costs should be correlated across tax ditches. For ease of use, the estimation calculation suggested should be on a per foot or mile basis.

The process for combining and dissolving tax ditches was shared. The process of each as prescribed in the Tax Ditch Law is not a simple task. Combining tax ditches is possible for those tax ditch organizations constructed/formed as part of the same Civil Action Number or those identified as benefiting each other in formation documents. The DNREC Tax Ditch Program plans to work with those tax ditch organizations who meet these criteria for improvement (Table 3).

Table 3 Tax ditch organizations that can currently be combined due to the formation of the ditch under the same Civil Action Number or were expressed as linked in the Commissioners Report in the formation documents.

| Tax Ditch Organization | Ditch Numbers | Civil Action Number |
|--|---------------|--------------------------------------|
| Gum Branch | D-57-65 | 98M-12-005 |
| Meadow Branch | D-56, 68,74 | 06M-11-134 |
| Pepper Creek | D-127 -132 | 06M-11-082 |
| Tyndall Branch | D-88 & 89 | 06M-11-122 |
| Williams Canal | D-11-22 | 06M-11-131 |
| Derrickson Canal – Deep Hole – Millville | D-50, 41 & 47 | 06M-11-107 / 06M-11-101 / 06M-11-108 |

At the end of the session the workgroup participants were asked, “With the current outlined process, do you think tax ditches can collect sufficient funds to perform routine tax ditch maintenance operations?” While most participants noted that it is possible, the other half of the group said no, or they were not sure (Figure 14). This further supports the need to estimate maintenance costs and develop a calculation for recommending warrant rates that can be used by the tax ditch officers.

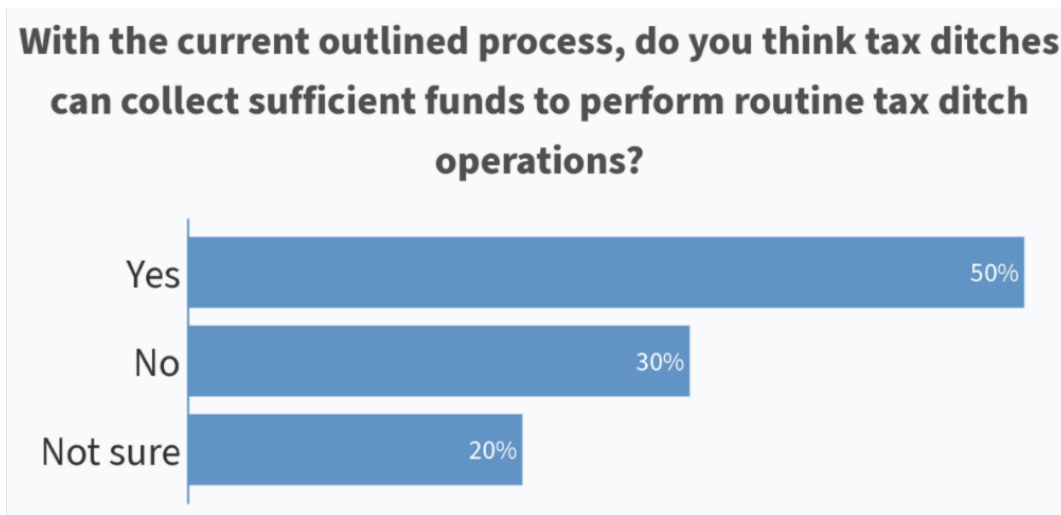


Figure 14. Responses from workgroup participants when asked "With the current outlined process, do you think tax ditches can collect sufficient funds to perform routine tax ditch operations?"

As funding was mentioned numerous times as a concern, the workgroup members were asked to share ideas on how to increase funding to tax ditches. Workgroup member ideas included:

- Educate legislators on the importance of tax ditches.
- Request additional funds from Legislature for tax ditch work.
 - Increase and equitably distribute existing and § 3921 Funds.
 - Increase dedicated funds.
- County or state equipment and personnel used to perform mowing maintenance.

Session 6: § 3921 Funds

Workgroup Finding 8.0: *Create a workgroup consisting of county conservation districts, the DNREC Tax Ditch Program, and county officials to explore opening Title 7 Chapter 39 to increase funding in § 3921 to further assist tax ditch maintenance activities.*

Workgroup Finding 8.1: *Take a more comprehensive look at expected tax ditch organization expenses to assist with tax ditch financial planning.*

The topic of § 3921 Funds was discussed over the course of two different sessions. The original session 6 was rescheduled to September 15, 2021 and held at the Kent Conservation District Building practicing social distancing and masking protocols. The material related to § 3921 Funds covered in session 7 provided a basic overview of § 3921 Funds and associated conservation district policies for eligibility across counties ([DNREC, September 2021](#)). Eligibility requirements for tax ditch organizations to obtain supplemental or § 3921 funds from the county conservation districts vary. However, eligibility requirements that are typically enacted and correspond to compliance with the Tax Ditch Law include annual meeting held, audited financial report submitted, and bond secured for Secretary-Treasurer. In addition, maintenance practices eligible for supplemental or § 3921 Funds also vary across the counties (Figure 15). Discussion ensued surrounding the issue that some practices are only eligible if the county conservation district has enough funds to cover the practice. Determination of maintenance practices to cover is determined in part by the amount of funds allocated as well as the number of requests received from tax ditch organizations for financial assistance annually.

The rescheduled session 6 was an open discussion between the DNREC Tax Ditch Program and county conservation district staff to determine if § 3921 Funds are sufficient at bridging the gap in dollars needed for tax ditch maintenance, and, if not, determine a path forward to resolve. Each county conservation district indicated that the allocations assigned under Title 7 Chapter 39 § 3921 do not meet today's need for funding tax ditch maintenance. In addition, it was noted that the allocations should be made on a per mile, per county basis. Currently § 3921 provides for \$75,000 to be provided by the state and matched by each county (Table 4). The request to explore opening the Title 7 Chapter 39 was made.

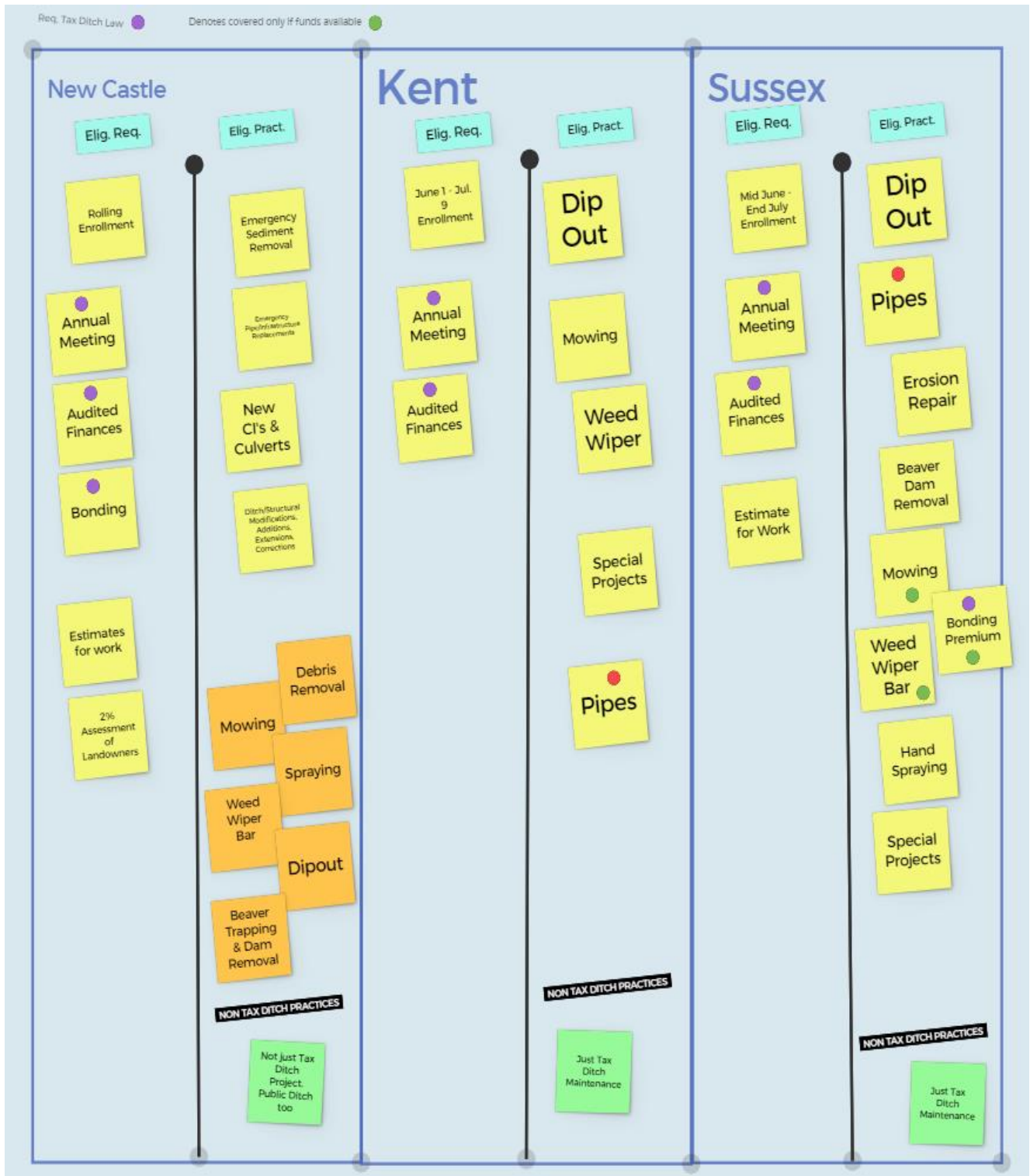


Figure 15. Screenshot of the IdeaFlip board used to capture eligible practices and associated requirements for 3921 Funds for each county conservation district during the virtual session 7 meeting.

Table 4 Review of the § 3921 allocations to counties overtime.

| | July 1966 | July 1970 | July 1974 | July 1976 | Today |
|------------------------|----------------------------------|---|---|---|---|
| New Castle | ≤ \$30,000 | ≤ \$30,000 | ----- | ≤ \$30,000 | ≤ \$75,000 |
| Kent | ≤ \$10,000 | ≤ \$30,000 | ----- | ≤ \$30,000 | ≤ \$75,000 |
| Sussex | ≤ \$22,500 | ≤ \$22,500 | ----- | ≤ \$30,000 | ≤ \$75,000 |
| Use as noted in Law | Tax Ditch Only- Kent & Sussex | Tax Ditch Only- Sussex | Tax Ditch Only- N/A | Tax Ditch Only- N/A | Tax Ditch Only- N/A |
| | Public Drainage - New Castle | Public Drainage- New Castle & Kent | Public Drainage- Kent, New Castle, & Sussex | Public Drainage- Kent, New Castle, & Sussex | Public Drainage- Kent, New Castle, & Sussex |

The need to identify current and projected maintenance funding needs was identified. During this meeting, Kent Conservation District staff provided a draft of estimated tax ditch maintenance expenses. This document was discussed, and it was determined it would be used as a baseline to determine maintenance expenses by county.

Using estimated data for costs associated with dipout, mowing, weed wiper and hand clearing, the following yearly regular maintenance expenses were estimated by county. It should be noted that these costs in Table 5 do not account for any unexpected maintenance repairs, potential pipe replacements, hand spraying for invasive species management or administrative fees associated with running the tax ditch organization. In addition, New Castle County’s total is underestimated as proper funding amounts could not be ascertained at the time of this review. The total estimated expenses for only dipout, mowing, weed wiper and hand clearing appear in Table 5.

Table 5 Estimated expenses for dipout, mowing, weed wiper and hand clearing for New Castle, Kent, and Sussex.
*New Castle's estimates are an underrepresentation due to recent cost estimate data not available for mowing.

| Estimated Annual Tax Ditch Maintenance Costs per County | | | |
|--|-------------------|-----------------|-----------------|
| | New Castle | Kent | Sussex |
| Avg Cost/Mile (Initial) | \$ 7.23 * | \$ 903.23 | \$ 1,027.73 |
| Total Estimated Annual Tax Ditch Maintenance Costs per County | | | |
| Calendar Year 2022 | \$ 91,928.07 * | \$ 617,958.17 | \$ 958,647.93 |
| Total Estimated Maintenance Costs for 5 Years per County | | | |
| Calendar Years 2022-2027 | \$ 459,640.37 * | \$ 3,089,790.85 | \$ 4,793,239.64 |

Further investigation is warranted to determine a total estimated cost that includes not only the items highlighted in Table 5, but those surrounding tax ditch administrative fees, hand spraying to control

invasive plant species and average costs for repairs to tax ditches. Tables 6 – 10 show cost estimates per maintenance item for dipout (Table 6), mowing (Table 7), weed wiper (Table 8), hand clearing (Table 9), and hand spraying of invasive species (Table 10).

Table 6 Estimated expenses for 2022-2027 for dipout of tax ditches by county.

| Tax Ditch Maintenance - Dipout - 20 Year Maintenance Plan | | | | |
|--|-------------------|-----------------|-------------------------------------|--------------------------------------|
| | New Castle | Kent | Sussex Urban/Residential | Sussex Agriculture/Wooded |
| Total Tax Ditch Miles | 56 | 747 | 117 | 1,098 |
| Miles/Year | 3 | 37 | 6 | 55 |
| Ft/Year | 14,678 | 197,205 | 30,819 | 289,938 |
| Avg Cost/Foot (Initial) | \$6.25 | \$ 2.00 | \$ 1.50 | \$ 2.00 |
| Estimated Expense for Dipout Activity | | | | |
| Annual | \$ 88,070.40 | \$ 394,410.72 | \$ 46,229.04 | \$ 579,876.00 |
| 5 Year Total (2022-2027) | \$ 440,352.00 | \$ 1,972,053.60 | \$ 231,145.20 | \$ 2,899,380.00 |

Table 7 Estimated expenses for 2022-2027 for mowing of tax ditches for Kent and Sussex Counties. Data was not available for New Castle.

| Tax Ditch Maintenance - Mowing – 20 Year Maintenance Plan | | | |
|--|-------------------|---------------|-----------------|
| | New Castle | Kent | Sussex |
| Total Tax Ditch Miles | 56 | 747 | 1,215 |
| Miles/Year | 28 | 373 | 607 |
| Avg Cost/Mile (Initial) | \$ | \$ 500.00 | \$ 425.00 |
| Estimated Expense for Mowing Activity | | | |
| Annual | \$ | \$ 186,747.50 | \$ 258,185.38 |
| 5 Year Total (2022-2027) | \$ | \$ 933,737.50 | \$ 1,290,926.88 |

Table 8 Estimated expenses for 2022-2027 for weed wiper practices in Kent and Sussex. New Castle does not currently use the weed wiper practice.

| Tax Ditch Maintenance – Weed Wiper - 20 Year Maintenance Plan | | | |
|--|-------------------|--------------|---------------|
| | New Castle | Kent | Sussex |
| Total Tax Ditch Miles | 56 | 747 | 1,215 |
| Miles/Year | 3 | 37 | 61 |
| Avg Cost/Mile (Initial) | \$ | \$ 400.00 | \$ 600.00 |
| Estimated Expense for Weed Wiper Activity | | | |
| Annual | \$ | \$ 14,939.80 | \$ 36,449.70 |
| 5 Year Total (2022-2027) | \$ | \$ 74,699.00 | \$ 182,248.50 |

Table 9 Estimated expenses for 2022-2027 for hand clearing in Kent, Sussex, and New Castle.

| Tax Ditch Maintenance – Hand Clearing- 20 Year Maintenance Plan | | | |
|--|-------------------|---------------|---------------|
| | New Castle | Kent | Sussex |
| Urban Tax Ditch Miles | 12 | 67 | 117 |
| Miles/Year | 1 | 3 | 6 |
| Avg Cost/Foot | 1.23 | 1.23 | 1.23 |
| Avg Cost/Mile (Initial) | \$ 6,494.40 | \$ 6,494.40 | \$ 6,494.40 |
| Estimated Expense for Hand Clearing | | | |
| Annual | \$ 3,857.67 | \$ 21,860.15 | \$ 37,907.81 |
| 5 Year Total (2022-2027) | \$ 19,288.37 | \$ 109,300.75 | \$189,539.06 |

Table 10 Expenses for an estimated 40 hours of hand spraying a year for invasive plant species. This information is not summed in Table 5.

| Tax Ditch Maintenance - Hand Spraying- 20 Year Maintenance Plan | | |
|--|------------------------------------|-----------------------|
| | Phragmities & Cattails* | Parottfeather* |
| Total Tax Ditch Miles | 1,215 | 1,215 |
| Hours/Year | 40 | 40 |
| Avg Cost/Hour (Initial) | \$ 98.50 | \$ 173.00 |
| Estimated Expense for Hand Spraying | | |
| Annual | \$ 3,940.00 | \$ 6,920.00 |
| 5 Year Total (2022-2027) | \$ 19,700.00 | \$ 34,600.00 |

**Data is from Sussex Conservation District for Sussex County Tax Ditches*

Limited Resources

***Workgroup Finding 9.0:** Improve the recruitment and retention of tax ditch officers by improving education, outreach, and technical assistance initiatives through the implementation of an Officer Recruitment and Retention Strategy.*

***Workgroup Finding 9.1:** Tax Ditch Organization funds cannot be spent without officers. Identify alternate funding sources or methods for assisting tax ditches that do not have officers during emergency situations.*

Session 7, Limited Resources virtual meeting was held on September 8, 2021, and had 22 attendees from the DNREC Tax Ditch Program, county conservation districts, and tax ditch organizations. Tax ditches are faced with limited resources in two main areas - volunteers to fill officer positions and adequate funding. Tax ditch organizations are managed largely by three volunteer officers; two managers, one is designated chairman, and a secretary-treasurer, with a few larger organizations having 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. This workgroup topic focused on:

- Input for a tax ditch officer recruitment and retention strategy.
- Feedback on meeting notice requirements.
- Alternative solutions to ditch management because of no officers.
- Review of § 3921 Fund expenditures and policies for use across counties. The outcomes of this topic are addressed in the Session 6: § 3921 Funds.

Since 1951 Delaware's tax ditches have been managed by a workforce of volunteer landowners that have performed the unrewarded tasks of establishing drainage systems, tracking finances, and employing ditch maintenance activities, all for the benefit of public health and safety. These positions have historically been passed down through family members or neighborly interactions. But with changes in expectations of ditch functions through time, which has happened to coincide with changes in the land use from rural to urban through time, questions remain around the need for improved management infrastructure and support.

Tax ditches were organized to be run by the people who are most impacted by the ditch system, the people who live, work, and play on the lands within the drainage area. No one knows the issues an area faces better than the people who reside and own the lands themselves. As such, tax ditch officers must own property within the tax ditch drainage area, are elected by the impacted landowners, called taxables, and are the only ones who can authorize work or expend funds in the name of the tax ditch. Assistance is provided to the officers by many partner agencies and include the DNREC Division of Watershed Stewardship and county conservation districts, but again, without the officer's direct input and participation, tax ditches cannot function appropriately.

Across Delaware’s three counties - Kent, New Castle and Sussex - tax ditches have a common issue: retaining and recruiting new officers. This issue, combined with the importance of the tax ditch officer positions, highlights the imperative need for a cohesive plan that addresses the retention of existing officers and recruitment of new ones.

Strategies for improving the retention of existing managers and recruitment of new ones, suggested enhancements to resources and areas to be further explored for improvements were documented and shared to the workgroup for comments via Mapping the Way for Delaware’s Tax Ditch Managers: An officer recruitment and retention strategy (Appendix E).

When attendees were asked if the tax ditch officers’ responsibilities were clear, most responses were no or not sure (Figure 16). The Strategy document (Appendix E) outlines steps to improve the understanding of tax ditches and suggests improvements to the DNREC Tax Ditch Program operations to include:

- Ease of access to information through the provision of organized easily accessible tax ditch specific information.
- Modernizing the volunteer management software for improved tracking of officers needs and contacts.
- Establishing regular communication between officers and partner agencies about service offerings, deadlines, funding, and other tax ditch related information across multiple platforms including newsletters, establishing a volunteer coordinator role, offering officer round tables, trainings and exit interviews (Figure 17).
- Officer appreciation initiatives to recognize tax ditch officers for their service to their communities.
- Marketing strategies to both improve meeting notice requirements, general understanding of tax ditches and generate interest in officer position needs.
- On-boarding package improvements to provide the latest information about tax ditches and policies.

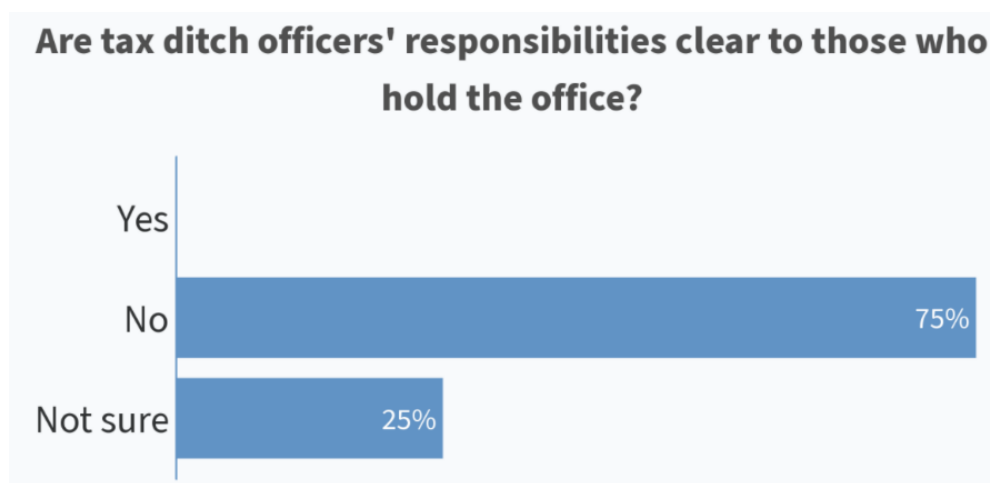


Figure 16. Workgroup participant responses when asked "Are tax ditch officers' responsibilities clear to those who hold the office?"

What method of communication works best with tax ditch officers?



Figure 17. Workgroup responses to the question "What method of communication works best with tax ditch officers?"

Workgroup participants were also asked, "How often should officers work on tax ditch related issues?" The consensus was that it depends, but in general, it was believed that holding an officer position would require activity or participation in their duties on a bi-monthly or quarterly timeframe (Figure 18). The DNREC Tax Ditch Program has observed how an officer's time spent on the tax ditch can vary widely, especially when taking into consideration those areas that are experiencing development booms.

How often should officers work on tax ditch related issues?



Figure 18. Responses to the question "How often should officers work on tax ditch related issues?"

One of the topics of discussion within the workgroup session related to tax ditches that were vacant of officers. It was clarified to workgroup members that if no tax ditch officers were present, then tax ditch funds could not be spent. This was not fully understood by the group. According to Tax Ditch Law, any

instrument of the tax ditch requires the signature of the Chairman and attested by the Secretary-Treasurer (§ 4166). Since the creation of the bank account is an instrument of the tax ditch to collect and spend funds, the officers are the only ones who can access these funds.

To alleviate some of the concerns surrounding emergency issues on tax ditches with no officers, the DNREC Public Ditch Program has created an emergency funds line item in the RC&D funding to assist in these situations. However, additional consideration into a cost recovery protocol is needed. Ultimately, the goal is to fill vacant officer positions so a tax ditch organization is not in this position. The Strategy (Appendix E) outlines ideas to assist in this endeavor.

Conclusion

On Wednesday, September 19, 2021 the final session of the workgroup was held to review the findings of all sessions. All workgroup participants were invited to virtually attend, and total of 36 participants attended. A copy of the presentation slides is available in Appendix D.

In conclusion, the Tax Ditch Modernization Workgroup brought to the forefront prevailing issues that tax ditch organization face across the State of Delaware. Common themes and issues became apparent throughout the workgroup effort, and this report compiles these concerns, and offers potential solutions that tax ditch partner agencies can use to address and prioritize efforts.

The following tables outlines short, medium and long-range goals for addressing concerns.

Short-range Goals

| <i>Short Term Goals for Education and Outreach</i> |
|---|
| <ul style="list-style-type: none"> • Hire a Planner position in the DNREC Tax Ditch Program with primary job duties of education, outreach, and marketing. |
| <ul style="list-style-type: none"> • Develop a Tax Ditch Officer Recruitment and Retention Strategy. |
| <ul style="list-style-type: none"> • Introduction for Officers Course |

| <i>Short Term Goals for Funding Changes</i> |
|---|
| <ul style="list-style-type: none"> • Reconvene respective members of the workgroup to evaluate opening Del. Code Title 7 Chapter 39 with the intent to equitably increase allocations noted in § 3921. |
| <ul style="list-style-type: none"> • Identify funding sources and cost recovery for emergency situations when a tax ditch organization has no officers. |

| <i>Short Term Goals for Design Changes</i> |
|--|
| <ul style="list-style-type: none"> • Coordinate with jurisdictional agencies to ensure tax ditch considerations are made prior to entities issuing approvals. |

Medium-range Goals

| <i>Medium Term Goals for Education and Outreach</i> |
|---|
| <ul style="list-style-type: none"> • Develop a marketing strategy to increase awareness of tax ditches. |
| <ul style="list-style-type: none"> • Coordinate with the Office of State Planning Coordination (OSPC) to add tax ditch items to the Land Use and Comprehensive Planning Process Checklist(s). |
| <ul style="list-style-type: none"> • Implement the Tax Ditch Officer Recruitment and Retention Strategy. |
| <ul style="list-style-type: none"> • Develop a resource that provides primary points of contact and a checklist of items to address prior to, during, and after completion of maintenance or improvement projects. |
| <ul style="list-style-type: none"> • Develop checklist and instructions for external agencies to review requests received for potential tax ditch impacts. |
| <ul style="list-style-type: none"> • Standardized signage that can be placed along tax ditches in public locations, such as near highway/bridge crossings. |
| <ul style="list-style-type: none"> • Periodic state/local news articles highlighting tax ditches |

- Develop presentations to increase awareness of tax ditches and improve coordination across agencies due to associated processes affecting tax ditches.
- Develop and maintain list of Homeowners, Condominium Associations, and Property Management companies with points of contact for those located within a tax ditch watershed.

- Medium Term Goals for Funding Changes**
- Coordinate with tax ditch organizations that are eligible to be combined following the process outlined in Tax Ditch Law.
 - Identify tax ditch organizations that may be benefited by combining based on proximity, limiting assessment bases, and/or officer recruitment and retention issues.
 - Consult with legal counsel to determine if reassessment of tax ditch organizations is possible.
 - Consult with County Treasury Offices to pursue back taxes.
 - Develop a tool to estimate and project future routine expenses to determine appropriate annual warrant rates.
 - Calculate and provide suggested warrant rates ahead of annual meetings for officer and taxable consideration.

- Medium Term Goals for Design Changes**
- Update and/or develop a Tax Ditch Best Management Practice (BMP) handbook.

- Medium Term Goals for Law Changes**
- Increase the fine issued for tax ditch damages and/or right-of-way obstruction issues under Title 7 Chapter 41 § 4186.

Long-range Goals

- Long Term Goals for Education and Outreach**
- Develop a digital/GIS based tax ditch infrastructure and conditions inventory that can be easily shared, including reports provided, to officers and maintenance contractors.

- Long Term Goals for Funding Changes**
- Consult with legal counsel on combination of identified tax ditch organizations and process to proceed which may require changes to the Tax Ditch Law.
 - Determine methodology to reassess taxable properties.

- Long Term Goals for Design Changes**
- Develop specifications to incorporate factors identified in Figure 3 when producing designs and details for tax ditch maintenance and/or improvement projects.
 - Establish regulatory requirements for tax ditch maintenance and/or improvement projects as identified in Figure 3.

Long Term Goals for Law Changes

- Add additional State or Local government agencies in the Tax Ditch Law that a tax ditch organization may elect to transfer its authority.
- Update Tax Ditch Law to improve likelihood of a tax ditch organization successfully meeting the requirements to transfer authority if desired.
- Create a state-run opt-in Tax Ditch Maintenance Program.
- Consult with legal counsel to establish procedures to address inactive tax ditch organizations.
- Development of a Tax Ditch Real Estate Disclosure Form and/or other disclosure improvements.
- Turn over enforcement of tax ditch damages and right-of-way issues to the DNREC

References

Delaware Department of Natural Resources and Environmental Control. *Session 1: Tax Ditch Law 101*. June 2021, <https://dacdnet.org/tax-ditch-modernization/>. PowerPoint Presentation.

Delaware Department of Natural Resources and Environmental Control. *Session 2: Tax Ditch Function 101*. June 2021, <https://dacdnet.org/tax-ditch-modernization/>. PowerPoint Presentation.

Delaware Department of Natural Resources and Environmental Control. *Session 3: Tax Ditch Right of Way Issues*. July 2021, <https://dacdnet.org/tax-ditch-modernization/>. PowerPoint Presentation.

Delaware Department of Natural Resources and Environmental Control. *Session 4: Tax Ditch & External Agency Approvals*. July 2021, <https://dacdnet.org/tax-ditch-modernization/>. PowerPoint Presentation.

Delaware Department of Natural Resources and Environmental Control. *Session 5: Financing Tax Ditches*. August 2021, <https://dacdnet.org/tax-ditch-modernization/>. PowerPoint Presentation.

Delaware Department of Natural Resources and Environmental Control. *Session 7: Limited Resources*. September 2021, <https://dacdnet.org/tax-ditch-modernization/>. PowerPoint Presentation.

Appendix

Appendix A – Summarized List of Attendees

Appendix B – Model to Address Tax Ditch ROW Obstructions

Appendix C – Land Development Review Process

Appendix D – Wrap Up Presentation Slides

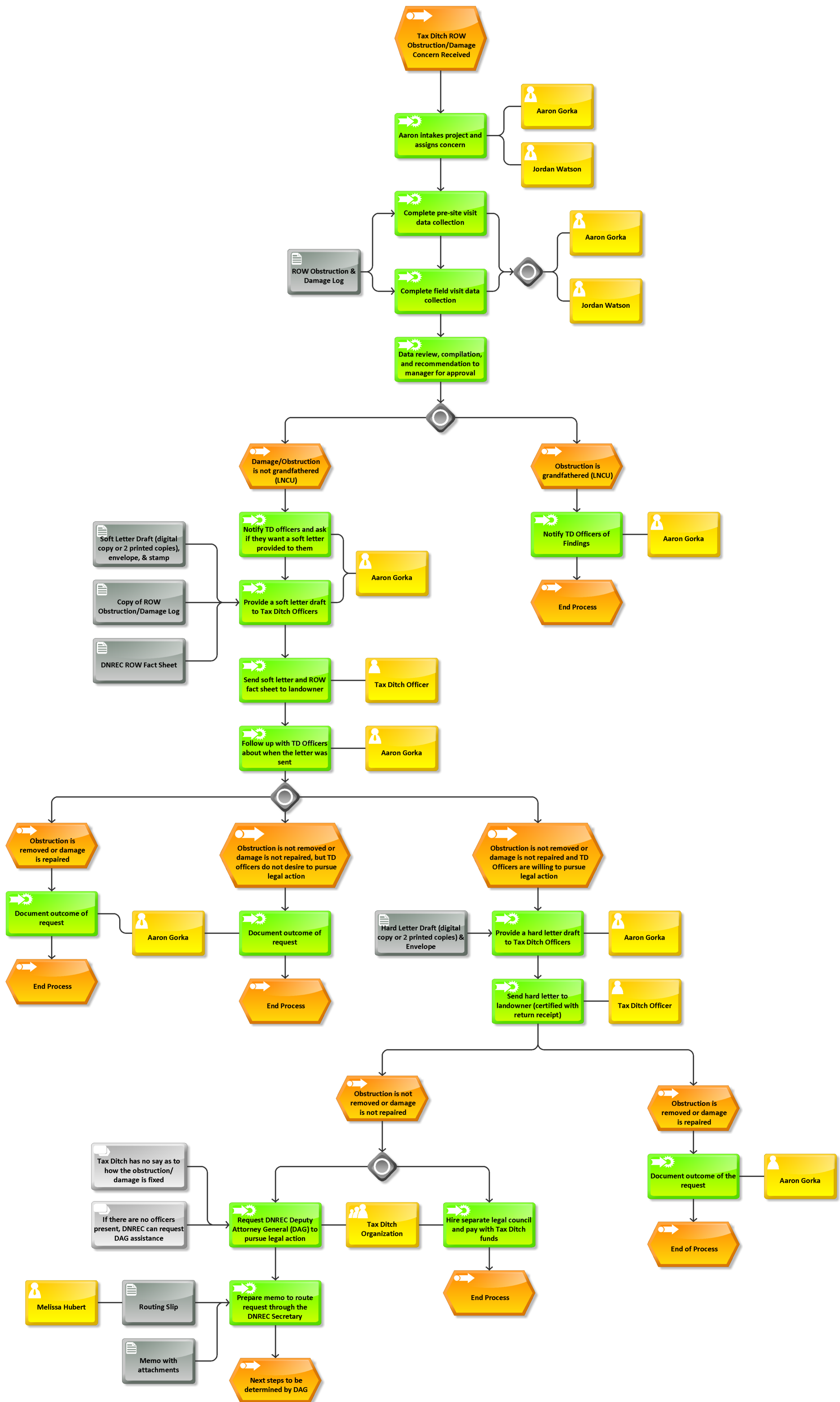
Appendix E - Officer Retention and Recruitment Strategy

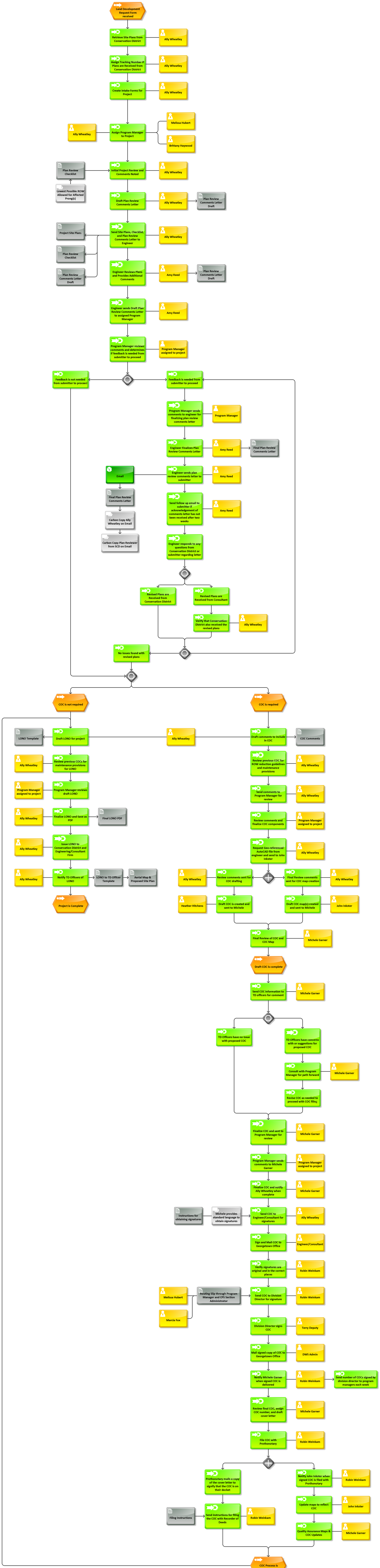
| Participant Invited | Organization Affiliation |
|----------------------------|--|
| Kevin Donnelly | New Castle Conservation District |
| Rick Mickowski | New Castle Conservation District |
| Andy Bowman | New Castle Conservation District |
| David Baird | Sussex Conservation District |
| Bryan Jones | Sussex Conservation District |
| Debbie Absher | Sussex Conservation District |
| Jason Strauss | Sussex Conservation District |
| Jessica Watson | Sussex Conservation District |
| Joel Wharton | Sussex Conservation District Board |
| Tim Riley | Kent Conservation District |
| Gene Vanderwende | Kent Conservation District |
| Jared Adkins | Kent Conservation District |
| Matt Webber | Kent Conservation District Board |
| Mike Brown | Kent Conservation District Board |
| Jennifer Nelson | Delaware Association of Conservation Districts |
| Karen Raines | Town of Blades |
| Bethany DeBussy | Town of Bridgeville |
| Jason Stewart | Town of Camden |
| Cynthia Brought | Town of Dagsboro |
| Sara Bynum-King | Town of Delmar |
| Randy Robertson | City of Dover |
| Josh Barth | City of Dover- Selected as Delegate |
| Kimberly Hughes | Town of Ellendale |
| Greg Welch | Town of Frankford |
| Donald Donovan | Town of Greenwood |
| Duane Bivans | City of Harrington |
| Jamie Smith | Town of Laurel |
| Craig Pugh | Town of Leipsic |
| Ann Marie Townshend | City of Lewes |
| Deborah Botchie | Town of Millville |
| Carol Houck | Town of Ocean View |
| Kenneth Cimino | Town of Ocean View- Selected as Delegate |
| David Genshaw | City of Seaford |
| Buddy Lynch | City of Seaford- Selected as Delegate |
| Stacey Long | Town of Selbyville |
| Andrew Haines | Town of Smyrna |
| Jacob Mitchell | Town of Smyrna- Selected as Delegate |
| Anthony Mangeri | Town of Townsend |
| Michael Wooleyhand | Town of Wyoming |
| Rich Hall | New Castle County Department of Landuse |
| Michele Davis | New Castle County Department of Landuse |
| Doug Hokuf | New Castle County Engineering Division |
| Michael Clendaniel | New Castle County Engineering Division |
| Tracy Surles | New Castle County Department of Public Works |
| Michael Harris | New Castle County Department of Public Works- Selected as Delegate |

| | |
|----------------------|--|
| Denzil Hardman | New Castle County |
| Sarah Keifer | Kent County Inspections & Enforcement |
| Susan Durham | Kent County Department of Finance |
| Diana Golt | Kent County Department of Public Works |
| Jamie Whitehouse | Sussex County Department of Planning and Zoning |
| Hans Medlarz | Sussex County Engineering Department |
| Danielle Lones | Sussex County Assessment Department |
| Katrina Mears | Sussex County Treasury |
| Ann Baldwin | Natural Resources Conservation Service |
| Rich Gorlich | Natural Resources Conservation Service |
| Al Rizzo | US Fish and Wildlife Service |
| Jim Pappas | Delaware Department of Transportation |
| Stephen Wright | Delaware Department of Transportation- Selected as Delegate |
| Jimmy Kroon | Delaware Department of Agriculture |
| Richard Wilkins | Delaware Farm Bureau |
| Ed Launay | Environmental Resources, Inc. |
| David Blendt | New Castle County Tax Ditch Commissioner |
| Nicholas Ferrara | New Castle County Tax Ditch Commissioner |
| Al Finch | New Castle County Tax Ditch Commissioner |
| Ray Staats | Massey Church Tax Ditch |
| Scott Webb | Kent County Tax Ditch Commissioner |
| Theodore Bobola | Kent County Tax Ditch Commissioner |
| Edwin Alexander | Kent County Tax Ditch Commissioner |
| Richard Morgan | Sussex County Tax Ditch Commissioner |
| Richard James | Sussex County Tax Ditch Commissioner |
| Richard Carlisle | Sussex County Tax Ditch Commissioner |
| Nancy Jordan | Little Bay Tax Ditch |
| Randy Powell | Beaver Dam Canal Tax Ditch |
| Devera Scott, Esq. | Delaware Department of Justice |
| William Kassab, Esq. | Delaware Department of Justice |
| Steve Smailer | Delaware Department of Natural Resources & Environmental Control |
| Alan Pongratz | Delaware Department of Natural Resources & Environmental Control |
| Jim Cassidy | Delaware Department of Natural Resources & Environmental Control |
| Scott Eichholz | Delaware Department of Natural Resources & Environmental Control |
| Beth Krumrine | Delaware Department of Natural Resources and Environmental Control |
| Susan Love | Delaware Department of Natural Resources and Environmental Control |
| Terry Deputy | Delaware Department of Natural Resources and Environmental Control |
| Marcia Fox | Delaware Department of Natural Resources and Environmental Control |
| Jim Sullivan | Delaware Department of Natural Resources and Environmental Control |
| Bonnie Arvay | Delaware Department of Natural Resources & Environmental Control |
| Elaine Webb | Delaware Department of Natural Resources and Environmental Control |
| Melissa Hubert | Delaware Department of Natural Resources and Environmental Control |
| Brittany Haywood | Delaware Department of Natural Resources and Environmental Control |
| John Inkster | Delaware Department of Natural Resources and Environmental Control |
| Heather Hitchens | Delaware Department of Natural Resources and Environmental Control |
| Michele Garner | Delaware Department of Natural Resources and Environmental Control |
| Allison Wheatley | Delaware Department of Natural Resources and Environmental Control |

Aaron Gorka
Jordan Watson

Delaware Department of Natural Resources and Environmental Control
Delaware Department of Natural Resources and Environmental Control







DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL



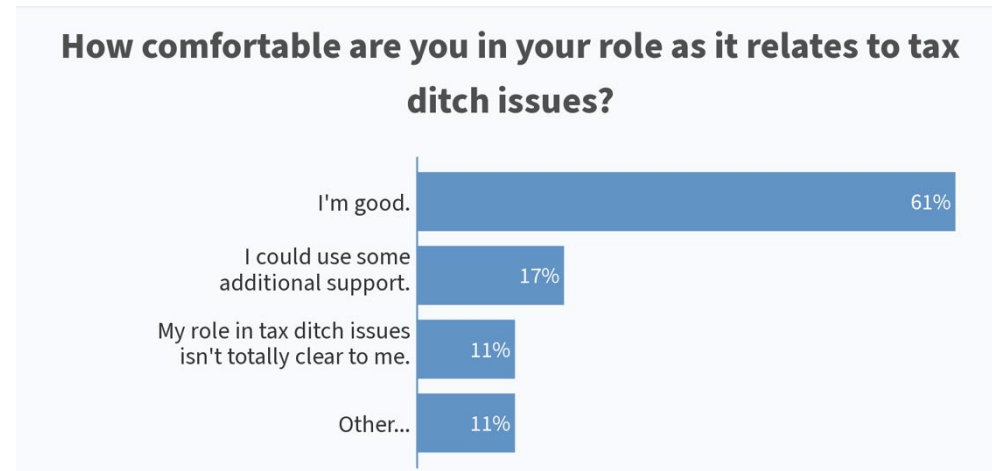
Wrap Up Workgroup Findings

September 29, 2021

Operational Issues Tax Ditch Law 101

Key Findings

Tax Ditch organizations operate with the assistance and/or supervision of multiple agencies. As a result, clarity regarding roles, responsibilities, and legal authorities of tax ditch organizations and the affiliated entities is not well understood.



Improvement of Education and Outreach regarding tax ditches is necessary

Action Items:

Session Presentation was recorded and will be posted on the DNREC Tax Ditch Program webpage to increase awareness

Session Presentation will be shared and utilized as training resource for new hires to the DNREC Drainage Program, partner agencies, and those individuals who are new or interested in becoming tax ditch officers.

Key Findings:

Traditional tax ditch design methodology with factors considered was shared. The following factors were suggested for additional consideration for improvement in tax ditch design protocol.

| Recommended Tax Ditch Design Considerations | |
|--|--|
| Additional Considerations | Considered on Drainage Program Projects |
| Design for 100 year storm | Groundwater Table |
| Climate Change | Soil feasibility |
| Water Quality | Downstream restrictions |
| Wildlife Habitat | Flooding concerns |
| Riparian Corridor Planning | Cost of Construction |
| Anticipated land development/landuse changes | Downstream & surrounding land impacts |

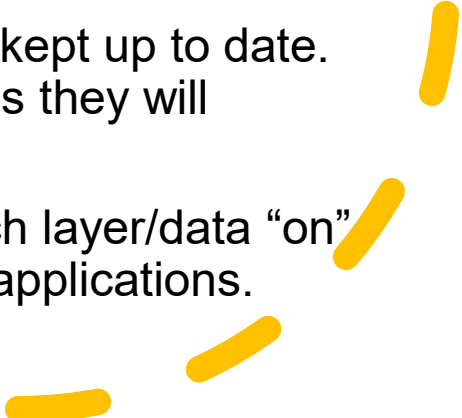
Operational Issues Tax Ditch Function 101

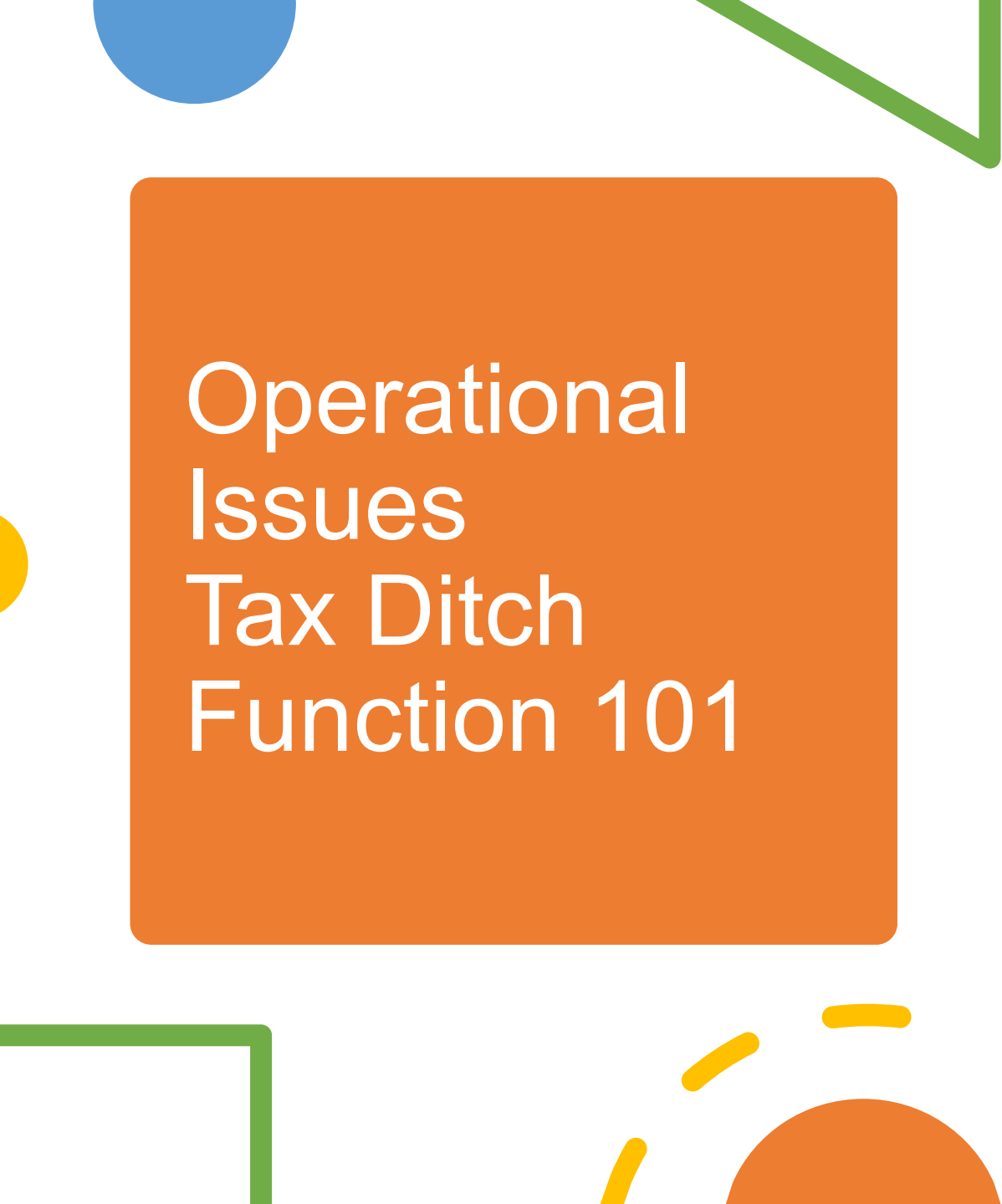
Key Findings:

Since external agencies play a role and/or help to enforce the Tax Ditch Law for effective implementation, the following items were noted as needs for external agencies to better account for tax ditch impacts:

- Clarity on what is within their jurisdiction
- Clear guidance regarding what and how to review submittals
- Education/Training of those performing the reviews
- Enforcement with a specific suggestion that this be provided by DNREC

Action Items:

- Share guidance for utilizing the tax ditch map application
 - Share location of digital tax ditch data which is kept up to date. If properly linked in external agency applications they will have up-to-date tax ditch data.
 - Recommend external agencies to have tax ditch layer/data “on” by default for use in their web-based mapping applications.
- 




Operational Issues Tax Ditch Function 101

Key Findings:

Guidance needed to help external entities quickly determine whether or not requests received impact Tax Ditches.

Action Items:

- Share guidance for utilizing the tax ditch map application
 - Share location of digital tax ditch data which is kept up to date. If properly linked in external agency applications they will have up-to-date tax ditch data.
 - Recommend external agencies to have tax ditch layer/data “on” by default for use in their web-based mapping applications.
- 

Operational Issues Tax Ditch Function 101

Key Findings:

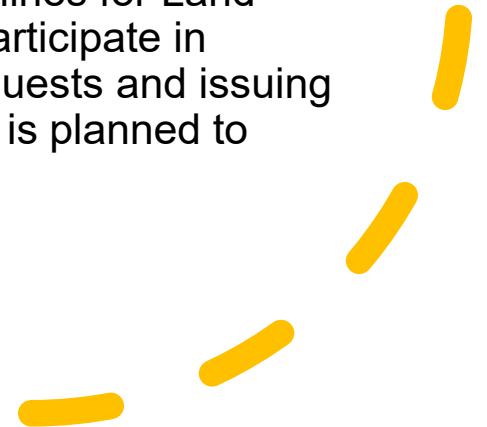
External Agencies may not be able to determine appropriate course of action as a change to the tax ditch channel and/or right-of-ways may be necessary based on requests received.

In these cases, the DNREC Drainage Program can/should be consulted by the requestor or approval agency to determine feasibility of request regarding tax ditch needs prior to issuing permit approvals.

To help expedite review of requests by the DNREC Drainage Program request forms and plan submittal guidance have been developed to make sure items/features and interferences with the tax ditch channel and/or right-of-way can be deciphered.

Action Items:

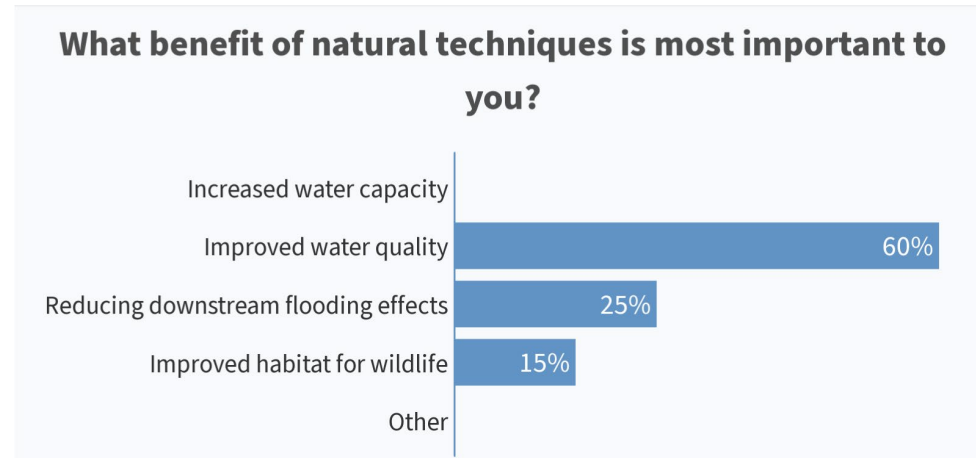
- Distribute printed copies of the “Land Development Request Form”, “Tax Ditch ROW Change Request”, and “Tax Ditch Guidelines for Land Development Plans” to the agencies requested to participate in workgroup as a resource for their staff reviewing requests and issuing permits/approvals in the event a submitted proposal is planned to impact a tax ditch channel and/or right-of-way.



Operational Issues Tax Ditch Function 101

Key Findings:

Natural design techniques are desired in tax ditch systems.



Action Item:

Develop proposal to prepare a Tax Ditch Best Management Practice (BMP) handbook. The handbook should include design details that can be replicated to address tax ditch maintenance issues under typical tax ditch site conditions. The handbook must provide operation and maintenance details for each practice for clarity of expectations.

Operational Issues Tax Ditch Function 101

Key Findings:

There are a limited number of contractors who are willing and able to perform tax ditch maintenance activities. The following items were noted as improvements for additional resources for contractors to better support tax ditches:

- Updated GIS resources
- Maintenance plans
- Past maintenance scheduled with reviews of scope of work completed
- Checklist or step by step guide for process of getting work approved and ready for implementation
- Training on following what's on a plan
- Training on natural design
- Certification for performing work

Action Items:

- Development of a digital tax ditch infrastructure and conditions inventory.
- Development of a checklist of items that must be addressed for various maintenance practices for tax ditch officers and contractors to use to better prepare and schedule upcoming maintenance.
- Tax Ditch Function 101 presentation will be shared and utilized as a training resource for new hires to the DNREC Drainage Program, partner agencies, and tax ditch officers who are interested.

Changing Land Use Tax Ditch Right-of-Way Issues

Key Findings:

Increase education/outreach regarding tax ditch right-of-ways as well as coordination with agencies that grant approvals for features commonly considered obstructions.

Stakeholders to increase tax ditch education/outreach and coordination of approval efforts

| Regulatory Stakeholders | General Stakeholders |
|-------------------------|---|
| Counties | Utility Companies - Power, Cable, Phone, Water, Gas |
| Municipalities | Well Drillers |
| DeIDOT | Septic Designers & Installers |
| DNREC Septics | Land Surveyors |
| DNREC Wells | General Public & Tax Ditch Landowners |
| | Home & Building/Shed/Deck/Pool Builders |
| | Fencing & Landscaping Companies |
| | Realtors & Real Estate Attorneys |

Changing Land Use Tax Ditch Right-of-Way Issues

Key Findings:

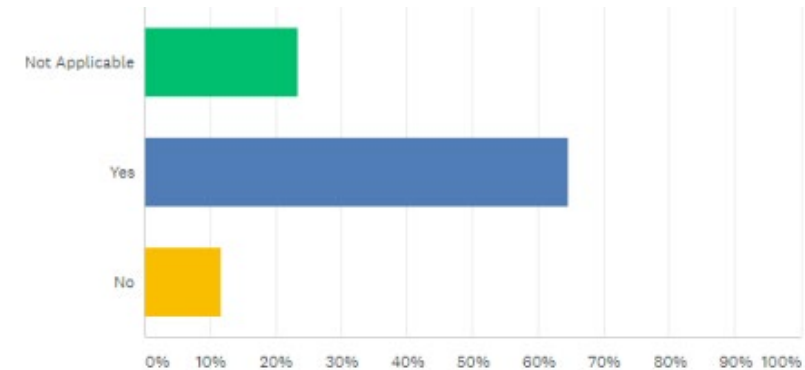
Many external agencies participating in the Workgroup issue approvals for features that could be an obstruction or damage to tax ditches.

There is support from external agencies to make changes to their approval process for more effective implementation of the Tax Ditch Law.

Action Item:

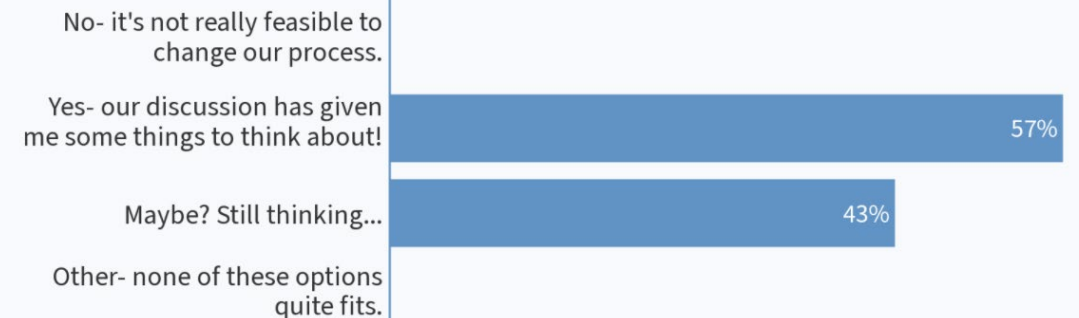
Development of guidance for regulatory/approval agencies to utilize regarding how to consider tax ditch impacts on requests submitted to their office.

Does your agency/organization provide approvals or permits in general development impacts (buildings, fences, utilities, drainage, large developments, etc.)?



| ANSWER CHOICES | RESPONSES |
|------------------|-----------|
| ▼ Not Applicable | 23.53% |
| ▼ Yes | 64.71% |
| ▼ No | 11.76% |
| TOTAL | |

Think back to your permitting process. Are there additional opportunities to address ROW issues before they start?



Changing
Land Use

Tax Ditch &
External
Agency
Approvals

Key Findings:

The Plan Reviews and process conducted by Drainage Program were shared to increase awareness of this service as a resource for external agencies reviewing submitted requests that impact tax ditches.

Court Order Changes (COCs) including the need and process to complete was reviewed for awareness and consideration in timeline of approval for requests requiring a COC.

Awareness of Court Order Changes (COCs) which may include conditions for the property affected moving forward are not easily found by potential buyers or new landowners.

Action Item:

Determine method to improve awareness of Court Order Changes processed on properties in particular as property ownership changes.

Changing Land Use Tax Ditch & External Agency Approvals

Key Findings:

Tax ditch impacts and considerations should be made both at the preliminary and final approval stages of a project.

Tax ditch impacts considered at the preliminary stage could help to determine feasibility of proposal and prevent delays.

Action Item:

Preliminary comments issued by DNREC Drainage Program to note existing tax ditch conditions **and** feasibility of request based on past processed changes.

Suggestion Made:

Tax Ditches to be considered or made a part/element of the State/County/Municipal Comprehensive Planning and Review process.

Changing Land Use

Tax Ditch & External Agency Approvals

Key Findings:

For more effective implementation of the Tax Ditch Law the following improvements were noted as suggestions to help incorporate tax ditch considerations into plan review and approval processes:

- Tax ditch channels and right-of-ways should not only be on Property Deeds but when applicable added as exhibits or attachments to Homeowners Association and/or Condominium documents.
 - Further Consideration Required: This has been added as a requirement in processed Court Order Changes. **Determine when HOA and/or Condominium documents are filed because processing of plan reviews for tax ditch impacts may need to be adjusted to incorporate.**
- Buyers should receive information regarding tax ditch information at settlement.
 - Further Consideration Required: Tax ditch information should be disclosed at settlement based on title search conducted. However, this may not occur and/or individuals not aware of what is being shared, so considerations for a different method to share tax ditch information to buyers to be brainstormed.
 - Suggestion: Real Estate Disclosure Form.
- Target an outreach efforts regarding tax ditches to the Delaware Building and Planning Commissions as well as surveying community.
- Planning and Zoning to advocate for tax ditch channels and right-of-ways across a parcel to be areas of community and/or open space to minimize risk of tax ditch damages and obstructions.

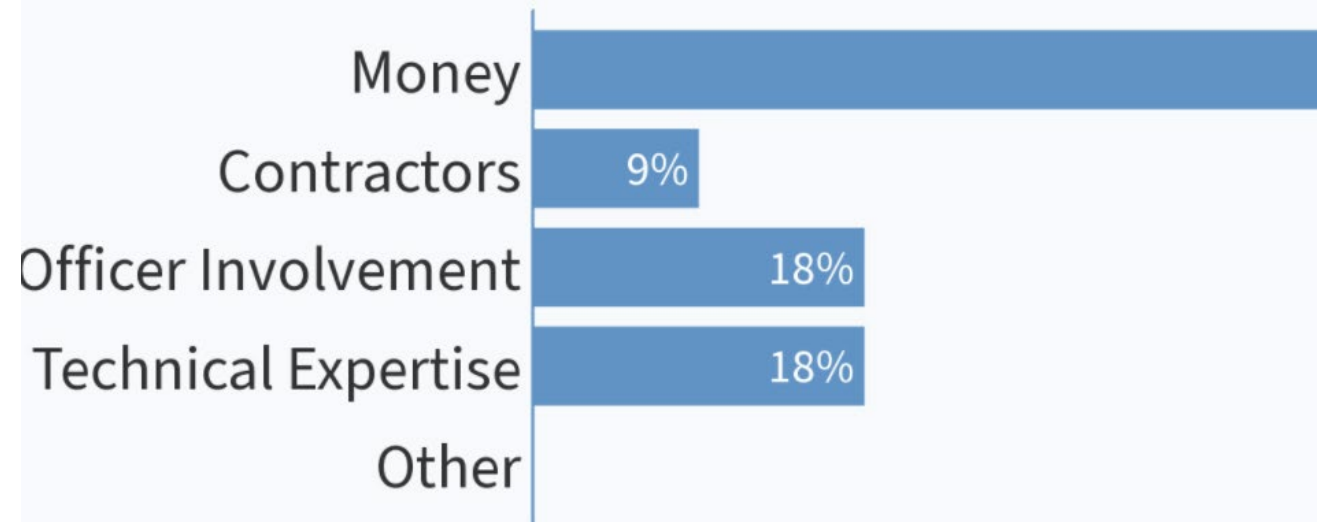
What does Tax Ditch modernization mean to you?

This information will be used to prioritize improvements and further discussions with appropriate stakeholders.

- **Tax Ditch Funding-** Tax ditch organizations were created to self fund. However, the tax rate is hard to increase and those organizations that have not been as well managed have a difficult time getting back on track. **Determine funding mechanism to get the tax ditches in better working order.**
- **Tax Ditch Funding- Address tax ditch assessment inequities.**
- **Existing Supplemental Funds** – A suggestion was made for funds provided by the State to supplement tax ditch maintenance be distributed equitably across the 3 counties.
- **Tax Ditch Maintenance-** The landscape of tax ditch right-of-ways has changed over time due to development and/or lack of consistent or routine maintenance. A plan is needed on how to maintain these systems moving forward.
- **New Tax Ditches/Drainage Infrastructure** – Tax ditches may be the solution to drainage issues however, the current process for forming a tax ditch in today's environment is not a quick or easy process. A suggestion was made to revisit the Law or find more funding to invest in the construction of new drainage infrastructure.
- **Tax Ditch Design** – Higher set of design standards to account for the needs of the landscape today as well as anticipated challenges in the future. Consider what this will look like 20-30 years from now.
- **Tax Ditch Design-** Upgrade tax ditches on willing landowner properties
- **Tax Ditch Best Management Practices** - encourage/allow buffers along tax ditch right-of-ways
- **Tax Ditch Officers-** Recruit and retain officers for managing the tax ditch systems
- **Tax Ditch Officers** – Appreciation events and develop mentorship program to train individuals to replace tax ditch officers ready to retire
- **Tax Ditch Awareness-** Provide a standardized sign or logo for signage in and along tax ditches to spread awareness

Insufficient Funds Financing Tax Ditches

What is the most limiting resource for tax ditches
effective?



Key Findings:

The most limiting resources for tax ditch effectiveness are in order as follows: money, officer involvement & technical expertise (tied), and contractors.

Insufficient Funds Financing Tax Ditches

Routine Tax Ditch Expenses

Administrative

Bonding
Meeting Notices/Advertising
Audit Materials
Bank Fees
Meeting Facility Rentals
Legal

Operational

Mowing
Dipout
Repairs (Bank or Infrastructure)
Beaver Trapping
Beaver Dam Removal
Pipes (New or Replacements)
Storm Damages/Cleanup
Invasive species control

Key Findings:

To determine whether or not tax ditch organizations can collect sufficient funds for maintenance, typical maintenance expenses must be known.

Action Items:

Determine average cost of the activities listed to improve recommended warrant rate calculation.

Develop warrant rate calculation tool.

Insufficient Funds Financing Tax Ditches

Key Findings:

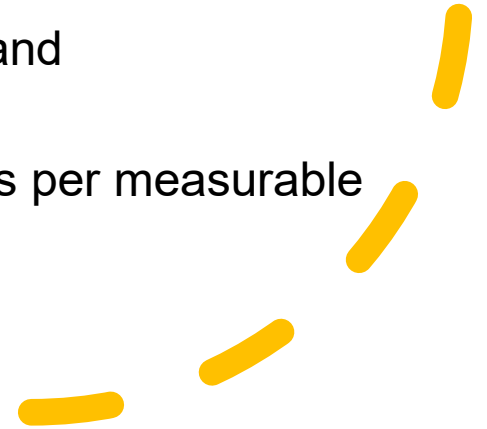
Resources identified to better assist tax ditch officers with financial planning for maintenance:

- Typical costs of maintenance activities per mile or foot of tax ditch by county
- Sharing and accepting of different methods of maintenance and to resolve issues
- Officers need more technical assistance from field personnel
- Inventory of tax ditch conditions

Action Items:

Development of a digital tax ditch infrastructure and conditions inventory.

Determine average cost of maintenance activities per measurable unit that is repeatable across tax ditch systems.



Insufficient Funds Financing Tax Ditches

Key Findings:

The process for combining tax ditch organizations was reviewed as a consideration for achieving economies of scale. This process is no easy feat but there are some tax ditch organizations where this may be easier achieve than others.

Action Items:

Develop list of Tax Ditch organizations where combining organizations this is likely to be successful and coordinate with respective officers to hold appropriate meeting of taxables.

Insufficient Funds Financing Tax Ditches

Key Findings:

The method followed to assign tax ditch assessment values to a property was reviewed to help address concerns regarding the equity of tax ditch assessment assignments as landuse and benefits may change overtime.

The protocol to assign tax ditch assessments to properties in the watershed is determined at the formation of the tax ditch and for equity and fairness must be repeated in the same fashion as parcels split, combine, etc.

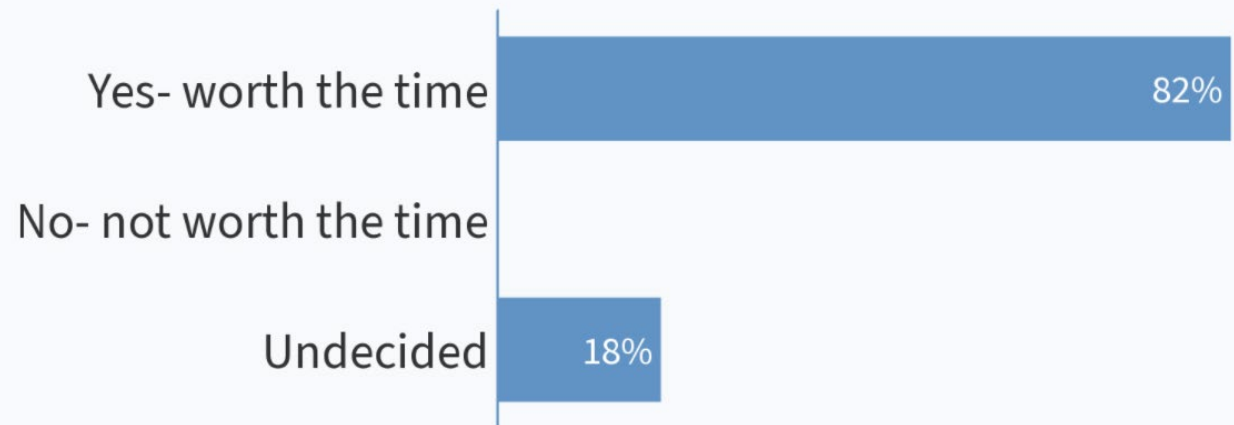
Re-evaluating the assessment allocations for tax ditch parcels is recommended.

Action Item:

Obtain legal opinion on how reassessing tax ditch assessments could be pursued.

Schedule meetings with County Treasury Offices to discuss back tax issues on tax ditches for guidance towards a resolution.

What are your thoughts on re-evaluating assessment base allocations for tax ditch parcels?



Insufficient Funds §3921 Funds

Key Findings:

Legally allocated tax ditch funds provided to supplement tax ditch maintenance activities are not sufficient in supporting tax ditch maintenance match requests. This gap in funding needs is worsened as tax ditch warrants levied, past and present may not meet maintenance needs.

Action Items:

- Encourage tax ditches to execute appropriate warrant rates to meet maintenance needs.
- Determine appropriate annual amount of supplemental funds to support the tax ditch maintenance match requests
- Create a workgroup to explore opening the §3921 Law to increase funding to tax ditches to assist with maintenance activities.

Insufficient Funds

§3921 Funds

Key Findings:

Anticipated annual maintenance expenses differ across the 3 counties due to number of miles of tax ditch channels, surrounding landuse, and contractors available to perform the maintenance work.

Action Item:

Gather estimates for the following maintenance routine maintenance activities; dipout, mowing, weed wiper, and hand clearing and apply these rates to the miles of channels that are agricultural/wooded properties vs developed/residential properties as appropriate with the consideration of the frequency of each activity.

Review the cost estimates with Conservation District staff to ensure values are reasonable.

Determine appropriate value of §3921 request. Include assumptions used to determine. *A starting point may be to assume tax ditch organizations would be requesting of Conservation Districts a 1:1 match for all routine maintenance activities.*

| | New Castle | Kent | Sussex |
|----------------------------|---------------|--------------|--------------|
| Annual Estimated Expenses* | \$91,928.07** | \$617,958.17 | \$958,647.93 |
| 3921 Funds Allocated | \$150,000 | \$150,000 | \$150,000 |
| Tax Ditch Revenues | \$71,016 | \$289,803 | \$648,050 |
| Gap | ----- | \$-178,155 | \$-160,598 |

*These expenses do not account for administrative fees, emergency situations or pipe repairs.

**Only includes dipout and Sussex's estimate for hand clearing.

Insufficient Funds §3921 Funds

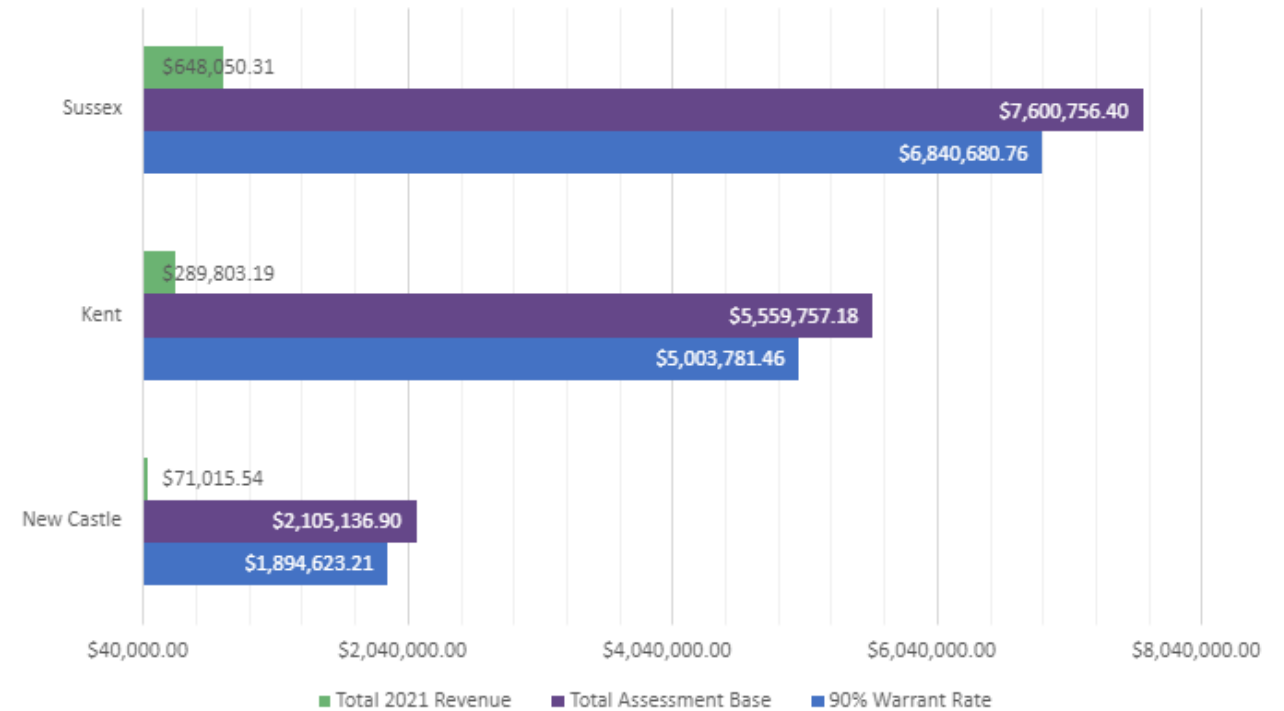
Key Findings:

Tax Ditch warrants may not be levied appropriately based on maintenance needs.

Action Item:

Determine if warrant rates across tax ditch organizations can be levied to meet annual maintenance estimate determined *with assumption noted that 1:1 match (or less) from §3921*

2021 Total Assessment Base, Total Collected Revenue and Max Warrant Rate Allowed



Officer Retention &
Turnover
Limited Resources

Key Findings:

Across Delaware's three counties, Kent, New Castle and Sussex, tax ditches have a common issue: retaining and recruiting new officers. This issue is high priority as officers are key to maintaining a functional ditch.

Action Items:

Improve the recruitment and retention of tax ditch officers with improved education, outreach, and technical assistance initiatives through a cohesive plan that addresses the retention of existing officers and recruitment of new ones into the future; Tax Ditch Officer Recruitment & Retention Strategy.

Officer Retention &
Turnover
Limited Resources

Key Findings:

When tax ditches are vacant of officers, tax ditch funds cannot be spent.

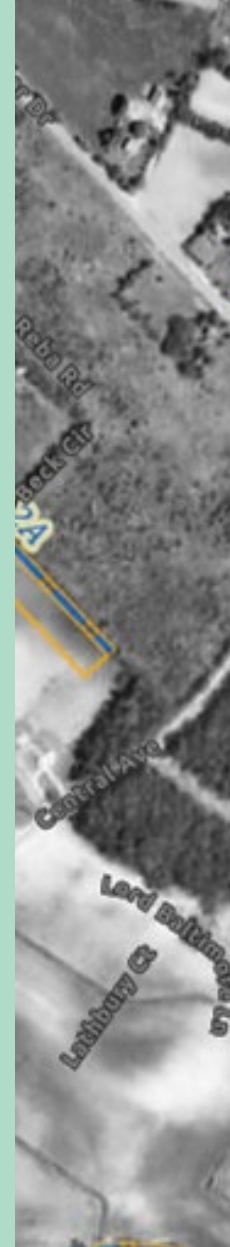
Action Item:

Create alternate funding sources for assisting tax ditches that do not have officers in emergency drainage situations.

Any Last Thoughts?

*And Thank You
for Your Time!*

*Thank You
Very Much*



Mapping the Way for Delaware's Tax Ditch Managers

An officer recruitment & retention strategy

August 2021

Delaware Department of Natural Resources & Environmental Control

21309 Berlin Road, Unit 6
Georgetown, DE 19947



DELAWARE DEPARTMENT OF
**NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**



Introduction

Engaged Officers are Vital for Ensuring Adequate Tax Ditch Function

Since 1951 Delaware's tax ditches have been managed by a workforce of volunteer landowners that have performed the thank-less tasks of establishing drainage systems, tracking finances, and employing ditch maintenance activities, all for the benefit of public health and safety¹. These positions have historically been passed down through family members or neighborly interactions. But with changes in expectations of ditch functions through time, which has happened to coincide with changes in the land use from rural to urban through time, questions remain around the need for improved management infrastructure and support.

Tax ditches were organized to be run by the people who are most impacted by the ditch system, the people who live, work, and play on the lands within the drainage area. No one knows the issues an area faces better than the people who reside and own the lands themselves. As such, tax ditch officers must own property within the tax ditch drainage area, are elected by the impacted landowners, called taxables, and are the only ones who can authorize work or expend funds in the name of the tax ditch¹. Assistance is provided to the officers by many partner agencies and include the DNREC Division of Watershed Stewardship and county Conservation Districts, but again, without the officer's direct input and participation, tax ditches cannot function appropriately.

Across Delaware's three counties, Kent, New Castle and Sussex, tax ditches have a common issue: retaining and recruiting new officers. This issue combined with the importance of the tax ditch officer positions highlights the imperative need for a cohesive plan that addresses the retention of existing officers and recruitment of new ones.

Through this document you will find information about the responsibilities of the officers and associated agencies, strategies for improving retention of existing managers and recruitment of new ones, and suggested enhancements to resources. This document is intended to highlight areas that could be further explored as capacity and funding allows. As there are many partners that play a role in supporting the officers, another goal of this document is to not only serve an educational purpose, but to assist in coordinating efforts from partner agencies across Delaware to support tax ditch officers.

In closing we would like to gratefully acknowledge the assistance of members of the 2021 Tax Ditch Modernization Workgroup in the preparation of this document.

¹ "Agricultural and Soil Conservation; Drainage and Reclamation of Lowlands." TITLE 7, CHAPTER 41, <http://delcode.delaware.gov/title7/c041/index.html>.

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Tax Ditch Organization's Mission & Needs

Tax Ditch Organizations were formally established in 1951 under the state of Delaware's Uniform Drainage Law and outline the process for a uniform system to create, finance, administer, and maintain drainage in perpetuity for the prevention of flooding and water management for public health and safety (Delaware Code: Title 7 Chapter 41 Agricultural and Soil Conservation, Drainage and Reclamation of Lowlands).

Each Tax Ditch Organization is:

- A governmental subdivision of the state
- Formed by a prescribed legal process in Superior Court
- Organized by watershed
- Made up of all landowners, called taxables, within the watershed, and
- Managed by the volunteer elected taxables, the officers, with the assistance of partner agencies.

At the direction of the officers, the Tax Ditch Organization may:

- Determine maintenance needs
- Levy taxes, sue, execute contracts and enter into agreements
- Obtain loans
- Acquire property
- Accept contributions from landowners, and
- Exercise eminent domain.

Who Are Our Tax Ditch Officers?

Delaware has 234 Tax Ditch Organizations, and each Organization requires a minimum of three volunteers to be fully staffed (some require more). That equates to a minimum volunteer force of 702 people: 78 in New Castle County, 223 in Kent County, and 401 in Sussex County. The number of actual volunteers is lower due to either a lack of officers or a single person volunteering for more than one tax ditch.

These officers are farmers, homeowner's association (HOA) officers, town employees, business owners, and regular landowners looking to help their communities. All either have full-time jobs, part-time jobs and/or are retired in addition to putting in the time it takes to manage tax ditches. Each of these individuals does their best to understand the needs of the tax ditch they manage and to make the best decisions for ditch maintenance operations including utilizing their own resources to get the job done.

Many of these folks have had the position passed down to them from one generation of family members to the next, others take interest as the need arises. The reasons landowners volunteer to serve as an Officer vary widely depending on the needs of their individual Tax Ditch Organization, whether the position is one valued in their family culture or one developed out of a need to serve the community. Tax ditch officer's dedication to getting the job done right is highlighted by those officers have held the position for 30+ years and regardless of their annual tax ditch taxes.

Responsibilities of Officers & Partner Agencies

Identifying responsibilities of key players related to tax ditch business is fundamental for determining current processes and recognizing areas that can be improved or where capacity of a partner agency has been reached. To gain an understanding of roles as determined by Tax Ditch Law, position or service areas have been identified for officers and partner agencies.

Officer Responsibilities

Tax Ditch Organizations require the participation of the landowners, called taxables, within its drainage area or watershed. From these taxables, officers are elected in accordance with the Ditch Order, a document that was created at the formation of the ditch and highlight key functions and concepts of the ditch system. Officer positions include the Chairperson, Manager(s), and Secretary-Treasurer. These positions hold a one-year term, but often the officer will serve for many years.

All officers are responsible for managing the tax ditch and determining the: maintenance needs of the tax ditch, amount of money the ditch collects every year via the warrant rate, potential need for a loan to complete required maintenance, and timeframe for annual meetings of the taxables and officers². However, the Chairperson and Secretary-Treasurer positions have specific designated tasks as outlined in Tax Ditch Law¹.

Chairperson

The Chairperson is an officer, also known as one of the Managers, of the tax ditch and assists the other Manager(s) and Secretary-Treasurer in their roles and responsibilities. In addition to assisting with the overall officer responsibilities, the Chairperson is specifically responsible for scheduling and presiding over meetings of the officers and/or taxables and is the designated signing authority on all official documents or practices of the tax ditch.

Secretary-Treasurer

The Secretary-Treasurer is an officer position that is held by a single person and assists all officers in performing the general responsibilities to the ditch. In addition, this position is responsible for taking and keeping minutes of all meetings, providing for the safekeeping of tax ditch funds, which includes securing a bond that covers the Secretary-Treasurer position at a minimum in an amount approved by the Managers and presenting financial reports at all meetings, prepare materials for annual audit of tax ditch accounts, and attesting the signature or approval of the Chairperson on all official documents or practices of the tax ditch.

Supporting Partner Agency Responsibilities

There are multiple agencies across the state of Delaware that play supporting roles to tax ditches. They provide both administrative and technical assistance to assist officers in performing their duties. Agencies specifically called out in Tax Ditch Law include: DNREC Division of Watershed Stewardship, Conservation Districts, Superior Courts, and county taxation offices.

DNREC Division of Watershed Stewardship

Housed within the DNREC Division of Watershed Stewardship is the Tax Ditch Program. This Program provides the administrative, technical, and program implementation assistance, as outlined in the Tax Ditch Law, and houses a team of eight staff solely dedicated to assist tax ditches. Also available to the Program are a team of engineers and surveyors.

² "Agricultural and Soil Conservation; Drainage and Reclamation of Lowlands." TITLE 7, CHAPTER 41, SUBCHAPTER IV, § 4162, <http://delcode.delaware.gov/title7/c041/sc04/index.html>.

The Program assists with the following administrative tasks:

- Calculate and estimate warrant rates
- Right-of-way obstruction resolution
- Officer bonding guidance
- Audits
- Support for annual meetings and banking issues
- Field inquiries related to assessments, right-of-way or watershed boundary
- Process Court Order Changes (COC)
- Provide mapping resources
- Request legal assistance from the Delaware Attorney General (DAG) for tax ditch matters
- Clearinghouse for tax ditch records

The Program assists with the following technical assistance tasks:

- Providing design specifications for tax ditch features
- Perform maintenance inspections for tax ditch and right-of-way
- Prepare permit applications for Tax Ditch Organizations
- Evaluate tax ditch concerns
- Stakeout and inspect approved tax ditch work
- Land development review for tax ditch impacts

The Program assists with the following program implementation tasks:

- Jump start tax ditches without officers
- Assist in the creation of new tax ditches
- Update and process tax ditch assessment values for counties
- Disperses §3921 funds to county Conservation Districts

For more information about the program, please visit de.gov/taxditch.

Conservation Districts

Kent, Sussex and New Castle Conservation Districts also play a major supporting role for Delaware's tax ditches (§3921 - §3923, §4117-§4125). The Conservation District Board of Supervisors in each county have responsibilities relating to the acceptance of the filing of tax ditch petitions to form a new ditch and the approval of tax ditch warrant rate changes. The staff of each of the Conservation Districts also provide administrative and technical assistance to the tax ditches through the administration of matching and cost share funds to the individual tax ditch organizations, provision of technical assistance, construction (Sussex Conservation District only), and audit services (Kent and New Castle Conservation Districts only).

Superior Court

Board of Ditch Commissioners are positioned in and officers of the Superior Court of each county and are appointed by the resident judge (§4106). Each county has three positions with a term of three years, and three alternates with a term of one year. These positions are held by individuals who are a resident of the county they preside in and have knowledge of water management and are present to assist the DNREC Tax Ditch Program in preparing plans and recommendations for proposed tax ditch drainage systems and/or changes. DNREC Tax Ditch Program serves as the Secretary to the Commissioners.

Focus: Retention

Simplify Officer Information Conveyance

With all the responsibilities that fall upon Tax Ditch Officers and the multiple partner agencies, and the importance of the historical knowledge that officers contain. It is important that efforts be made to encourage the retention of existing officers. The following provide a path forward to improving relationships between Officers and partner agencies.

Ease of Access to Information

Provide Organized Easily Accessible Tax Ditch Information

With over 200 tax ditches across the state dating back to the 1950s, there are a lot of data associated with each individual ditch. Data has historically been stored in multiple locations, both digitally and in print, and the information includes but is not limited to formation documents, court order changes, meeting minutes, financials, assessment lists, and maintenance activities. Access to the data is relegated to those who can connect to the location of the digital files or those who have the physical files in hand. The issue of accessing the information becomes more prevalent when thinking about integrating multiple agencies and tax ditches (234 times three officers each) into one data solution. Geographic Information Systems (GIS) lends itself well to the conveyance of this type of information as tax ditches are spatially located.

To begin to resolve the issue of tax ditch data access and compilation, a need for an inventory and plan to augment current GIS management practices is high. This plan should include efforts that allow for an “one-stop-shop” approach and automated reporting or analyses based on user feedback that can be accessed via the web or created printed reports.

An example of how this project could address existing concerns relates to the development of Operations and Maintenance Plans for each tax ditch. These plans contain the path forward for planning maintenance efforts and many have expired and need to be updated. To update these documents would require information from multiple partners and staff to perform a line-by-line review and collection of individual tasks such as past mowing timing from tax ditch officers (verbal), or extents of tax ditch channel dipped out from the Conservation Districts (database) and installed or maintenance responsibility of crossings (GIS). If this information was available in a GIS system, the reports could be designed with standardized and/or automated components that apply to each tax ditch.

To move forward with this effort an inventory of existing, current, and future data needs and formats is warranted to review potential applications that could provide information quickly and efficiently.

Modernize Volunteer Management Software

To be able to track existing or previous officers more accurately, occupation, years of service, communication preferences, birthdays, availability/work schedule, etc., an updated officer tracking software is needed. Currently volunteer information is managed through an Access

database that is not set up to track past officers, more detailed custom fields, or the ability to access from a web-based system.

A more modernized application would allow staff and volunteer officers to develop and maintain relationships and track communications all in one place. It is even possible to set up a portal where officers can update contact information themselves to reduce staff time maintaining the system.

An example of such as system is Better Impact – Member Impact application (<https://www.betterimpact.com/member-impact-member-management-software/>). This application can be purchased and allows staff to log in, create customized officer profiles, search and report out on members, individual or mass targeted communication, desktop and mobile online portals for members, and encrypted data storage and protection. Fees start at \$300 a year and go up as features are added.

Establish Regular Communication Between Officers & Partner Agencies

Newsletters

Beginning in 2020 the DNREC Drainage Program instituted an annual printed newsletter that was mailed to all Tax Ditch Officers in all three counties (see Appendix B). The first edition of the newsletter introduced Officers to the staff of the Tax Ditch Program held within DNREC's Drainage Program and the Conservation District partners, along with other helpful information. Subsequent newsletters will provide relevant updates or general information and will be mailed out at the end of every year.

To supplement the printed annual newsletter, an e-newsletter was created and emailed out to all Officers who had email addresses on file in April of 2021. This e-newsletter provides programmatic updates relevant to the time frame and is emailed three times a year in April, August, and December.

Both the printed and e-newsletter formats and time frame were chosen as a cohesive path forward for providing regular updates to officers and improve communication between the DNREC Tax Ditch Program, Conservation Districts, and tax ditch officers. This decision was based on multiple factors including costs, tax ditch officer characteristics, and staff time availability. Printed newsletters are more costly than solely web-based efforts, however, since currently many officers do not have easy access or want to use computers as a primary method of communication, the printed format was determined to be the best choice initially. To expand DNREC's communication throughout the year the e-newsletter was chosen as the second option as it is a free format and doesn't require as much staff time as the printed version to produce.

However, it has been noted that both methods of communication are easily disregarded or "lost in the mail", and as such the necessity of a designated person to check-in with the volunteer Tax Ditch Officers is also needed.

Designate a Volunteer Coordinator

At the time of writing this document, a single point of contact does not exist within the DNREC Drainage Program to regularly check-in with tax ditch officers, determine needs, and answer questions. Currently these tasks are performed on demand and by a variety of staff.

Designating a staff member to this role can assist in providing a more open line of communication between officers and DNREC, allow for tax ditches and agencies to get ahead of any issues known to the Officers, and improve efficiency of staff members to address their tax ditch tasks.

This role would also be responsible for providing consistent training needs and opportunities, performing outreach to existing officers, recruiting new officers, maintaining and improving the Tax Ditch Officer database, and facilitating officer recognition initiatives.

Officer Round Table

Another option to increase communication between Officers and partner agencies is to host virtual, or in person as allowed, meet & greet or round table events. The frequency of these events could be as requested or biannually factoring Officer's schedules. These events would be organized by the Volunteer Coordinator, allow partner agencies to introduce themselves to Officers, discuss services we provide, and have an open forum to discuss any other concerns or questions they may have.

Trainings

Protocols, processes, and factors affecting tax ditches are changing and evolving. As such training and education is crucial for keeping Officers apprised of what is going on. The training needs also goes two ways, where partner agencies need to explain how they operate and the factors that go into decisions, and where Officers need to explain the common issues they face or processes they perform to partner agencies. Examples may be as simple as guest speaker meetings, or include brief field trips to show and tell maintenance needs from an officer's perspective, or Tax Ditch 101, etc.

Exit Interviews

When an officer is no longer able to serve, having the Volunteer Coordinator conduct and document exit interviews can assist with knowledge retention and understanding current issues. The information collected in an exit interview can go a long way to transferring knowledge from one volunteer to the next related to history of the system, current and future needs, or recommended improvements in operations.

Officer Appreciation

Volunteering as a Tax Ditch Officer is a prime opportunity to give back to the community as an elected public servant. The Officers assist in ensuring drainage within the tax ditch system is maintained to the original design, dealing with blockages to drainage, and determining the financial needs of the system. These positions are suitable for someone looking to build their resume by serving on a management board of a governmental subdivision of the state and/or ensure that adequate drainage is in place for the lands for which they and their neighbors hold.

Because of the duties required, Tax Ditch Officers devote quite a bit of time to ensuring the smooth operations of tax ditch systems and as such they should be recognized for it. The following are ideas to acknowledge the Tax Ditch Officer's volunteer work and would need a funding source identified to implement.

- DNREC to host a single annual event for all tax ditch officers across the state – RSVP needed
 - The event would be held in the evening, and could offer heavy hors d'oeuvres
 - Have a guest speaker on a relevant topic
 - Provide recognition/awards
 - Provide news or updates on tax ditch information
 - Estimated yearly costs: \$3,000 - \$4,000

- Recognition and/or Certificate of Appreciation categories
 - Existing:
 - Tax Ditch Officer Cooperator – by Sussex Conservation District Annually
 - New Ideas:
 - Thank you to Tax Ditch Officers for serving (individuals that are leaving office)
 - A certificate of recognition in a folder signed by DNREC Secretary
 - Presented at annual event, noted in yearly Tax Ditch Newsletter
 - Welcome to new Tax Ditch Officers (individuals who were elected that year)
 - Presented at annual event, noted in yearly Tax Ditch Newsletter
 - DNREC Tax Ditch Innovator Award
 - Awarded to a Tax Ditch Organization that has tried a new technique, practice, or innovative project to improve the standards of Delaware's tax ditches.
 - A framed certificate of recognition for each Tax Ditch Officer, signed by DNREC Secretary
 - Presented at annual event, noted in yearly Tax Ditch Newsletter
 - Nominations to the DNREC Drainage Program
 - Certificate of Appreciation – Years of Service
 - 5, 10, 15, 20+, etc.
 - A certificate of recognition in a folder or framed, signed by DNREC Secretary
 - Presented at annual event, noted in yearly Tax Ditch Newsletter
 - Depending on years include pins, keychain or another giveaway
 - Recognition by Governor at State Fair in July for those with 10+ years

Focus: Recruitment

Simplify Path to Join

A key component to recruiting new Tax Ditch Officers, is providing information about what the positions entail upfront in an easily understood and obtainable format. Interested parties need to know that they are in the right place, immediately see the value and the impact the position will have on their life, and the path forward for expressing interest in becoming a Tax Ditch Officer is clear.

The first step in simplifying the path is ensure relevant tax ditch information is available for public consumption. One way of doing that is expanding DNREC Tax Ditch Program webpage(s) for individuals interested in learning more about becoming a Tax Ditch Officer. The site could house information related to Tax Ditch 101 recorded presentations, explanations in laymen's terms of position responsibilities and expected time commitment, list of vacant positions, request to be contacted form, and provide the Volunteer Coordinator as the point of contact. Existing documents would be updated to DNREC Branding Guideline standards, new documents would be created based off needs, and all would be formed into a complete recruitment package.

Marketing Strategies

Tax Ditch Organization Specific

There are multiple methodologies available for marketing to recruit new Tax Ditch Officers for a specific tax ditch. The tried-and-true means to gain interested parties is through word of mouth, but this method relies on the use of existing connections to people. When new connections are needed, an open invitation to taxables for their annual meeting is a good place to begin to build relationships, but the first hurdle is usually getting people to show up. Advertising annual meetings is a requirement within the Tax Ditch Law (§ 4159) with two available options to choose from at a minimum: "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" or "By mailing to each affected taxable at the address currently shown on the records of the board of assessment of the county, a notice." Relying on one of those options alone, may not be enough to spark interest in today's climate.

Direct mailers are the best way to gain landowner's attention and should be utilized to have the most impact on the taxables, however it never hurts to advertise in as many places as possible. The mailer templates should be updated with images and graphics to visually attract attention, provide general information about tax ditches or information for where it can be found, provide meeting information, and highlight why it is in the taxables interest to join in on the conversation.

In addition to the two options for advertising highlighted in the law, other options to consider are local radio stations, online event calendars, notice to relevant community groups or homeowner's associations (HOA), and social media. There are multiple free avenues for advertising community meetings, however usually the most impactful solutions required payments. Tax Ditch Organizations should be prompted to consider how they would like to pursue announcement of their meetings and recruitments of new officers when making financial decisions with warrant rates.

Statewide

To raise awareness about tax ditches statewide, education and outreach efforts should be expanded. As presentations to local interest groups that highlight basic tax ditch information are requested or attendance at local events with an exhibit booth is desirable, they should be provided.

On the topic of social media, a coordinated effort between DNREC Public Affairs office, DNREC Tax Ditch Program and Conservation Districts would increase potential viewers and provide consistent messaging to reduce public confusion. The creation of regular posts and/or paid social media marketing upon available funding could push those that are technologically savvy towards the correct tax ditch resources and information. Other opportunities for collaborative marketing efforts entail short videos (both informational and officer recruitment based), cross-reference between DNREC and Conservation District websites where appropriate, and complimentary handouts physically located for consumption in appropriate DNREC and Conservation District buildings.

On-Boarding Package

To start new Tax Ditch Officers off on the right foot, each Officer is given handouts to help explain processes. This on-boarding package can be expanded and become more all-inclusive to contain the below information. Files will be printed, organized, and handed over to officers. Depending on the tax ditch, an indexed/ tabbed binder or file box with information would be provided.

- Written overview of tax ditch and position roles
 - Ditch order date, # of acres, # of parcels, # of miles, assessment base total at formation and current (2021), # of COC's (current of 2020), # of managers, warrant history from formation to current, current assessment list, etc.
 - Map
 - Position description handout
- Inspiration and example projects that new Officers can aspire to that would encourage active and long-term commitments
- Welcome note personally written from the DNREC Tax Ditch Program Manager and associated Conservation District TD Coordinator
- Key personnel and their responsibilities in DNREC's Tax Ditch Program and relevant Conservation District
- Timeline of annual events and Deadlines
 - Tax Ditch Organization Fiscal Year (January – December)
 - Warrant change requests due to DNREC date
 - Financial records due for audit to DNREC date
 - Matching/cost share sign-up to Conservation District by
 - Timeline of newsletters (email and printed)
 - Date Expected vs Actual Reports are sent out
 - Minimum time to notify public of upcoming annual/public meeting is 10 days
 - Provide 2 weeks' notice when requesting attendance at annual meetings, mailing labels or post cards from DNREC
- Formation documents and system map
- Copy of court order changes (COC)
- Copy of Tax Ditch Law
- Maintenance Recommendations
 - Contractor options
- Banking guidelines
 - Federal EIN
 - Banking options
 - Audit
 - Bonding
 - Escheated/escrowed funds

- DNREC Tax Ditch Program Fact Sheet
- Financial needs estimator form (Excel sheet)
- Right-of-way reduction and tax ditch changes or obstruction processes
 - Information on how DNREC handles land development and court order change requests on behalf of the Officers
 - Information on how the Tax Ditch Officers can pursue right-of-way obstruction or damage issues