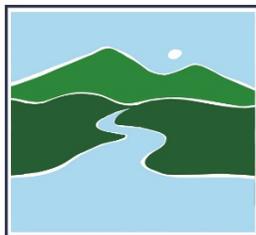


VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATERSHED MANAGEMENT DIVISION

STRATEGIC PLAN 2016-2018

*Guiding the Division's collective work to meet our goal to
PROTECT, MAINTAIN, ENHANCE, and RESTORE
Vermont's surface waters*



VERMONT DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

**WATERSHED
MANAGEMENT DIVISION**

WATERSHED MANAGEMENT DIVISION --- OVERVIEW

The Watershed Management Division in the Vermont Department of Environmental Conservation is responsible for **protecting, maintaining, enhancing** and **restoring** the quality of Vermont's surface water resources. Inherent in this effort is the support of both healthy ecosystems and public uses in and on Vermont's 800 lakes and ponds, 23,000 miles of rivers and streams and 300,000 acres of wetlands. The Division has 113 full time employees located in its central Montpelier office and regional offices in St. Johnsbury, Rutland, Essex and Springfield. The Division's organizational chart is shown in **Attachment 1**.

The Division includes three media-specific programs, **Wetlands, Rivers and Lakes**, that provide for the comprehensive management of these resources through science based management and permitting programs and activities. The Division also administers federally delegated **Stormwater** and **Wastewater** permitting programs that regulate discharges to surface waters. The **Monitoring, Assessment and Planning** program serves to integrate the Division's program work through strategic monitoring and the development of tactical basin plans that identify priority implementation projects to both protect high quality waters and restore impaired waters. The newly reorganized and renamed **Vermont Clean Water Initiative** program (formerly the Ecosystem Restoration Program) is responsible for education, outreach, implementation and funding activities associated with Vermont's new Clean Water Act (Act 64) and Clean Water Fund, and cleanup plans for Lake Champlain, Lake Memphremagog, Long Island Sound, and other major ecosystems. The Division also recently consolidated its administrative, financial and compliance services into a new **Business Operational and Support Services** program to promote efficiency, enhance consistency, and better leverage technology.

INTEGRATED, HOLISTIC WATERSHED MANAGEMENT

In the past five years, the Division has faced significant new challenges, including:

- An increase in the number and breadth of its regulatory programs, including the new shorelands management program, and river corridor permitting program, and a greatly expanded stormwater permitting program required under Act 64;
- A sharpened focus on river corridor protection and flood resiliency as a result of Tropical Storm Irene;
- The development of major ecosystem TMDLs and implementation frameworks, including those for Lake Champlain and Long Island Sound;
- The need to identify priority implementation projects based on sound science and up to date monitoring and assessment, and to link federal and state funds to priority projects to the greatest extent possible;
- Increased calls for the Division to carefully track its progress in a transparent and easily understood way.

As a result of self-initiated restructuring and a Division-wide embracement of integrated, holistic watershed management, we are meeting these challenges. The entire Division has pivoted to a fully collaborative, cooperative surface water management philosophy, with all eight programs

actively engaged in strategizing and solving problems as a team. This “rowing together” was most recently seen in the team work necessary to complete the Phase 1 Implementation Plan for the Lake Champlain TMDL under tight timeframes imposed by EPA.

The Division has released the **Vermont Surface Water Management Strategy** (VSWMS) that provides a comprehensive framework for statewide surface water management. The VSWMS describes:

- The Division’s goals and objectives for managing Vermont’s surface waters to meet the federal Clean Water Act and Vermont’s state surface water quality policy;
- Activities and stressors that affect surface waters, as well as individual pollutants;
- The tool kit (i.e. monitoring and assessment; regulatory/technical assistance; funding; education and outreach) used to protect, maintain, enhance and restore surface waters; and
- The monitoring, assessment and planning processes used by the Division for watershed management, including strategic tactical basin planning.

The VSWMS guides the Division’s decision-making to ensure efficient, predictable, consistent and coordinated management actions. The resultant cross-pollination and collaboration among the Division’s permitting and resource programs has significantly improved surface water management and protection in Vermont.

A central element expressed in the VSWMS is program integration, whereby all surface water-related resource programs, permitting, monitoring, and assessment and restoration activities and related funding, are housed and managed in a single Division. Over the past several years, the Division has realigned positions and programs to promote integrated surface water management, including:

- Assimilating the NPDES Direct Discharge Permit Program (that was formerly housed in the former Wastewater Management Division);
- Merging monitoring and planning functions into a single Monitoring, Assessment and Planning Program (MAPP) to better integrate monitoring, assessment and planning activities;
- Acquiring the water rulemaking authority of the Vermont Water Resources Panel was transferred to the Division, including authority over the Vermont Use of Public Waters Rule, the Vermont Water Quality Standards, Mean Water Level Rule, the Surface Water Level Rule, designations of Outstanding Resource Waters and Class 1 Wetlands;
- Creating a Program Coordinator position to coordinate the technical review necessary across programs to issue Section 401 water quality certifications for projects impacting Vermont’s aquatic resources;
- Creating a hydrologist position to assist permit program decision-making;
- Assimilating the former Clean & Clear program to promote synergy between the technical aspects of project identification and funding;
- Forming a new Business and Operational Support Services (BOSS) Program to centralize administrative surfaces, financial operations and compliance services for all

- Division programs to increase efficiency, especially in the administrative processing of permits; and
- As a result of Act 64, hiring 13 additional positions to foster implementation of the Lake Champlain TMDL and other requirements of Act 64, including new permitting program and planning staff, a modeler to assist in identifying the highest priority implementation projects for impaired waters restoration, and a position dedicated to tracking activities implementing the requirements of Act 64 and the Lake Champlain TMDL, and the funding of projects from the Clean Water Fund

STRATEGIC PLAN STRUCTURE

This Strategic Plan will guide the work of the Division and its eight programs over the next 3 years. The Plan is designed to ensure that federal and state requirements are met, that surface water resources are protected and impaired waters restored, and that the Division is responsive to citizen needs and concerns. Providing accountability, and accessible, measurable and comprehensive information on the Division's work is a central purpose of this Plan.

The Plan first sets forth the Division's **mission** and **vision**, and four central **Division goals** that will guide our collective work. Each Division goal will be met through the **objectives** and **strategies** described in program-specific strategic plans. Division and program progress will be tracked via **performance measures** as part of our annual Results Based Accountability report to the Legislature, which is discussed more below.

Finally, this Plan describes some of our recent successes under the Division's 2012-2015 Strategic Plan and Division-related elements in DEC's 2012-2015 Strategic Plan, and how we are poised to meet emerging challenges, such as increased regulatory requirements in Act 64, implementation of the Lake Champlain TMDL, identifying and funding strategic projects identified in tactical basin plans, and the need to streamline internal processes and fully leverage technology.

DIVISION MISSION, VISION AND GOALS

MISSION STATEMENT

To efficiently and effectively manage Vermont's surface water resources through a comprehensive, integrated, and holistic watershed based system.

VISION STATEMENT

To achieve full support of both healthy ecosystems and public uses in and on all of Vermont's water.

DIVISION GOALS

“PROTECT” --- DIVISION GOAL #1: Protect Vermont’s pristine or “special waters by safeguarding these natural systems from deleterious change over the long term through the expanded use of proactive protection tools such as upward classification of waters, designation of outstanding resource waters, Class 1 wetlands, the identification and funding of projects focused on protection, and by working to better synchronize Vermont’s statutes, regulations, and water quality standards to support this overall effort.

“MAINTAIN” --- DIVISION GOAL #2: Improve and expand the ongoing maintenance of Vermont’s existing high quality waters through more protective and streamlined permitting and by updating rules and procedures to strengthen and clarify permitting standards, including Vermont’s water quality standards and anti-degradation policy.

“ENHANCE” --- DIVISION GOAL #3: Increase opportunities for the enhancement of existing high quality waters to an improved condition through the development and use of programs, policies, outreach and education efforts and other tools that are designed to proactively identify and fund projects to enhance surface waters, and to promote the use of processes and measures by existing discharges to improve the existing condition.

“RESTORE” --- DIVISION GOAL #4: Aggressively pursue restoration of currently impaired waters through the development and timely implementation of comprehensive TMDLs, and implementation of remediation plans for Vermont’s degraded waters using a combination of both regulatory and non-regulatory tools.

The Division’s comprehensive planning strategy is illustrated in **Attachment 2** which shows how our mission, vision and four goals translate down through individual program strategic plans to individual staff workplans. **Attachment 3 outlines the full strategic plan and the link between the Division four goals and program-related objectives and strategies.** Each Division program has created its own program-specific strategic plan that describes the primary work of the program and its priorities, objectives and strategies for the next 3 years.

In addition to the work described in **Attachment 3**, over the next three years the Division will focus special attention on:

- Continued refinement of the tactical basin planning process to identify the highest value, prioritized projects for implementation based on the most recent data and assessments and modelling tools;
- Continued streamlining of the project-identification to project-funding continuum;
- Finalizing the Lake Champlain TMDL Phase 1 Implementation Plan after EPA’s issuance of the final Lake Champlain TMDL, including a public comment period;
- Ensuring timely implementation of requirements under Act 64, and the Lake Champlain TMDL and Phase 1 Implementation Plan, including development of a database and systems to track these efforts;

- Promoting creation of electronic forms (nForms) to allow electronic submission of permit applications, monitoring and reporting forms;
- Development of clear and consistent “decision records” for permitting decisions in order to increase transparency;
- Pushing priority rulemaking efforts, including a second round of revisions to the Vermont Water Quality standards, and development of a Combined Sewer Overflow Rule; and
- Promoting proactive resource protection, through prioritizing upward surface water reclassifications, Class 1 wetland designations and Outstanding Resource Water designations.

MEASURING FUTURE SUCCESS – RESULTS BASED ACCOUNTABILITY

Success in implementing this Strategic Plan will be measured through a Results Based Accountability (RBA) framework. RBA is used to measure how well an agency, department, division or program is performing. The Division is actively engaged in RBA efforts has submitted its second annual RBA report.

The Division is working hard to develop comprehensive Division and program level performance measures and tracking systems to link the work we perform with State level indicators and population level outcomes. Division performance measures summarize work across numerous programs, whereas program level measures dig deeper to assess performance within programs.

MEASURING FUTURE SUCCESS - VERMONT CLEAN WATER ACT

As the Division’s responsibilities grow, so does its responsibility to transparently track its progress. In addition to annual RBA reporting, the Division is developing a comprehensive database to track our efforts in meeting Act 64 requirements, implementation of the Lake Champlain TMDL and Phase 1 Plan, and tactical basin plan implementation. Under Act 64, Vermont Clean Water initiative partner agencies will track and report on clean water restoration activities across all applicable programs and sectors (e.g. agriculture, forests, roads, wastewater, and developed lands). Through the *Vermont Clean Water Annual Investment and Performance Report*, we will report on the financial, social, performance, and environmental results of clean water efforts. The first annual report is due to the legislature in January 2017.

The Department is creating a project tracking system in order to meet these reporting requirements. The tracking system will contain information on each clean water project, including data on project performance, including pollutant load removed. The database will track the lifespan of projects from proposal to design to implementation and funding of projects, including Ecosystem Restoration Grants and Clean Water Fund monies. The system will also be designed for transparency so that the public can access project information through an on-line

interactive map. We will also track and report on clean water-related outreach efforts through a recently developed on-line form that will be used by the Agency of Agriculture, Agency of Transportation and Agency of Natural Resources. Finally, the system will track priority projects that have been identified through tactical basin planning. This will allow the Department to identify high priority and cost effective projects to recommend for funding in the next fiscal year.

PAST SUCCESSES, NEW CHALLENGES, AND PRIORITIES

ACCOMPLISHMENTS UNDER DEC'S 2012-2015 STRATEGIC PLAN

The Division accomplished the outcomes/strategies for which it was responsible in DEC's 2012-2015 Strategic Plan, including:

“INCREASED LONG-TERM PROTECTION OF FLOODPLAINS AND RIVER CORRIDORS”(DEC Goal 5, Outcome 1) through assisting municipalities in the development of river corridor plans, establishing a Flood Ready webpage, developing a floodplain protection permitting program for developments exempted from municipal regulations, developing a flood resilient community incentives program and providing outreach and training programs for municipal officials, and completing the development of river corridor maps for the entire state.

“SUPPORT IMPLEMENTATION OF GOVERNOR'S EXECUTIVE ORDER ON GREEN INFRASTRUCTURE AND REPORT BACK TO GOVERNOR” (DEC Goal 6, Outcome 1, Strategy 3) through the Vermont Clean Water Initiative Program's representation on a Green Stormwater Council to implement Governor Executive Order 06-12, aimed at promoting green stormwater infrastructure. CWIP also helped to establish a Green Infrastructure Roundtable, a 90-member organization dedicated to supporting green infrastructure statewide and worked with the group to develop a Green Stormwater Infrastructure strategic plan, and sponsors training workshops, and develops educational materials.

“PROMOTE RESTORATION, PROTECTION AND MANAGEMENT OF WATER RESOURCES” (DEC Goal 7, Outcome 1, Strategies 1-4) through the development in collaboration with EPA of TMDLs and implementation plans for the Lake Champlain TMDL and the Long Island Sound TMDL, exploration of the concepts of pollutant trading and offsets via a contractor-led process, recent efforts to explore the use of integrated planning and permitting with Vermont municipalities, developing an agricultural pollution control strategy in concert with AAFM, other federal and state agencies and an agricultural stakeholder group, and preparing to issue a revised general permit for municipal separate sewer system (MS4) stormwater discharges upon final issuance of the Lake Champlain TMDL.

“PROACTIVE RESOURCE PROTECTION AND MANAGEMENT” (DEC Goal 7, Outcome 2) through the identification of waters for reclassification, waters for designation as Outstanding Resource Waters, and wetlands for Class 1 designations, and inclusion of these proposed reclassifications and designations in tactical basin plans; preparing to amend the Vermont Water Quality Standards to include these reclassifications.

ACCOMPLISHMENTS UNDER DIVISION'S 2012-2015 STRATEGIC PLAN

The Division met a significant number of its goals and objectives in its 2012-2015 Strategic Plan. Both cross-Division and program-specific accomplishments have significantly enhanced the overall management of Vermont's surface waters. Successful cross-Divisional efforts include:

- Cooperatively worked with EPA on development of Lake Champlain TMDL and Phase 1 Implementation Plan, and Long-Island Sound TMDL Implementation Plan;
- Undertook the first comprehensive triennial review of the Water Quality Standards in many years, including numeric nutrient criteria for better management of nutrient pollution;
- Participated in Department-level efforts to enhance enforcement and compliance efforts, and working to more effectively track Division compliance and enforcement work;
- Leveraged technology to enhance permitting program efforts and implemented Lean event(s) in each of the Division's programs to garner efficiencies, increase transparency;
- Tightening of the project identification process for tactical basin plan development.

Program-specific accomplishments during 2012-15 include:

BUSINESS AND OPERATIONAL SUPPORT SERVICES

- Completed a program reorganization, whereby all financial, administrative permitting and compliance functions from across the Division are now consolidated into one program;
- Involved in a number of Lean events to standardize permitting and financial processes handled by the program for the Division;
- Cross trained program staff so that absences and retirements no longer stop the flow of work, including public noticing and permit issuance;
- Developed an nForm for reporting and public posting of all combined sewer overflow events and unauthorized discharges of sewage;
- Utilized and leveraged technology to streamline and automate manual processes, such as permit issuance, permit renewal notifications and operating fee statements.

LAKES AND PONDS PROGRAM

- The Program worked tirelessly to promote passage of the Shoreland Management Act, and created a permitting program to implement the Act;
- In 2014, the Lake Encroachment and Shoreland Management permitting duties were regionalized across the state, to use staff time more efficiently, and to have "one stop shopping" for project proponents;
- The Aquatic Nuisance Control Permitting Section streamlined its processes and enhanced transparency through creation of an application review procedure and revised public notification procedure, a webpage developed for application status

and public notice, revised permit application forms, guidance created for the regulated community;

- The Program leveraged technology by developing new Shoreland permit and Encroachment permit databases for effectively managing the processing of applications and established the ANR.WSMDShoreland@vermont.gov email account to allow for efficient and timely responses to public inquiries;
- In 2015, the Program developed a curriculum for contractors and landscapers in Natural Shoreland Erosion Control to enhance the LakeWise program. Those certified through this six-hour training course are eligible for professional development credits.

MONITORING, ASSESSMENT AND PLANNING PROGRAM

- Realigned its planning functions, tightened the tactical basin plan issuance cycle, and increased its precision in identifying priority projects and has now completed a tactical plan rotation for the entire State;
- Conducted reasonable potential determinations for every wastewater permit issued since 2012 to ensure that permits are fully protective of water quality;
- Completed the first five-year survey of statewide water quality for Vermont's streams based on a scientifically sound survey method;
- Launched an on-line website that consolidates years of surface water monitoring data that is now available to the public;
- Continues to provide cross-Divisional coordination for large Act 250 and Section 248 projects, hydrologic reviews and analyses on flow protection issues and the identification of waters for reclassification and potential Outstanding Resource Water designation.

RIVERS PROGRAM

- Completed a river corridor map layer for the entire state that provides a delineated corridor for every stream over 2 square miles in drainage;
- Established a state floodplain rule that sets a standard of "no adverse impact" in floodplains and rivers corridors and addresses all developments exempt from municipal regulations, including state buildings and transportation facilities, utility projects, and agricultural structures;
- Developed Flood Hazard Area and River Corridor Protection Procedures to guide the regulation of Act 250 and Section 248 developments, and established River Corridor Best Management Practices;
- Established a stream alteration rule and general permit that set stream equilibrium and connectivity performance standards for both emergency (post-flood) and non-emergency actions in rivers and river corridors;
 - Developed Standard River Management Principles and Practices which is a growing compendium for selecting and designing geomorphic-based instream and floodplain restoration alternatives to support stream alteration permitting, clean water initiatives, hazard mitigation, and a River and Roads Training Program, which annually serves ~150 state and municipal roads worker trainees.

STORMWATER PROGRAM

- Implementing TMDLs in stormwater-impaired waters through the MS4 General Permit, which will be reissued shortly after completion of the Lake Champlain TMDL;
- As an outcome of a Lean event, recently launched an updated permit database that allows for automation of several functions, and has leveraged technology so that all project records are now available in electronic format;
- Worked cooperatively with the Agriculture Department to develop coordinated agricultural compliance and enforcement efforts, and participates on the Department's Municipal Assistance Task Force to assist municipalities in understanding and implementing Act 64 requirements;
- Nearing completion of a revised Stormwater Management Manual to enhance stormwater treatment and the use of green infrastructure to control stormwater runoff from roads and other impervious surfaces;
- Successfully implemented the Program's EPA-approved Compliance Monitoring Strategy.

VERMONT CLEAN WATER INITIATIVE PROGRAM

- The Program reorganized (was formerly the Ecosystem Restoration Program), and taken on new positions, including two agricultural specialists, a new position to track Act 64 and TMDL implementation, and a new communications AmeriCorp member to enhance outreach to partners and the public on clean water issues;
- The program is committed to improving grant management processes to better serve municipalities and other partners. The program participated in three LEAN events:
 - The first AID/WSMD LEAN event, completed in 2014, focused on the improving the grant approval process, grant administration, and invoicing.
 - The second MAPP/CWIP LEAN event, completed in 2015, focused on improving the Watershed Management Division's processes to use the Tactical Basin Planning process to identify and prioritize projects for funding.
 - The third LEAN event was a short, two-day evaluation of the technical grant management process. The outcome of this event defined grant management responsibilities and reaffirmed an intra-division commitment to finding programmatic efficiencies in grant and contract management;
- CWIP continues to partner with municipalities across the state to identify and map their stormwater drainage infrastructure and illegal untreated discharges. About 90 communities have had GIS drainage maps and infrastructure reports completed. We have or are currently conducting IDDE surveys in 65 non-designated MS4 communities;
- In 2015, DEC was the recipient (as a co-partner with AAFM) of a \$16 million grant from USDA/NRCS to accelerate the implementation of agricultural best management practices on farms in prior areas of the Lake Champlain watershed over 5 years. This grant is managed by the CWIP and a new project coordinator was hired to assist;

- CWIP continues to elevate the importance of Green Infrastructure as an innovative and cost-effective approach to address water quality degradation associated with stormwater runoff. CWIP represents ANR on a Green Stormwater Council to implement Executive Order 06-12, aimed at promoting green stormwater infrastructure. CWIP helped to establish a Green Infrastructure Roundtable, a 90-member organization dedicated to supporting green infrastructure statewide;
- The Program established a St. Albans Bay Initiative to focus clean water implementation and outreach efforts in this impaired segment;
- The Program has been active in evaluating innovations for TMDL implementation, including trading and offset program.

WASTEWATER PROGRAM

- Has reduced permit backlog by reissuing NPDES permits for WWTFs on Connecticut River in accordance with Vermont's permitting plan for implementation of the Long Island Sound TMDL;
- Developed biosolids white paper to discuss options for managing biosolids in Vermont and working with advisory group to evaluate options for moving forward;
- In formal rulemaking for new Combined Sewer Overflow (CSO) Rule to replace Vermont's 1990 CSO policy, and developed electronic form (aka "nForm") for municipalities to use to post notice of CSO and other sewage releases directly onto Department public website;
- Conducted Lean event to evaluate current structure of program and currently working on restructuring effort;
- Actively working to transfer management of operator certification program to outside entity in order to free up staff resources and increase program efficiency.

WETLANDS PROGRAM

- Redistricted wetland ecologists to reduce travel times to sites and moving staff to district offices;
- As an outcome of a Lean event, implemented revisions to program website to allow public to find answers to their questions online;
- Created inquiry forms and checklists so users get the most out of staff site visits and applications when submitted;
- Created and implemented in-field data collection by phone and created a new database for tracking projects more efficiently;
- Developed allowed use guidance documents and standard operating procedures to provide transparency and clarity and streamline work.
- Developed criteria for use in identifying wetlands for Class 1 designation and developed list of potential wetlands for such designation after field verification.

USE OF LEAN TO GARNER EFFICIENCIES, PROMOTE CONSISTENCY

Faced with an ever increasing workload, expanding regulatory programs, the need for targeted project identification and funding, and rapid changes in technology and customer expectations, the Division has fully embraced the use of LEAN to garner efficiencies and improve transparency. Division management and staff have participated in a number of weeklong LEAN events, and used LEAN tools in several shorter events. Several of these events, like those focused on grant processes and priority project identification, were initiated to proactively prepare for Act 64 and the Lake Champlain TMDL. These events have already increased efficiency and productivity.

EXAMPLE PAST LEAN EVENTS INCLUDE:

- Division staff participated in a weeklong event to evaluate the public notice and comment process across all DEC permit programs to identify commonalities, enhance transparency and streamline these processes as much as possible;
- Business and Operational Support Services program staff participated in a weeklong event with a number of other DEC Divisions to evaluate how over \$11 million in receipts is processed within DEC;
- The Business and Operational Support Services Program utilized a skills matrix tool to garnish efficiencies and evaluate training needs during its recent reorganization;
- The Vermont Clean Water Initiative Program held multiple multi-day events to create processes to more efficiently and effectively process grants and contracts;
- The Stormwater Program held a weeklong Lean event to improve its stormwater permitting business processes and enhance its database to more efficiently process applications, issue permits, collect fees and monitor compliance;
- The Wetlands Program held a weeklong event to explore how to shift staff time from inefficient processes to more protective actions for Vermont's wetlands, resulting in numerous database enhancements to increase customer satisfaction;
- The Rivers Program participated in a joint weeklong event with VTrans to streamline the Title 19 approval process for VTrans' projects;
- The MAPP Program and Clean Water Initiative Program held a joint event to more efficiently integrate the tactical basin planning priority project identification process with the CWIP funding process to ensure that priority projects are best identified and scoped, and to structure the grant issuance process so as to facilitate successful remediation projects;
- The Wastewater Program utilized Lean tools over several days to evaluate the federal and state requirements driving its workload and identify opportunities for streamlining processes and cross training staff; and
- The Lakes Program held a two-day Lean event to garner efficiencies in its newly regionalized shoreland and encroachment permitting programs.

UPCOMING LEAN EVENTS INCLUDE:

- The Lakes Program and MAPP will hold a multi-day Lean event to assess current monitoring conducted by the Division, to identify ways to garner efficiencies and streamline processes, and to ensure that monitoring is strategically targeted to support Division goals, protect Vermont's waters, and accurately assess performance;
- Division staff will use Lean tools to develop nForms for on-line reporting by NPDES permittees as the Division moves to meet requirements of the new federal e-reporting rule.

LEVERAGING TECHNOLOGY

The Division continues to leverage technology to increase its efficiency, streamline business and permitting processes, and better serve its customers, including an ever increasing number of permittees. As a result of two Lean events, the Stormwater and Wetlands programs have made significant database changes, including the establishment of on-line inquiry forms where the public can pose questions to staff and receive timely email responses. The Division is actively working to establish nForms that will allow electronic permit applications, fee payments and submission of reports and monitoring data from permittees.

The Monitoring and Assessment Program recently launched an on-line website that consolidates years of surface water monitoring data that is now available to the public. The Lakes program likewise has increased on-line availability of its monitoring data. The recently completed statewide river corridor maps are now available on-line courtesy of the Rivers Program. In addition, stormwater permits, wetland maps and other permit information are available on the Agency's "Natural Resource Atlas" website, thereby increasing transparency for the public and assisting project proponents in developing applications and siting projects.

Given the importance of outreach and education for the protection of our water resources and implementation of TMDLs, the Division is increasingly turning to technology to "spread our message." Division programs are using YouTube videos to highlight the importance of river corridor and floodplain protection and to educate local communities and the public about the science of river geomorphology. Other programs are using webinars as both an information sharing and training tool to increase participation and save travel time for staff and participants. Finally, the Division launched a blog, named "[Flow](#)", which regularly posts on the science of watershed protection, projects facilitated by Division programs, notices of grant opportunities and other topics related to protection of surface waters. Since September 2015, the Division has sponsored an AmeriCorp member in the Vermont Clean Water Initiative Program to foster communication around the Lake Champlain TMDL and other surface water issues. This AmeriCorp member has recently expanded the Division's on-line presence, through a new Facebook page.

ENHANCING PARTNERSHIPS

Federal, state and local partnerships have increased dramatically over the past five years, most notably in the development of the new Lake Champlain TMDL and the Phase 1 Implementation Plan. This collective “all in” approach will be critical in implementing the Plan and the requirements of Act 64, both of which require a heavy lift across multiple sectors – agriculture, municipal roadways, impervious surfaces, and forestry.

The Division holds alternating biweekly meetings with AAFM and VTrans to foster implementation. In addition, Agency Secretaries and senior staff meet bimonthly to monitor progress. Division staff have formed specialized work groups to focus on cross-Agency issues, such as development of a municipal roads permit, a TS4 permit for VTrans state highways, and an agriculture workgroup. Other cross-agency workgroups are closely collaborating on how best to target Vermont Clean Water Fund monies while ensuring transparency and public involvement, and establishing a tracking and database system that captures multi-agency work to meet EPA’s accountability framework in the Lake TMDL and progress in implementing Act 64. Additionally, Division staff participate on the Department’s Municipal Assistance Task Force in order to foster relationships with municipalities and help them better understand and meet increased obligations under Act 64 and the Lake Champlain TMDL.

Act 64 strengthened the Division’s relationship with Regional Planning Commissions (RPCs) by defining specific roles and responsibilities for RPCs around the development of tactical basin plans, and education and outreach. Through this cooperative process, the Vermont Association of Planning and Development Agencies (VADPA) and the Division have set forth a series of activities that each RPC shall undertake in support of tactical planning for all watersheds in the State. This cooperative framework recognizes that significant municipal outreach is needed to develop an understanding of Act 64 requirements, develop tactical basin plans with targeted priority projects, foster implementation and track projects for purposes of accountability. The roles and responsibilities articulated in Act 64 for RPCs recognizes their strength in supporting municipal activities aimed at water quality protection and restoration.

The Division is also actively working to enhance our partnerships with local watershed organizations, including Watersheds United Vermont, to promote education and outreach efforts and identification of priority projects. Only through these close relationships will the Division be successful in meeting its four goals of surface water management – protect, maintain, enhance and restore.

STRATEGICALLY TARGETING PROJECTS AND FUNDING

Given the huge lift – in terms of number and cost of projects – needed to successfully protect Vermont’s waters, it is imperative that projects be strategically targeted and funded. Over the past few years, the Division re-envisioned the basin planning process and developed a strategic “tactical basin plan” approach. Tactical basin planning is a watershed management planning

process in which water quality monitoring and pollution source assessment information is integrated with modeling or other land-based prioritization factors, to identify necessary actions to protect, maintain, enhance or restore surface waters. This planning process will integrate and deliver prioritized pollution control or mitigation actions for all Vermont surface waters. The benefits of these geographically explicit and data driven tactical basin plans include:

- More direct focus on the resource to be protected, tailored to basin-specific stressors and condition that are germane to that basin and sub-basins;
- Improved basis for management decisions as better coordination of monitoring is established and more information is gathered on a specific basin;
- Consistency and continuity is enhanced as an initial planning framework has been prepared and is applied to all basins and sub-basins in a systematic and rotational fashion;
- Increased opportunities for data sharing across agencies and organizations; and
- Encouragement of innovative solutions with input from various stakeholders and partner.

The draft Lake Champlain TMDL envisions that best management practices will need to be deployed on the landscape in such a manner to incrementally pursue required phosphorus load reductions. The Lake TMDL and associated Phase 1 Plan identify tactical basin planning as the vehicle by which “Phase 2” rosters of best management practices, identified projects and regulatory measures will be identified and phased in. Each tactical plan will be updated every five years, with a continually evolving implementation table that shows steady progress towards attaining priority actions. Most importantly, beginning in 2016, a significant amount of water quality modelling will inform each tactical basin plan. This will allow the Division to translate TMDL load reductions into very precise geographic prescriptions, in order to best target implementation projects. These new modelling approaches will further improve tactical basin plans and assist in targeting implementation of the new permit programs created in Act 64.

The Division has likewise been working hard to strengthen and tighten the project-identification to project-funding continuum to better link priority projects with federal and state funding. A recent outcome of a joint Lean event with the Monitoring Program and Clean Water Initiative Program was development of a project prioritization methodology, referred to as “Stage Gate,” to direct funds towards priority projects (defined as those that will achieve important water quality improvements). For any given project phase or “Stage,” there have been developed predictable criteria, or “Gates,” that need to be satisfied to move a project forward to the next stage. This approach is designed so that incrementally higher-cost investments necessary to move a project forward are made on the most important projects first, and that projects that do not merit additional investment are identified early in the process.



ATTACHMENT 3 – LINKAGE OF PROGRAM OBJECTIVES AND STRATEGIES WITH FOUR DIVISION GOALS (PROTECT, MAINTAIN, ENHANCE AND RESTORE)

LINKAGE OF PROGRAM WORK WITH WSMD'S FOUR GOALS

Each Program has outlined specific objectives and strategies for meeting each of the four Division goals. The Division goals are:

1. Protect Vermont's most pristine or special waters
2. Improve and expand the ongoing maintenance of Vermont's existing high quality waters
3. Increase opportunities for the enhancement of existing high quality waters to an improved condition
4. Aggressively pursue restoration of currently impaired waters through the development and timely implementation of comprehensive TMDLs, and implementation or remediation plans for Vermont's degraded waters using a combination of regulatory and non-regulatory tools.

Specifics of each of the division's program objectives and strategies can be found here: http://dec.vermont.gov/sites/dec/files/wsm/boss/docs/WSMD-Strategic-Plan_2016-2018_Attachment-3.pdf