WATER QUALITY PARTNERSHIPS:

TACTICAL BASIN PLANNING, IMPLEMENTATION AND ADMINISTRATION OF PROJECTS

2017 Act 84 § 34

Submitted to the

House Committee on Corrections and Institutions House Committee on Natural Resources, Fish and Wildlife Senate Committee on Institutions Senate Committee on Natural Resources and Energy

Vermont Agency of Natural Resources

December 15, 2017

2017 Act 84 § 34, Capital Bill

"On or before December 15, 2017, the Secretary of Natural Resources shall submit to the House Committees on Corrections and Institutions and on Natural Resources, Fish and Wildlife and the Senate Committees on Institutions and on Natural Resources and Energy a plan or process for how and to the extent the Secretary shall:

- (1) contract with regional planning commissions and the Natural Resources Conservation Council to assist in or produce tactical basin plans under 10 V.S.A. § 1253; and
- (2) assign the development, implementation, and administration of water quality projects identified in the basin planning process to municipalities, regional planning commissions, or other organizations."

Other Statutory References

<u>2013 Act 51</u>	§11(b)(2)(C)	H.533 Capital Bill FY14-FY15
2014 Act 178	Amending §11(b)(2)(C)	H.864 Capital Bill Adjustment FY15
2015 Act 26	§11(a)(5) & (d)(5)	H.492 Capital Bill FY16-FY17
2015 Act 64	§§ 26 & 43	H.35 Water Quality Act
2016 Act 154	§12	H.595 Tactical Basin Planning/NRCC
2016 Act 160	§11(d)(5)	H.878 Capital Bill Adjustment FY17
2017 Act 84	§11(b)(2) & (f)(2)	H.519 Capital Bill FY18-FY19

Clean Water Fund Board Recommendations

FY16-FY17 CWF Board Recommendation	(11/9/2015, adjusted 4/11/2016)
FY18 CWF Board Recommendation	(10/17/2016, adjusted 4/27/2017 & 8/31/2017)
FY19 CWF Board Recommendation	(11/6/2017)

Clean Water Program Grant Information

2015 Act 64	10 V.S.A. §1253(d)(3)	http://dec.vermont.gov/watershed/cwi/grants
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Executive Summary

The Vermont Legislature commissioned this report in the Capital Bill, Act 84 § 34, to better understand how and to what extent DEC leverages its public partnerships to conduct tactical basin planning, to implement projects, and to administer grants. Specifically, the Legislature inquired into the role of the Regional Planning Commissions (RPCs), the Natural Resources Conservation Council (NRCC), and municipalities in implementing these tasks.

Sources of Project and Tactical Basin Planning Funding:

In January 2017, reflecting increased concern over the state of pollution in Vermont's waters, the Governor and the Treasurer recommended investing an additional \$25 million per year, for two years, to support clean water implementation efforts. The Legislature supported this request and is on track to appropriate a total of \$51 million in state FY18 and \$55 million in state FY19 for clean water. This includes an additional \$22 million in capital funds in FY18 and a proposed additional \$24 million in FY19. This compares to \$10 million in FY17. This significant increase in capital funds available for clean water is expected to step down starting in FY20 and, over a period of several years, return to levels closer to those provided in FY17 by FY22.

Of the funds appropriated in the 2017 Capital Bill for FY18, \$6 million is to be administered through the Vermont Department of Environmental Conservation (DEC) for clean water projects. A capital appropriation of \$5 million to DEC for clean water is anticipated in FY19.

Chart 1 shows the total amount of funds administered by DEC for clean water work, including tactical basin planning services.



Clean Water Project Implementation Grants

DEC's clean water project implementation grants use a competitive grant application processes to achieve three main goals:

- 1. Reduce nutrient and sediment pollution from nonpoint sources into Vermont's surface waters, including Lake Champlain; ¹
- 2. Leverage the capacity of other parties, to deliver technical and educational training and assistance to municipalities, farmers and other parties to reduce nonpoint source pollution and improve flood resilience;
- 3. Facilitate competition among grantees to ensure best use of available funds.

In FY18, DEC is administering three grant programs; two of which are innovative programs being piloted for the first time this year:

- <u>Ecosystem Restoration Grants</u>: Offering grants for project planning, design and implementation. Existing grant increased from two to four grant rounds each year;
- <u>A new Municipal Road Grants-in-Aid Pilot Project</u>: Offering a formula based award through the RPCs for municipal road best management practice implementation; and
- <u>A new Clean Water Block Grant Pilot Program</u>: Offering grants to the RPCs and the NRCC to work with municipalities and other partners to implement projects already identified in the DEC Watersheds Projects Database.

Tactical Basin Planning

In 2015, Act 64² contained a provision that DEC shall, contingent upon the availability of funding, contract with Regional Planning Commissions (represented by VAPDA), to fulfill specific roles and responsibilities to assist in the development of tactical basin plans. In 2016, the Vermont General Assembly further amended 10 V.S.A. §1253(d) to include the Natural Resources Conservation Council (NRCC) as an eligible entity.

The Vermont Clean Water Act (2015) authorized DEC to use fee revenues from the Environmental Permit Fund³ in 2016 to support partnerships that enhance tactical basin planning contingent upon the availability of funding. In 2016 DEC allocated \$300,000 in accordance with this directive, and in 2017 continued to invest in this partnership with an allocation of \$330,000 from the Environmental Permit Fund. This funding approach was intended to provide a bridge while a long-term funding source was identified.

DECs primary goal with this investment is to secure essential tactical basin planning services that support deployment of clean water funding and align services with the needs of each tactical basin plan. Specifically, DEC views the partnership with VAPDA, and more recently the NRCC, as an essential opportunity to grow capacity to conduct outreach, engage with and

¹ Nonpoint sources of pollution are diffuse sources caused by precipitation or snowmelt that drains off of hard surfaces and compacted ground such as developed areas and roads, agricultural lands, and logging areas.

² Act 64 or the "Vermont Clean Water Act;" 2015 Vt. Acts & Resolves 975.

³ See reference to the Environmental Permit Fund, 3 V.S.A. § 2805. Act 64, Sec. 43.

provide services to municipalities, and support assessments, project development, and project implementation – all essential components of robust tactical basin plans. This expansion in capacity is important – a recent survey, conducted by the University of Vermont, found that just over 50% of municipalities surveyed have "No" or only "Slight" awareness of the tactical basin planning process.⁴ The partnership with both VAPDA and NRCC, just entering its second year, has been designed specifically to increase awareness and engagement with municipalities.

Vermont's 2015 Clean Water Act lays out DEC's tactical basin planning obligations, and the tactical basin plans are identified as the implementation vehicle for Phase II of the Lake Champlain TMDL. It is imperative that DEC direct the development of tactical basin plans and draw on the expertise of our statewide partners, VAPDA and NRCC.

The current level of funding is providing an appropriate level of service in support of tactical basin planning work. Funds for tactical basin planning services are a small portion of total clean water funds awarded, but provide essential funding for partner staff to deliver these services.

In FY18 DEC is piloting a new statewide framework to secure critical tactical basin services. Two statewide RFP's have been issued designed to take advantage of the services and expertise available from both VAPDA and the NRCC. DEC is committed to these important partnerships with VAPDA and NRCC, as well as continuing to learn from and adapt over time to ensure that this investment is leveraged to obtain the maximum possible value for clean water.

Recommendations for Tactical Basin Planning and Clean Water Implementation Grants

- Complete FY2018 tactical basin planning award process as outlined above.
- Conduct business process analysis with eligible entities to analyze successes and challenges of FY18 award process, and to explore potential alternative structures for award agreements that facilitate coordination with VAPDA and NRCC.
- Identify funds to provide sustainable funding for tactical basin planning services.
- Continue the Municipal Roads Grant-in-Aid Pilot Project, with an earlier start data to facilitate sign-ups.
- Revisit Clean Water Block Grant Pilot Program to address limitations in project delivery costs and to align required match between "Block" and "Ecosystem Restoration" grants.
- Continually pursue improvements for Ecosystem Restoration Grants administration through Lean business process analysis, and to evaluate each grant award round.

The Appendix summarizes DEC's grant programs to support basin planning services and clean water project implementation, funds available, and opportunities to improve service and project delivery.

⁴ Clark, Richard, Stephanie Hurley, "Topline data from the BREE Municipal Survey," Presentation at the PTAC Meeting, November 28, 2017, Burlington, VT

Introduction

The Department of Environmental Conservation (DEC) values the important partnership it has with the RPCs, the Natural Resources Conservation Districts(NRCD), and municipalities. The RPCs are represented by the Vermont Association of Planning and Development Agencies (VAPDA), and the Natural Resource Conservation Districts are represented by the Natural Resources Conservation Council (NRCC).

This report describes the roles of VAPDA and the NRCC in partnering with the State of Vermont meet its clean water goals by enhancing public awareness, increasing public engagement, and providing municipal and stakeholder review of DEC's tactical basin plans, and by supporting the development and implementation of prioritized clean water improvement projects identified via the tactical basin planning process. This report also describes the advantages of having partners engaged in these processes, while identifying some of the challenges.

Tactical Basin Planning (TBP)

1. Description

Tactical Basin Planning, mandated in 10 V.S.A. §1253, is the backbone of the state's efforts to assess, plan and implement clean water improvements in our communities.

Vermont is comprised of 15 watersheds, and the tactical basin plans for each watershed are updated on a five-year rolling cycle. The tactical basin planning process is the primary vehicle used to translate monitoring and assessment of Vermont's waters into actionable plans and a project database. Basin planning also provides the structure necessary to track and report on clean water improvement results statewide.⁵

Act 64, signed into law in 2015, contained a provision that DEC shall contract with Regional Planning Commissions to fulfill specific roles and responsibilities to assist in the development of tactical basin plans. DEC entered into grant agreements with VAPDA for FY16 and FY17 to fulfill these roles and responsibilities. Act 64 also authorized DEC to use fee revenues from the Environmental Permit Fund in 2016 to support partnerships that enhance tactical basin planning contingent upon the availability of funding. In 2016 DEC allocated \$300,000 in accordance with this directive, and in 2017 DEC continued to invest in this partnership with an allocation of \$330,000 from the Environmental Permit Fund.

⁵ This report complements the annual ' PROGRESS REPORT ON RIVER BASIN WATER QUALITY MANAGEMENT PLANNING (TACTICAL BASIN PLANNING) that DEC submits to the legislature Refer to the state webpage for the most recent report: <u>http://dec.vermont.gov/sites/dec/files/wsm/mapp/docs/2017-01-</u> <u>03 DEC Basin Planning Report.pdf</u>

In 2016, the Vermont General Assembly further amended 10 V.S.A. §1253(d) to include the Natural Resources Conservation Council (NRCC) as an eligible entity to supports the roles and responsibilities established in §1253(d) to assist in the development of tactical basin plans, contingent upon the availability of funding.

2. Role of Tactical Basin Planning in Project Development

Clean water improvement projects are described in the tactical basin plans' implementation tables, which are housed in the DEC <u>Watershed Projects Database</u>. The State uses tactical basin plans to target funding to those projects that will accelerate the reduction of nonpoint source pollution, including sediment and nutrient (phosphorus and nitrogen) pollution. These projects are essential in helping Vermont to improve and sustain water quality, and to comply with federal and state clean water directives, including the Lake Champlain Phosphorus TMDL,⁶ other TMDLs⁷ and Act 64. Clean water improvement projects are implemented not only for the improvement of surface waters, but also to:

- Support municipalities, businesses, property owners and the economy that depend on clean water;
- Safeguard public health by providing wastewater treatment and addressing combined sewer overflow system needs, while reducing nutrient pollutant loading from these facilities;
- Reduce storm water runoff and erosion from developed areas;
- Upgrade state and municipal highway networks with best storm water management practices;
- Reduce runoff, erosion and soil loss from farmlands and production areas;
- Reduce runoff and erosion on timberlands; and,
- Restore floodplains, river corridors, wetlands, and riparian areas (the land immediately adjacent to rivers, streams, lakes, ponds, and wetlands).

3. VAPDA and NRCC Engagement in the Basin Planning Process:

The partnership with VAPDA and the NRCC helps DEC provide more comprehensive and coordinated tactical basin planning services, as envisioned by 10 V.S.A. 1253. The following list summarizes the on-going and projected successes of this partnership approach:

- Enhanced engagement of a wide variety of audiences, including municipalities, landowners and the public, resulting in increased stakeholder participation;
- Improved communication with municipalities regarding Act 64, to provide transparency and predictability for municipal budgeting and planning processes;

⁶ A total maximum daily load (TMDL) sets pollutant reduction targets from a range of sources to achieve state water quality standards of an impaired water body. Federal Water Pollution Control Act of 1972, 33 U.S.C. Section 1251 et seq., Section 303(d).

⁷ Other TMDLs include phosphorus TMDL for Lake Memphremagog and Lake Carmi, nitrogen TMDL for the Long Island Sound/Connecticut River TMDL, and 18 stormwater runoff streams across the state.

- Greater ability to identify and prioritize water quality projects that incorporate municipal considerations;
- Improved communication between DEC, VAPDA and the NRCC regarding implementation of Act 64 and the tactical planning process;
- Increased public awareness and use of DECs monitoring and assessment data;
- Integration of tactical basin planning with other important planning activities, such as flood resiliency, hazard mitigation, and transportation planning;
- Delivery of a more comprehensive and prioritized list of projects and actions for inclusion in the DEC Watersheds Projects Database;
- Enhanced assistance for municipalities and local organizations in selecting projects from the DEC Watersheds Projects Database for implementation; and
- Increased awareness of tools for reclassification and designation of surface waters to achieve higher levels of water quality protection.
- 4. Recommendations for Tactical Basin Planning Services:

DECs primary goal is to secure necessary tactical basin planning services that support the efficient and effective deployment of clean water funding. VAPDA and the NRCC provide assistance in the development of tactical basin plans and the implementation of clean water improvement projects. Both entities provide essential coordination and engagement with municipalities. However, the current process is presenting challenges for all three entities.

- Organizations need predictable funding year to year to budget for and retain staff to implement the work identified in the RFP. The funds available for tactical basin planning services represent only a small portion of funds awarded to VAPDA, the NRCC and their local affiliates. However, it is one of the only sources of funding to support these organizations' staff engaged in tactical basin planning services.
- The Environmental Permit Fund is an essential source of funds for DEC permitting programs. Diverting funds to support tactical basin planning services limits the ability of DEC to meet current permit program obligations, implement new permit programs, and conduct permitting in a timeframe that meets the needs of permit applicants.
- 3. Both VAPDA and the NRCC conduct outreach, engage with and provide services to municipalities, and support assessments, project development and project implementation. There is however variability in services offered by each entity in the different regions of the state, and variability in how each entity engages with municipal officials or other stakeholders in each region.
- 4. The organizational and jurisdictional boundaries of the RPCs and the Natural Resource Conservation Districts (NRCD) are different from each other, and do not align with the watershed boundaries of the tactical basin plans. As many as five regional planning commissions and natural resource conservation districts can be involved in the review and support of one tactical basin plan.

- 5. Providing planning assistance on a watershed scale requires that both entities have the capacity to engage with municipalities, other interested parties, and the public in a coordinated manner. The fact that the organizations' jurisdictions are different compounds the problem.
- 6. A recent survey, conducted by the University of Vermont, found that just over 50% of municipalities surveyed have "No" or only "Slight" awareness of the tactical basin planning process.⁸ Increasing awareness and engagement with municipalities must be a primary focus for DEC, VAPDA and NRCC moving forward.
- 7. In addition to the RPC's and NRCD, other local entities such as watershed groups and lake associations are engaging in the tactical basin planning process and are seeking support from the state.

In FY18, to address these challenges, DEC is piloting a new statewide framework to secure critical tactical basin services. Two statewide RFP's have been issued designed to take advantage of the services and expertise available from both VAPDA and the NRCC as efficiently and effectively as possible. Additional work tasks to accelerate project implementation have also been included in the RFP. DEC anticipates finalizing the award process by end of calendar year, 2017.

DEC will also implement the following actions to further improve the partnership with VAPDA, the NRCC and municipalities:

- Conduct business process analysis with eligible entities to analyze successes and challenges of FY18 award process, and to explore potential alternative structures for award agreements, such as regional agreements or other approaches that facilitate coordination with VAPDA and NRCC.
- Identify funds to provide sustainable funding for tactical basin planning services.

⁸ Clark, Richard, Stephanie Hurley, "Topline data from the BREE Municipal Survey," Presentation at the PTAC Meeting, November 28, 2017, Burlington, VT

Clean Water Project Implementation Grants

1. Description and Administration

DEC manages three clean water project implementation grant programs to address nonpoint source pollution. Two are new and innovative programs piloted for his year.

The goals of the clean water project implementation grant programs are to:

- 1. Reduce nutrient and sediment pollution into Vermont's surface waters, including Lake Champlain, from nonpoint source pollution; ⁹
- 2. Leverage the capacity of other parties to deliver technical and educational assistance, including trainings, to municipalities, farmers and other parties in practices to reduce nonpoint source pollution and improve flood resilience;
- 3. Facilitate competition among grantees, which results in lower costs for taxpayers.

Clean water project implementation funding is received from two principal sources: (a) state capital funds;¹⁰ and (b) Clean Water Fund allocations.¹¹ With the exception of the Municipal Roads Grants-in-Aid Pilot Project, clean water implementation grants use an open grant application with a competitive scoring process to disperse these funds. The grant programs are:

- <u>Ecosystem Restoration Grants</u>: Offering grants for project planning, design and implementation. Existing program, increased from two to four grant rounds in FY18;
- <u>A new Municipal Road Grants-in-Aid Pilot Project</u>: Offering a no-grant application aid through the RPCs for municipal road best management practice implementation; and
- <u>A new Clean Water Block Grant Pilot Program</u>: Offering grants to the RPCs and the NRCC to work with municipalities and other partners to implement projects already identified in the DEC Watersheds Projects Database.

It is important to note that administering award agreements (grants or contracts) including the managing of projects through end of lifecycle and tracking of results, requires substantial administrative resources. The administrative costs to support, track and report on state investments is acknowledged in the Treasurer's Report.¹² DEC administers these funds in compliance with eligible uses of those funds and continually seeks to improve the efficiency and effectiveness of administration.

⁹ Nonpoint sources of pollution are diffuse sources caused by precipitation or snowmelt that drains off of hard surfaces and compacted ground such as developed areas and roads, agricultural lands, and logging areas.
¹⁰ Capital funds are state general obligation bonds employed to raise state capital funds to support general governmental needs, including water quality.

¹¹ Act 64 created the Vermont Clean Water Fund -- a dedicated source of funding that strategically targets priority water quality improvement actions. The Fund is currently supported by a portion of the 0.2 percent surcharge on the property transfer tax on properties over \$100,000. The Clean Water Fund receives approximately \$4 million of the \$5 million in revenues that the surcharge is estimated to generate annually. Act 64 sunsets the property transfer surcharge on July 1, 2027.

¹² *Id*. at 8.

2. Funding for Clean Water Project Implementation Grants

Table 1, below, presents the three grant programs and related funding sources administered by DEC in FY2018 to support clean water implementation.

Tab	le 1: CL	EAN WATER INITIATIVE PROGRAM ECOSYSTEM RESTORATION GRANT	5 - F	Y2018					
			С	apital Bill	Clean Water Fund		General Funds		Total
I. G	irants ir	n Aid - Municipal Roads	\$	2,500,000	\$	150,000	\$	-	\$ 2,650,000
II. B	lock Gr	ant Pilot Program							
	#1: Re	gional Planning Commissions	\$	1,500,000		-		-	\$ 1,500,000
	#2: Na	tural Resources Conservation Council	\$	500,000		-		-	\$ 500,000
	SI	UBTOTAL	\$	2,000,000		-		-	\$ 2,000,000
111.	Ecosyst	tem Resstoration Grants							
	Captia	l Funds (Open grant opportunities - RPCs and NRCDs can apply)		1,500,000					\$ 1,500,000
	Clean	Water Funds (Open grant opportunities - RPCs and NRCDs can apply)				1,858,177			\$ 1,858,177
	Gener	al Funds (Dedicated Grant & Partner specific/RPCs and NRCDs can't ap	oply)					92,000	\$ 92,000
	SI	UBTOTAL	\$	1,500,000	\$	1,858,177	\$	92,000	\$ 3,450,177
тот	TAL .		\$	6,000,000	\$	2,008,177	\$	92,000	\$ 8,100,177

3. Recommendations for Clean Water Project Implementation Grant Programs

- 1) Continue the Municipal Roads Grant-in-Aid Pilot Project, with an earlier start data to facilitate sign-ups.
- Revisit Clean Water Block Grant Pilot Program to address limitations in project delivery costs and to align required match levels between "Block" and "Ecosystem Restoration" grants.
- 3) Continually pursue improvements for Ecosystem Restoration Grants administration through Lean business process analysis, and evaluation of each grant round.

Conclusion

VAPDA and the NRCC are integral partners, providing a vital suite of services and expertise that complements and enhances DEC's statutory requirement to produce tactical basin plans. Their partnership is necessary to educate Vermonters and municipalities on the objectives and requirements in these plans, the obligations in Act 64, and to support implementation of clean water improvement projects. While the obligations in Act 64, the significant increase in capital funding and the urgency to move funds swiftly to implementation has stressed this three-way partnership, DEC is confident that the challenges will be addressed as the partnership and the State's commitment to meeting its clean water obligations matures.

Appendix: Summary of DEC Clean Water Grant Programs

DEC Clean Water Grants							
	Tactical Basin Planning Grant	Municipal Road Grants-in-Aid Pilot	Block Grant Pilot Program	Ecosystem Restoration (ERP) Grants			
Area of Focus	To provide tactical basin planning services including outreach to municipalities, farmers, landowners & local organizations	To provide funds directly to municipalities to implement road-related best management practices	To support implementation of projects identified in tactical basin plans & listed in DEC Projects Database	To support development & implementation of projects identified in tactical basin plans & listed in Projects Database			
Why Important	TBPs are the backbone of state's efforts to assess, prioritize, plan & implement clean water projects	Helps municipalities gain experience with the Municipal Road General Permit standards	Streamlines the implementation process of identified clean water projects	Projects are necessary to achieve state clean water goals, comply with TMDLs and Act 64			
Eligible Partner(s)	VAPDA & NRCC	VAPDA	VAPDA & NRCC	VAPDA, NRCC, non-profits, municipalities			
Grant Size	FY17: \$330,000-VAPDA; FY18: TBD	\$2,650,000; formula to disperse funds to municipalities	VAPDA: \$1.5M NRCC: \$500,000	No specific funding limit			
Targeted Audience	Municipalities, farms, landowners, public	Municipalities	Municipalities, landowners	Municipalities, farms, landowners			
Funding Source	Fees from Environment Permit Fund	Capital Funds & some Clean Water Funds	Capital Funds	Capital Funds and Clean Water Fund			
Grant Award Process	Single competitive grant process with funds awarded annually	Single grant process with funds awarded annually	Single competitive grant process with funds awarded annually	Competitive grant process with multiple grant rounds annually			
Advantages	Helps DEC provide more comprehensive planning services & increases stakeholder participation	Helps municipalities gain familiarity with road standards; Disperses funds via formula through RPCs with no grant application; 75% participation first year	Streamlines project implementation	Targets funds to projects that reduce sediment & nutrient pollution			
Disadvantages	Coordination among VAPDA and NRCC has proven difficult to facilitate	. Need to ensure other grant programs not at a competitive disadvantage	Current structure may not fully cover partners' program delivery costs; match not aligned with ERP grants	DEC faces capacity constraints, admin resources have not grown in line with grant funds; efforts to lean processes are ongoing.			
Recommendations	Use 2 RFPs; complete "lean" event on basin planning, 12/2017	Ensure that municipalities have adequate time to enroll	Revisit pilot to address disadvantages	Complete "lean" event on grant management, 11/2017			