



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.



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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

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

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.	<p>Finding: 9.1</p>	<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.	<p>Findings: 1.1, 7.0, 7.3, 7.4, 8.1, 9.0</p> <p>Workgroup Recommendation: E&O.5.1</p>	<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.	<p>Findings: 1.1, 7.0, 7.4, 8.0, 8.1, 9.0</p> <p>Workgroup Recommendation: F.1 & E&O.5.1</p>	<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

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

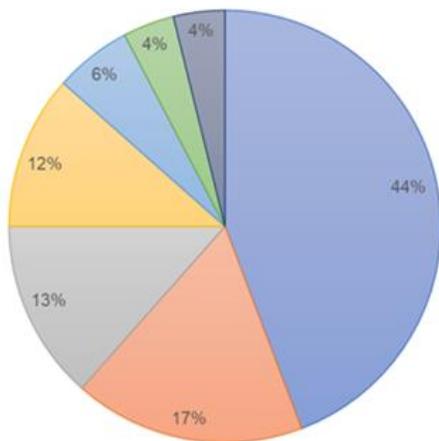
Overview of Workgroup Tasks

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

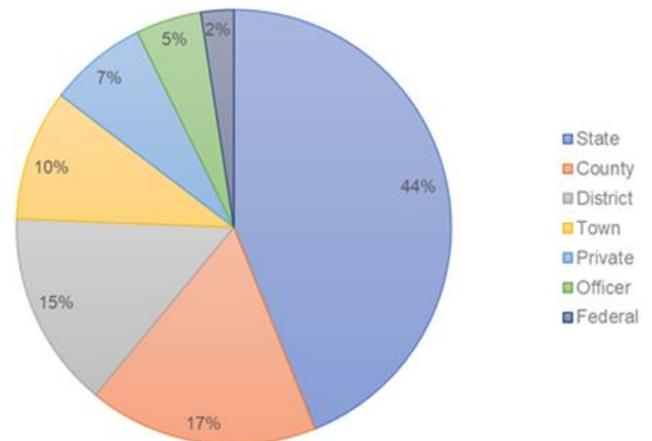


Figure 1. Tax Ditch Modernization Workgroup sessions 1 & 2 audience by affiliation.

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?

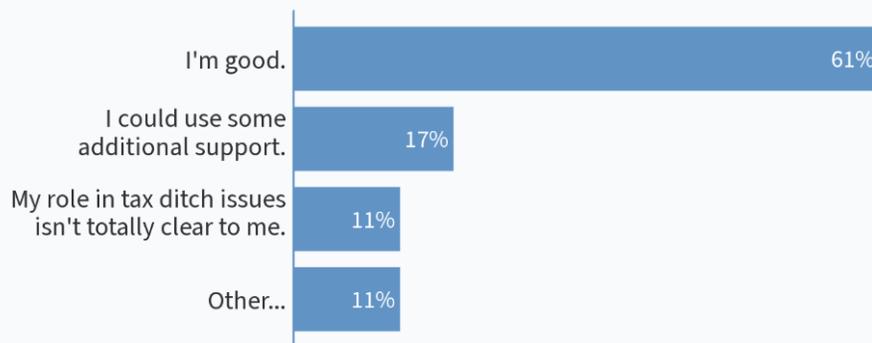


Figure 2. Results of polling question regarding workgroup attendees' comfort with their role in tax ditches.

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.

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.

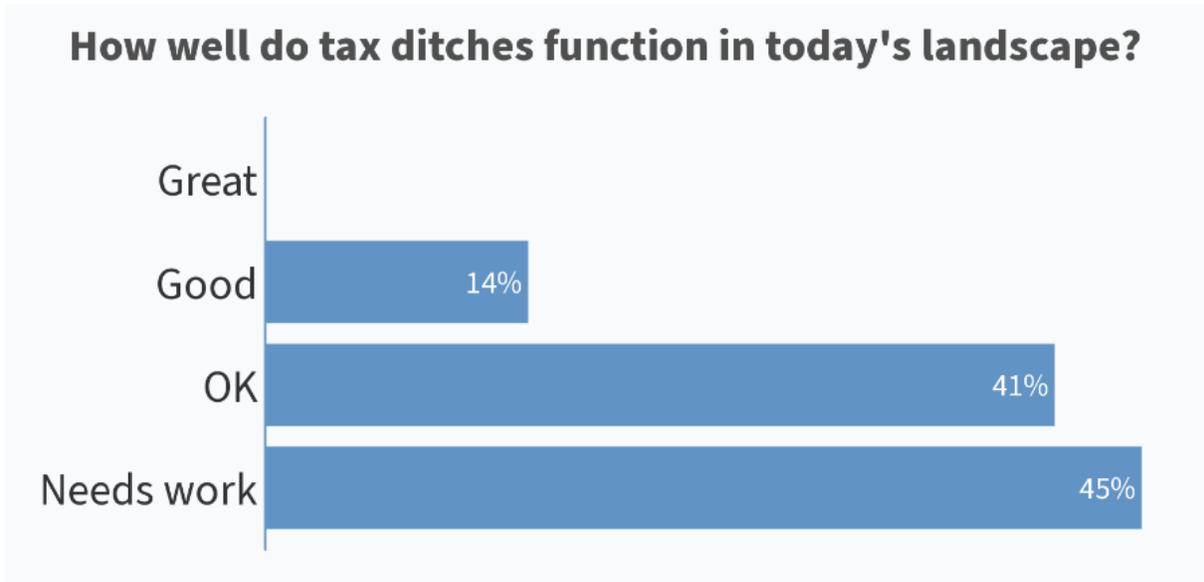


Figure 5. Results of polling question to garner thoughts on how well tax ditches function in today's landscape.

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).

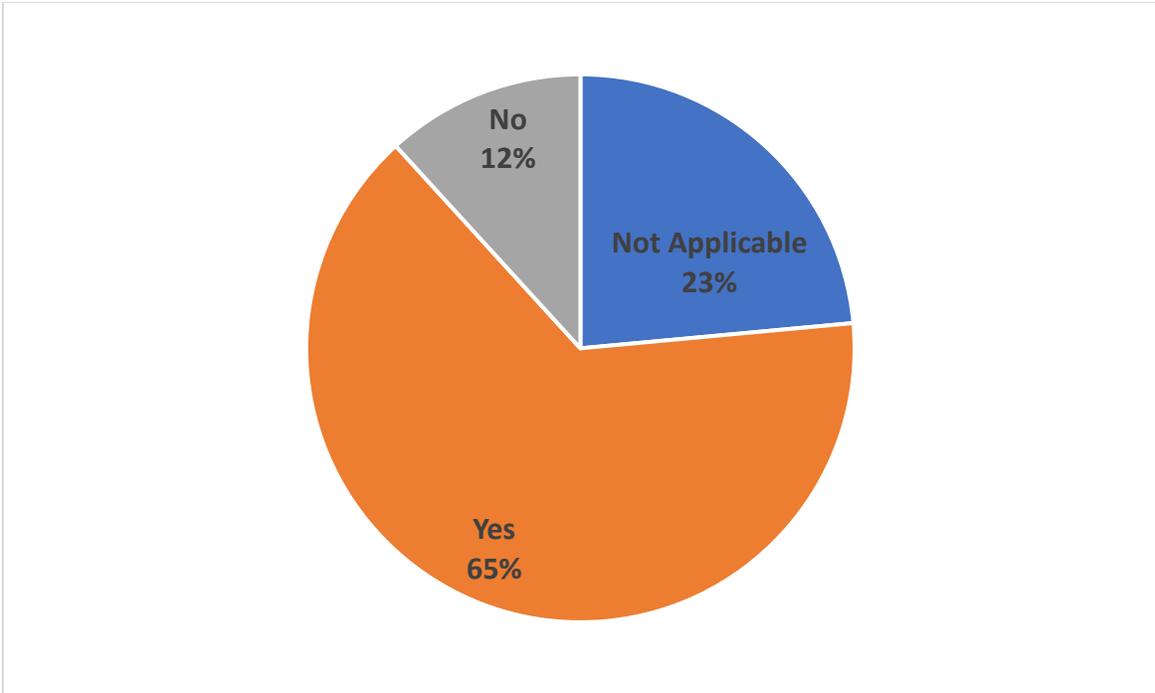


Figure 6. Results from the pre-session survey regarding the question "Does your agency/organization provide approvals or permits in general development impacts?"

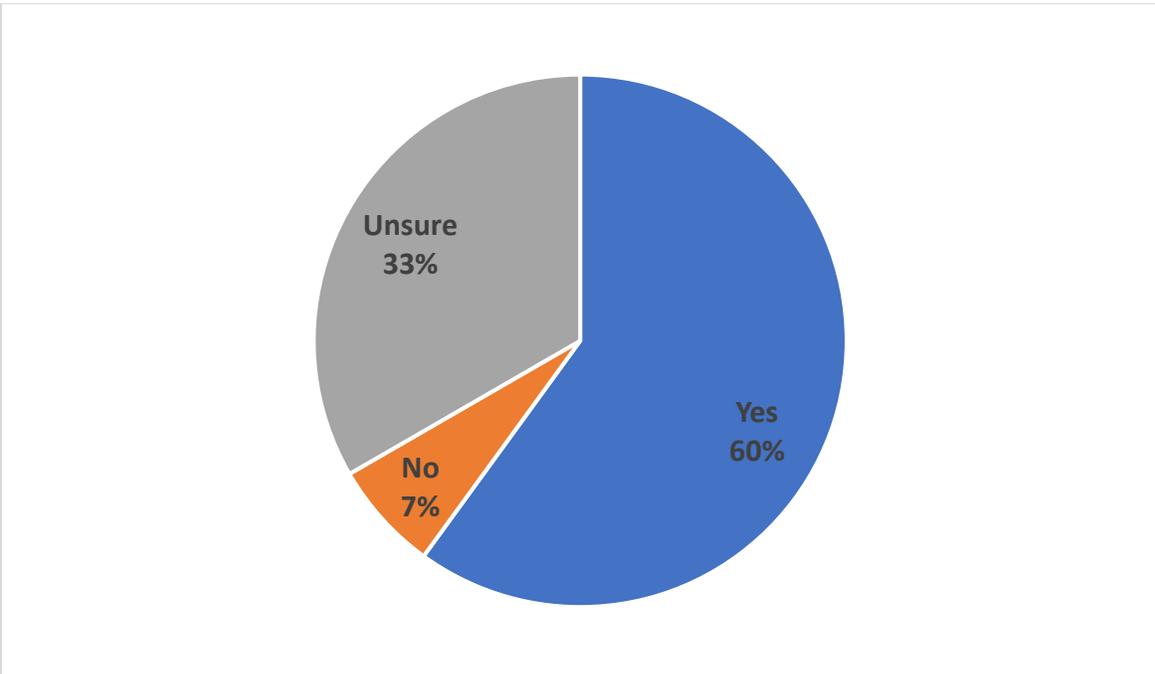


Figure 7. Results from the pre-session survey regarding the follow-up question to Figure 6, "If yes, does your agency/organization take tax ditches into consideration before providing an approval/permit?"

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.

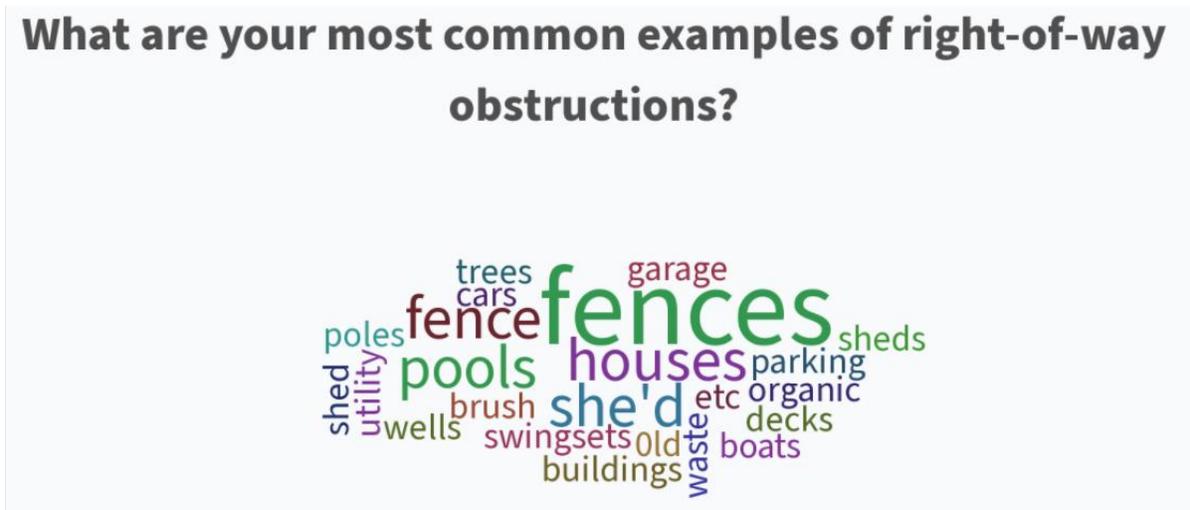


Figure 8. Image of the responses from participants to the question "What are your most common examples of right-of-way obstructions?" The larger the word, the more times it was mentioned.

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
DelDOT	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.

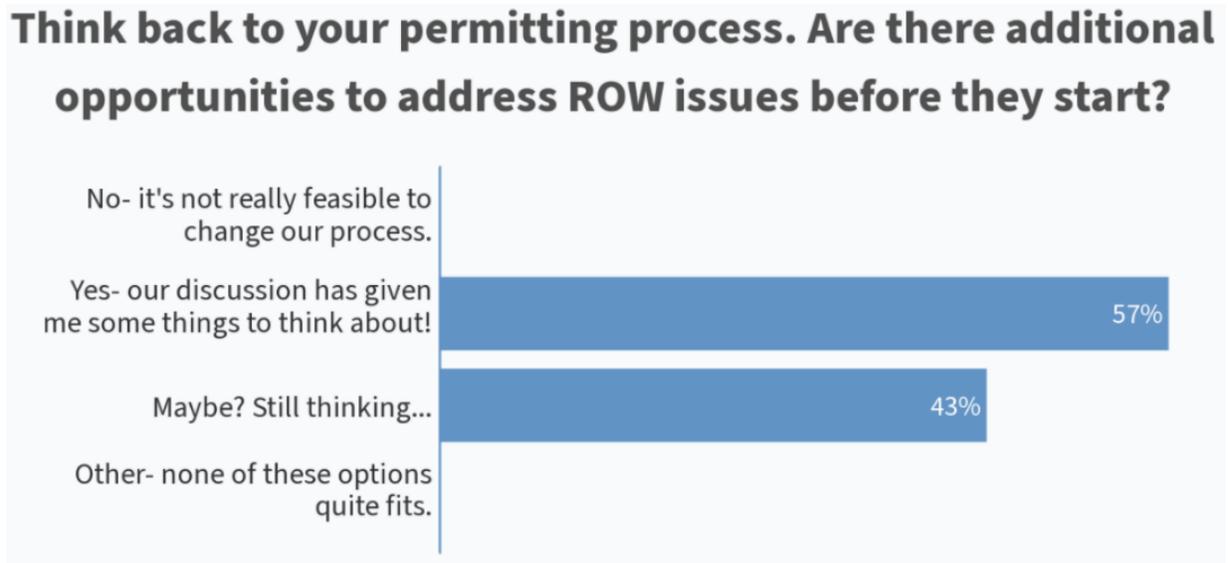


Figure 10. Responses during workgroup session 4 to the question posed: "Think back to your permitting process. Are there additional opportunities to address ROW issues before they start?"

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).

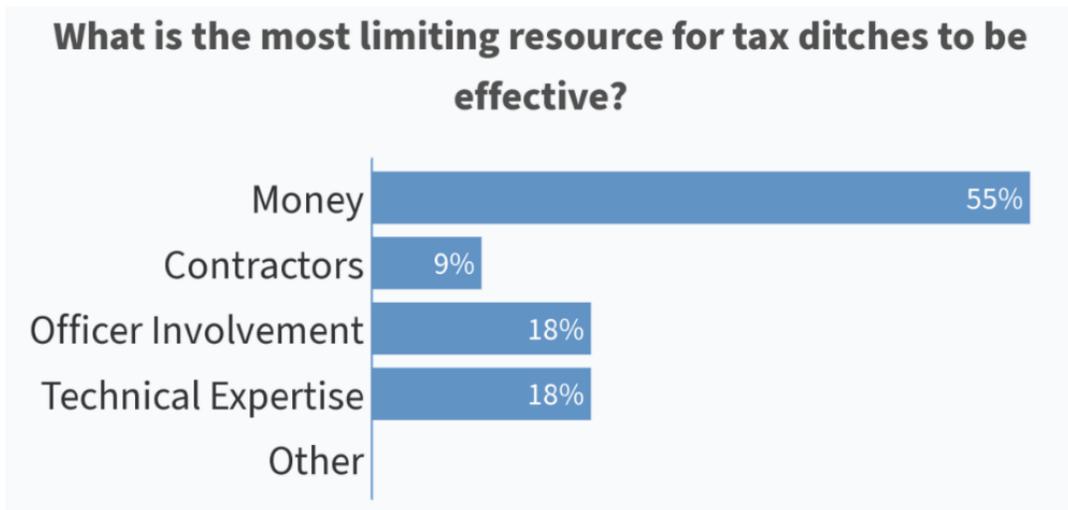


Figure 11. Results of polling question regarding the most limiting resource for tax ditch effectiveness

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?

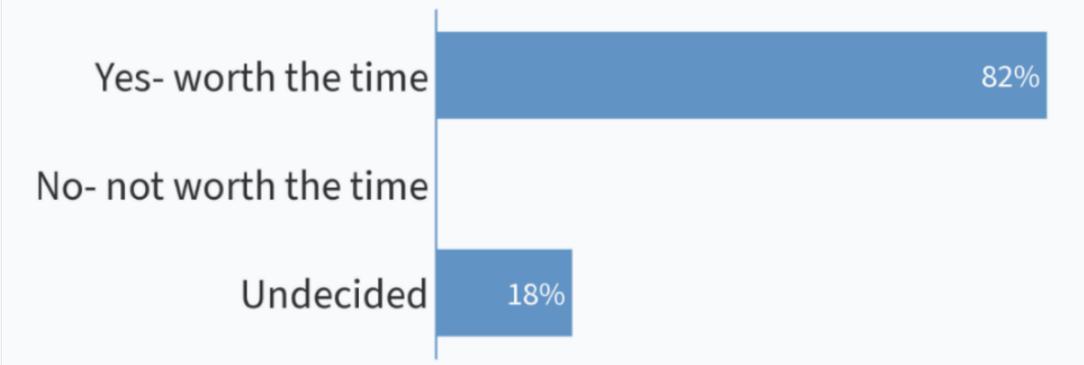


Figure 13. Results of the question "What are your thoughts on re-evaluating assessment base allocations for tax ditch parcels?"

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.

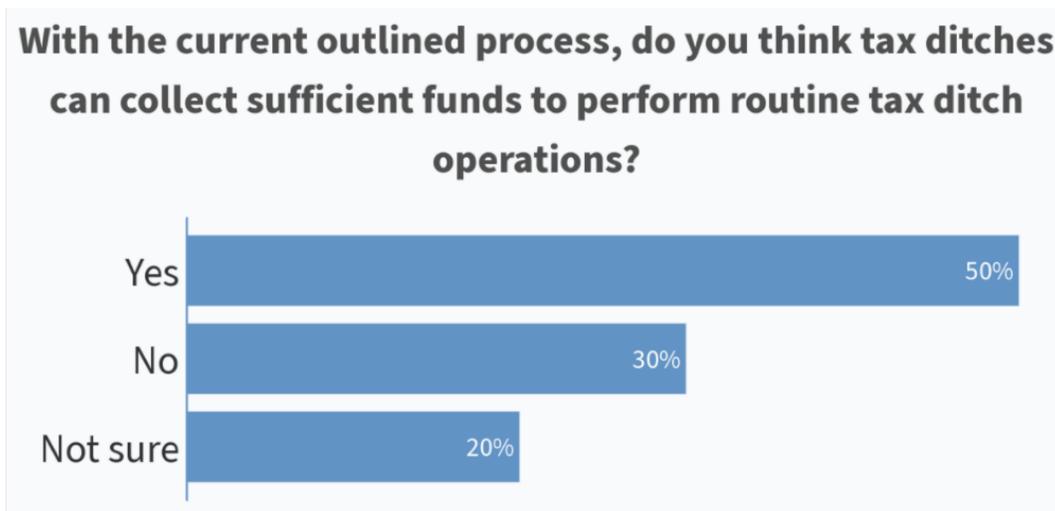


Figure 14. Responses from workgroup participants when asked "With the current outlined process, do you think tax ditches can collect sufficient funds to perform routine tax ditch operations?"

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.

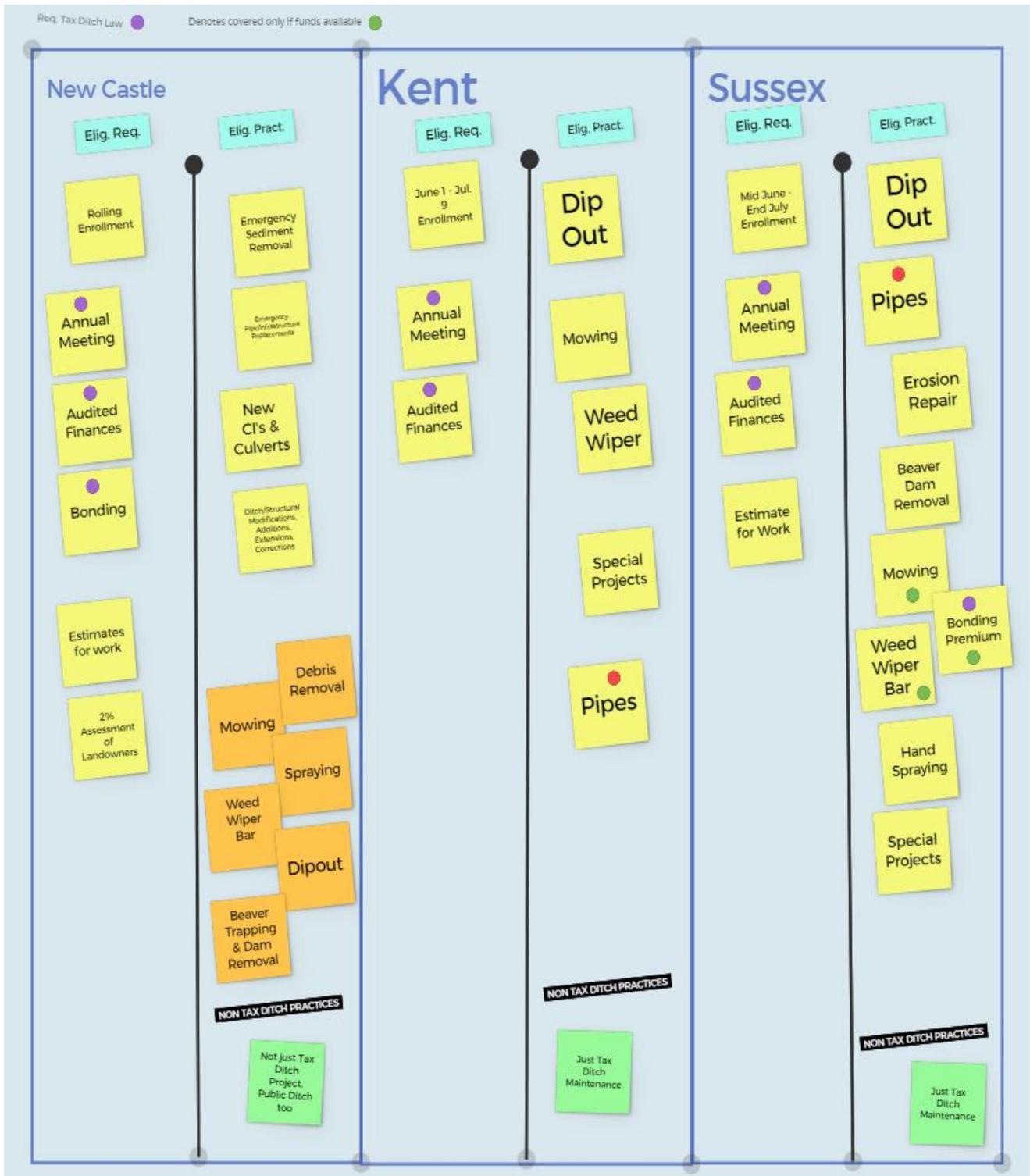


Figure 15. Screenshot of the IdeaFlip board used to capture eligible practices and associated requirements for 3921 Funds for each county conservation district during the virtual session 7 meeting.

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.

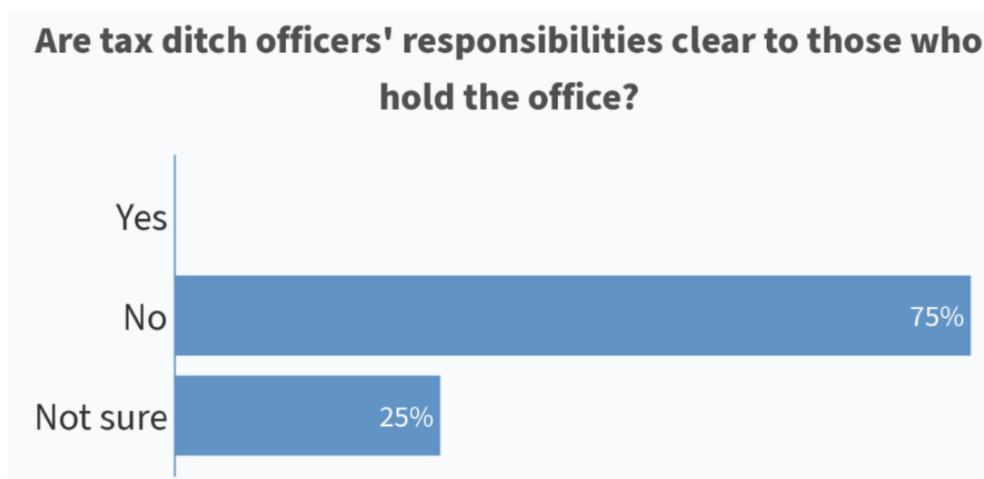


Figure 16. Workgroup participant responses when asked "Are tax ditch officers' responsibilities clear to those who hold the office?"

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

Short Term Goals for Education and Outreach
<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

Short Term Goals for Funding Changes
<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.

Short Term Goals for Design Changes
<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

Medium Term Goals for Education and Outreach
<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

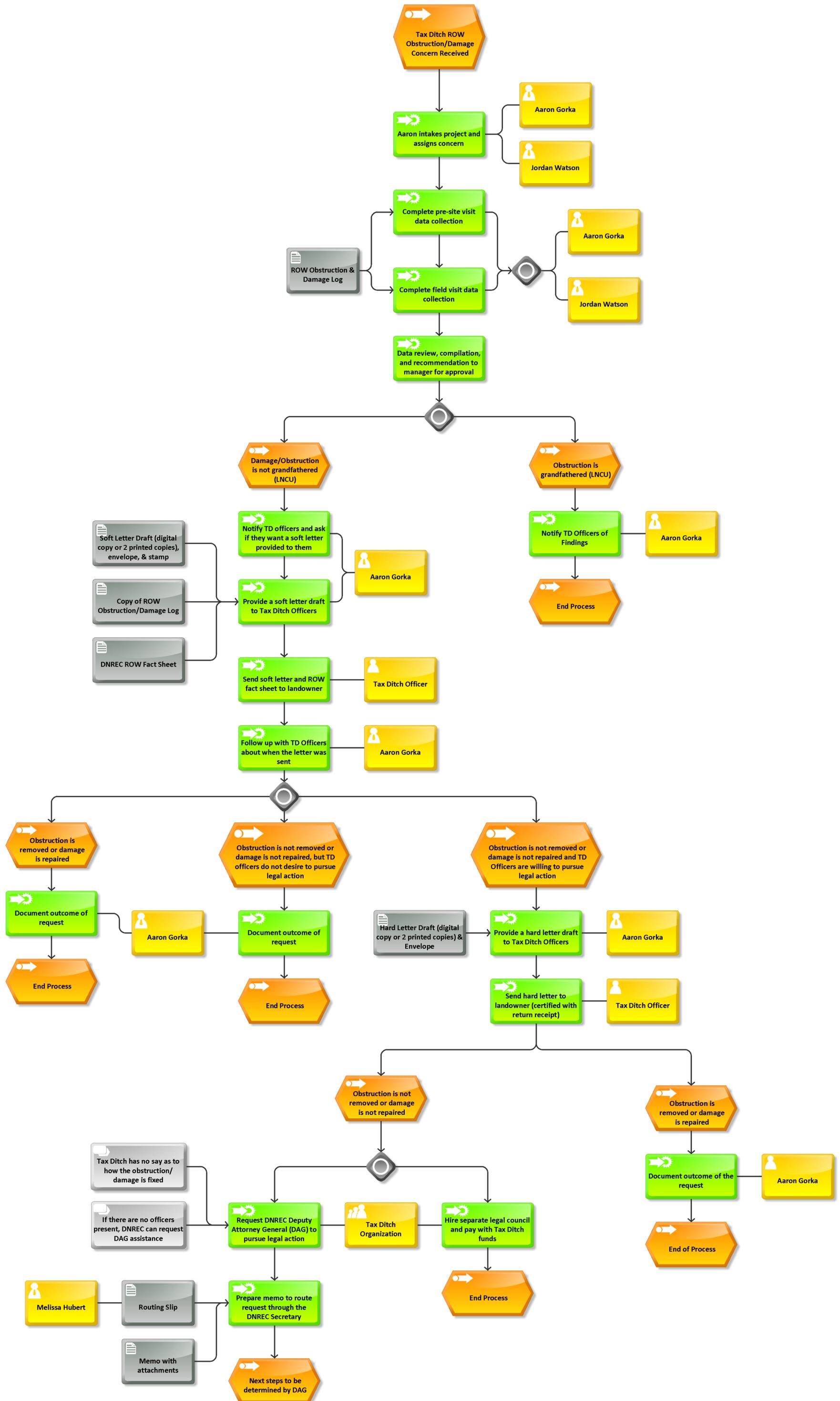
Appendix E - Officer Retention and Recruitment Strategy

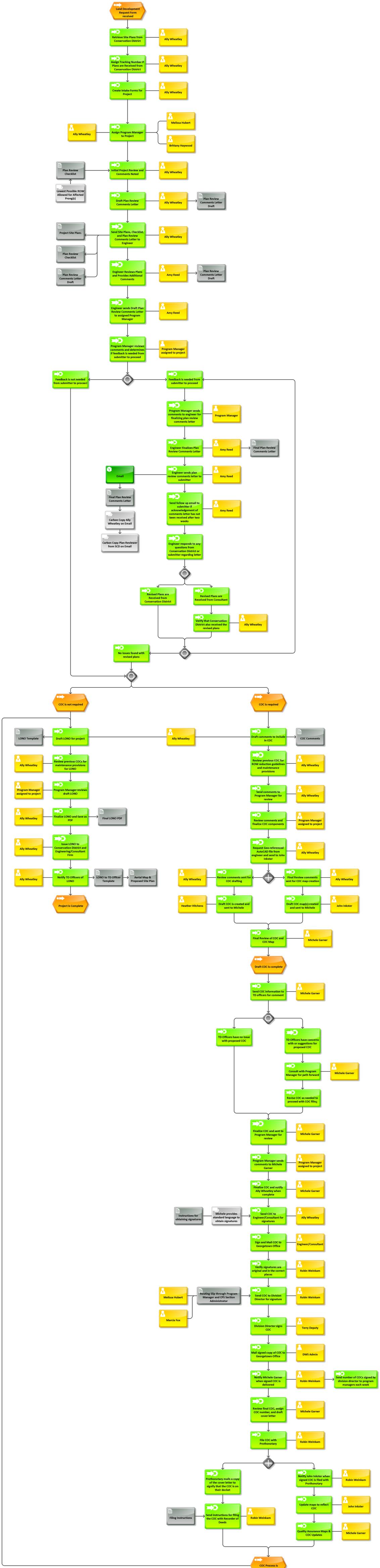
Participant Invited	Organization Affiliation
Kevin Donnelly	New Castle Conservation District
Rick Mickowski	New Castle Conservation District
Andy Bowman	New Castle Conservation District
David Baird	Sussex Conservation District
Bryan Jones	Sussex Conservation District
Debbie Absher	Sussex Conservation 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



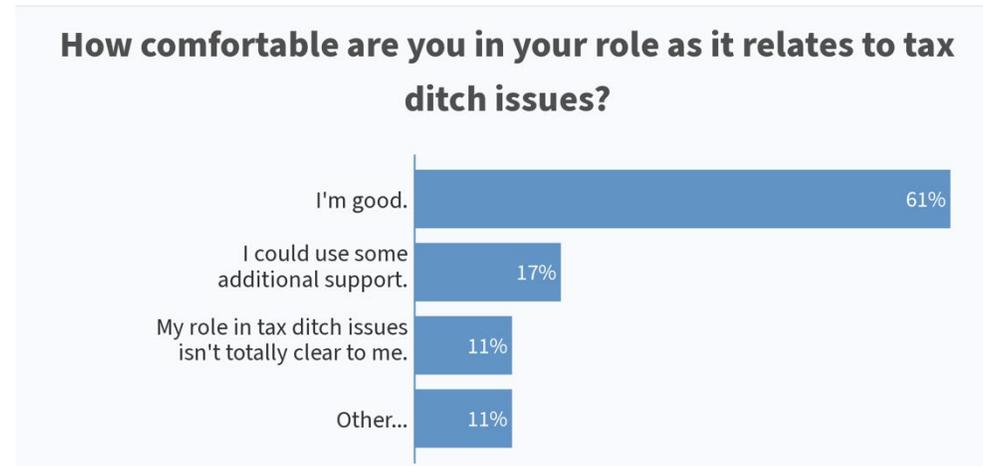
Wrap Up Workgroup Findings

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

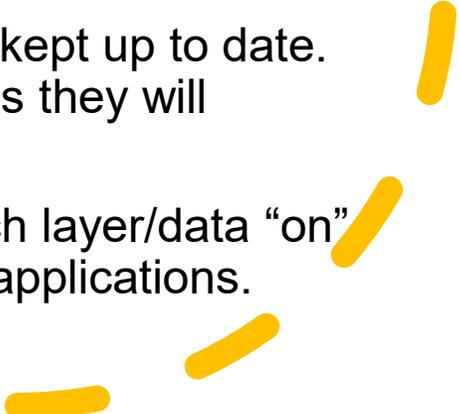
Operational Issues Tax Ditch Function 101

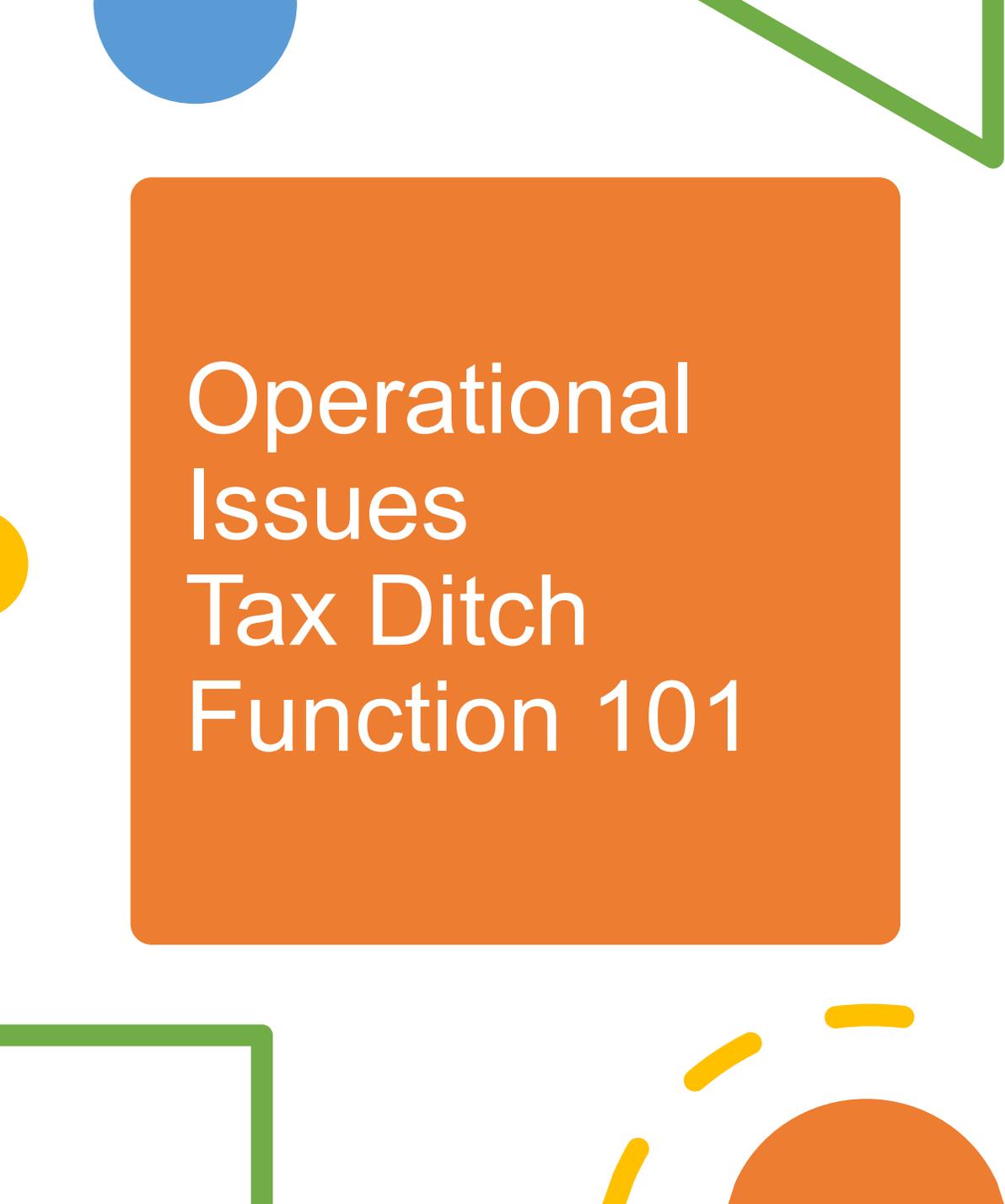
Key Findings:

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:

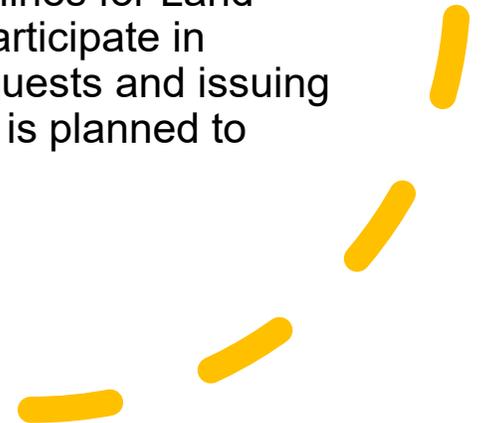
External Agencies may not be able to determine appropriate course of action as a change to the tax ditch channel and/or right-of-ways may be necessary based on requests received.

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:

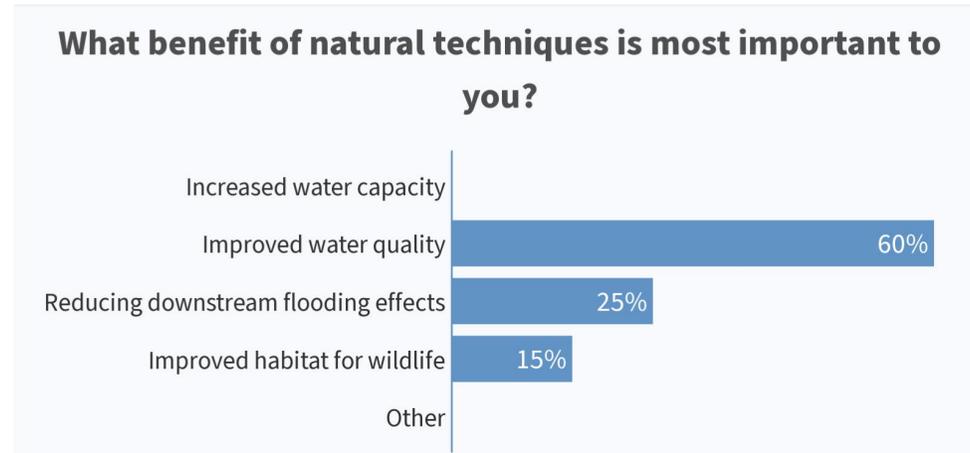
- Distribute printed copies of the “Land Development Request Form”, “Tax Ditch ROW Change Request”, and “Tax Ditch Guidelines for Land Development Plans” to the agencies requested to participate in workgroup as a resource for their staff reviewing requests and issuing permits/approvals in the event a 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:

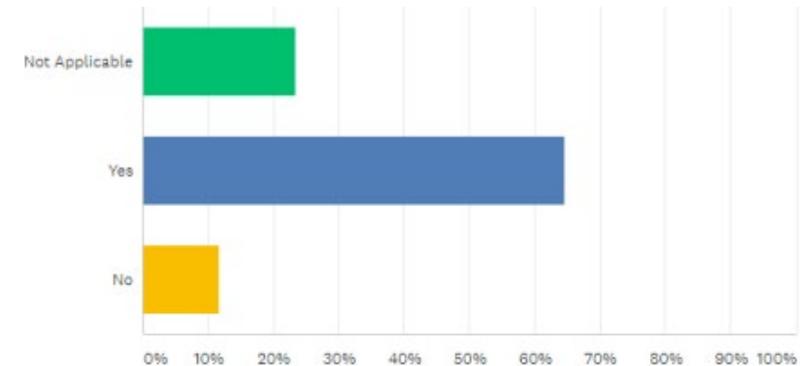
Many external agencies participating in the Workgroup issue approvals for features that could be an obstruction or damage to tax ditches.

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

Action Item:

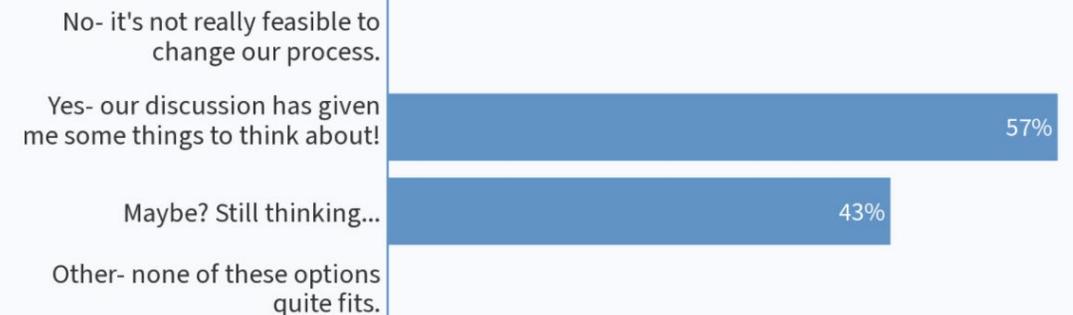
Development of guidance for regulatory/approval agencies to utilize regarding how to consider tax ditch impacts on requests submitted to their office.

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.

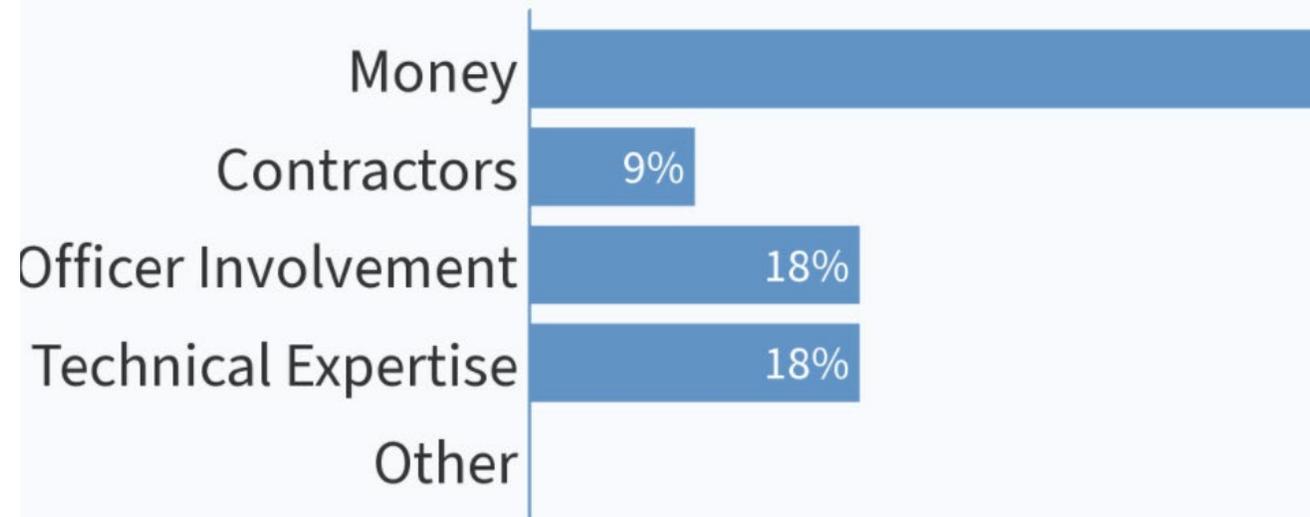
What does Tax Ditch modernization mean to you?

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.

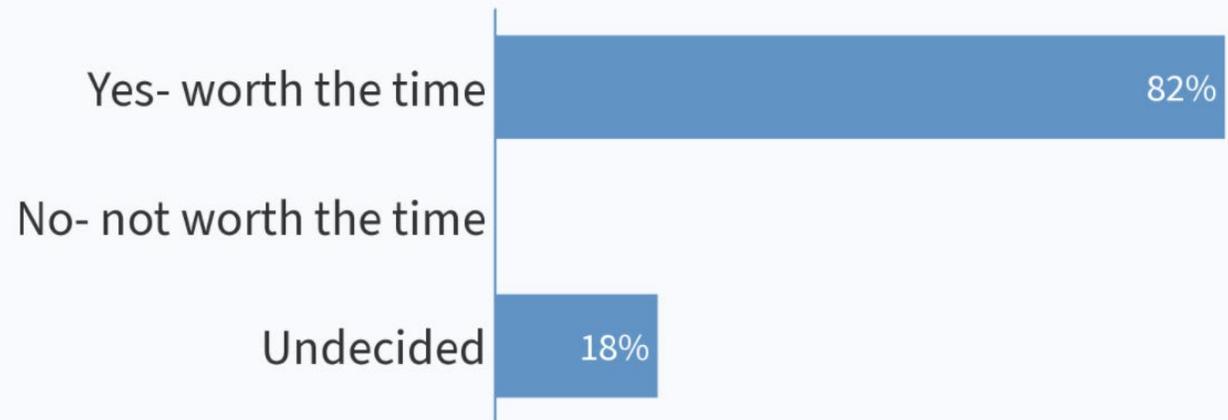
Re-evaluating the assessment allocations for tax ditch parcels is recommended.

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

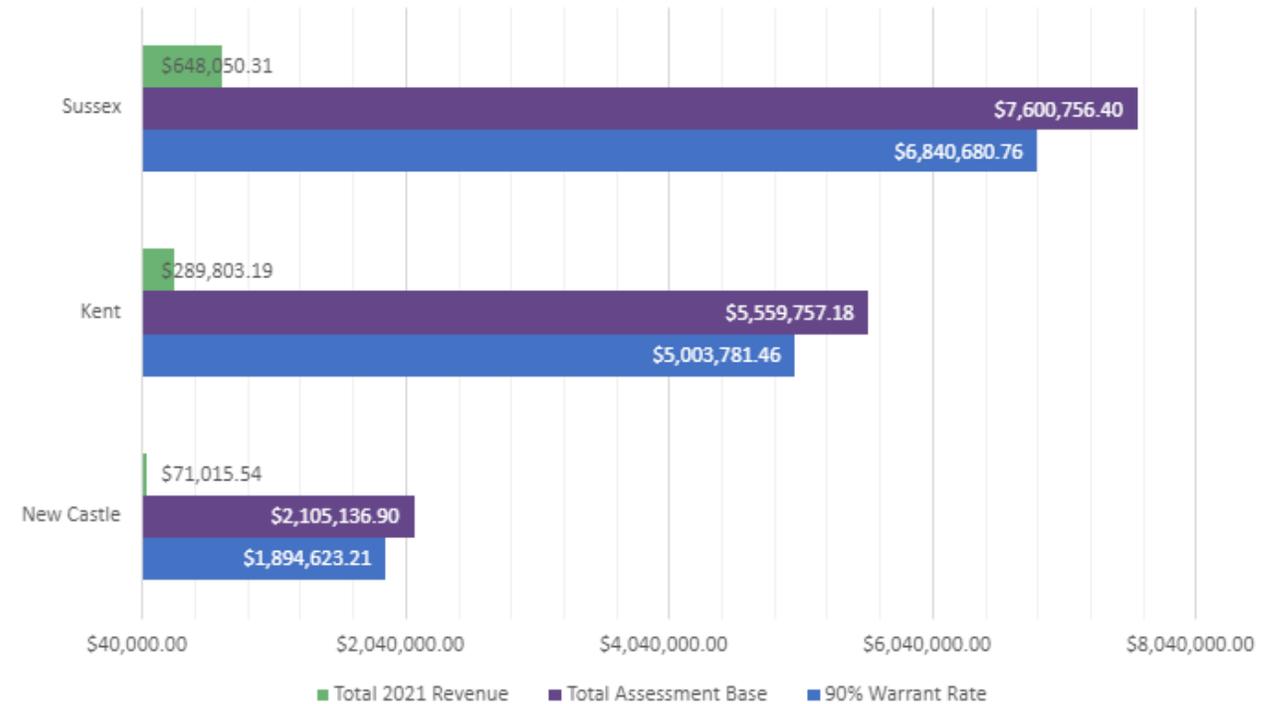
Key Findings:

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.

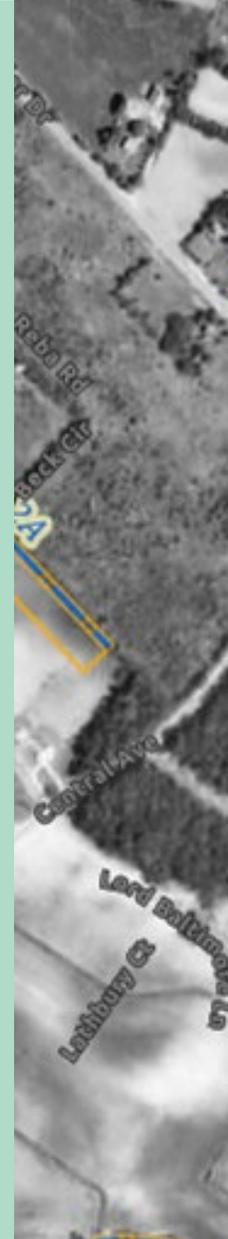
Action Item:

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 a 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