



**Department of Environmental Conservation**  
**Strategic Plan 2016 – 2018**



# Table of Contents

Message from the Commissioner .....	1
Department Mission .....	2
Department Strategic Planning Process .....	2
Population-Based Outcomes & Indicators.....	3
Clean Air.....	3
Clean Water .....	3
Healthy and Safe Communities.....	3
Efficient and Effective Government.....	3
Department of Environmental Conservation Goals (2016 -2018) .....	4
Goal 1: Reduced public health exposure and risk from air and climate pollution.....	4
Goal 2: All Vermonters have safe drinking water .....	4
Goal 3: Materials sustainably managed and properties returned to productive use.....	5
Goal 4: Protect, Maintain, Enhance and Restore Vermont’s Surface Waters .....	5
Goal 5: Manage infrastructure to protect the health safety of Vermonters.....	6
Goal 6: Develop and maintain a culture of continuous process improvement.....	7
Department of Environmental Conservation Score Card	



## Message from the Commissioner

It is New Year's Eve. Vermonters across the state are filled with anticipation for what tomorrow will bring. The moment is ripe for the release of the Vermont Department of Environmental Conservation's 2016-2018 Strategic Plan.



This plan is about results. For a Department of approximately 320 employees and a \$50 million budget, it is a lean plan. Created after many robust conversations, refinements and reflections, it charts a course towards clean air, clean water, healthy and safe communities and efficient and effective government. Furthering the mission of the Department "to preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health for the benefit of this and future generations," the plan outlines key strategies to achieve our desired outcomes.

In the process of developing this plan, we asked ourselves: "How much do we do?" "How well do we do it?" and "Is anyone better off?" and considered the answers. We then drew upon the Department's culture of continuous process improvement and performance measurement as we finalized the plan. In combination with the strategic planning process, systems have been developed to measure our progress towards achieving our goals to protect Vermont's natural resources.

The 2013-2015 Strategic Plan we leave behind encapsulates a time of noteworthy environmental policy advancements, including: the passage of a critical lakes and ponds shoreline protection law; universal recycling to ensure consistent, convenient collection recycling and organics collection statewide; and strong, new surface water protections focused on reducing pollution from stormwater run-off.

As the Department launches the 2016-2018 Strategic Plan, we are at a time of full implementation of these recent environmental advancements, while maintaining a consistent level of service across all programs. We will succeed in our implementation as we also strengthen our internal business practices by increasing electronic permitting and records management and applying Lean concepts to evaluate inefficiencies in our work flow and implement improvements.

A high degree of responsibility and investment has been given to the Department and we are poised to meet, and even exceed, the expectations set in partnership with the Vermont Legislature. This plan will be foundational to our success.

It is a true privilege to work with such talented professionals to achieve the environmental and public health goals that we all share.

**Alyssa B. Schuren, Commissioner**

## Department Mission

To preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health for the benefit of this and future generations.

## Department Strategic Planning Process

We initiated our planning process with the Department's executive management team in May 2015, developing a set of high-level strategic priorities for the Department. The draft plan was reviewed and further refined by management and supervisors over the course of the following six months. During the planning process, Department management focused on incorporating Results Based Accountability (RBA) into our plan to measure how well the strategies adopted by this plan are working. This is a streamlined approach, presented in simple language and includes overall population-based indicators along with more specific program-level performance measures. We plan to track progress on our indicators and performance measures annually and make adjustments to the plan, as necessary to achieve our performance targets.

# Population-Based Outcomes & Indicators

## ***Clean Air***

- Total greenhouse gas (GHG) emissions per capita
- Total concentration of mobile source air pollutants
- Total number of days with air quality alerts

## ***Clean Water***

- Percent of river miles with water quality that meet designated uses (i.e. swimmable, fishable, boatable)
- Percent of watersheds in Vermont where aquatic biota are rated “good” or “better”
- Number of previously impaired waters meeting water quality standards based on corrective actions

## ***Healthy and Safe Communities***

- Disposal rate of municipal solid waste (lbs./person/day)
- Total number of acres that has been or will be cleaned up/redeveloped based on sites enrolled in the Brownfields reuse environmental liability limitation act
- Percent of communities with asset management plans related to environmental infrastructure
- Annual number of dams reporting an upgrade in condition
- Percent of land in Vermont preserved to reduce flood and fluvial erosion hazards
- Percent of community water systems in compliance with health based standards

## ***Efficient and Effective Government***

- Number of Lean (process improvement) events successfully completed across state government

# Department of Environmental Conservation Goals (2016 -2018)

## Goal 1: Reduced public health exposure and risk from air and climate pollution

- A. Strategy: Support clean and efficient wood burning

**Performance Measure 1:** Number of uncertified wood stoves replaced with new certified units

**Performance Measure 2:** Percentage of monitoring locations where particulate Concentration trends (PM2.5) are decreasing during the heating season

- B. Strategy: Advance clean car initiatives, and other programs to reduce mobile source emissions

**Performance Measure 1:** Number of plug-in hybrid and all-electric vehicles registered

**Performance Measure 2:** Proportion of air pollutants from mobile sources based on EPA's National Emissions Inventory (NEI) 3-year schedule

**Performance Measure 3:** Number of charging stations funded in part by the Department

## Goal 2: All Vermonters have safe drinking water

- A. Strategy: Ensure communities have technical and managerial capability to provide long-term public health protection through public drinking water systems

**Performance Measure 1:** Percent of communities that have asset management plans

**Performance Measure 2:** Percent of public water systems in compliance with health-based standards

- B. Strategy: Promote public trust as a paradigm for groundwater management and protection

**Performance Measure 1:** Number of towns with groundwater protection included in their town plans.

**Performance Measure 2:** Annual number of groundwater samples collected analyzed for arsenic, radionuclides, nitrates, manganese, and other emerging contaminants.

**Performance Measure 3:** Annual number of wastewater systems permitted by the On-site Wastewater Program since 1989 that have not failed.

## Goal 3: Materials sustainably managed and properties returned to productive use

- A. **Strategy:** Ensure that all communities have approved Solid Waste Implementation Plans to fully implement Universal Recycling Law

**Performance Measure 1:** Number of Solid Waste Planning entities with approved Solid Waste Implementation Plans

**Performance Measure 2:** Amount of public and private funding dedicated toward Universal Recycling Infrastructure

- B. **Strategy:** Secure adequate funding to support and promote superfund cleanups and Brownfields redevelopment

**Performance Measure 1:** Amount of funds available each year for Brownfields and Superfund cleanups

**Performance Measure 2:** Amount of funds leveraged for Brownfields redevelopment

## Waters

- A. **Strategy:** Protect our surface waters through flood resiliency and resource protection; protect and restore wetlands, lakes, floodplains and rivers through conservation and protection strategies

**Performance Measure 1:** Number of acres protected

**Performance Measure 2:** Number of reclassifications or designations for protection

- B. **Strategy:** Maintain water quality and resources through regulatory programs and technical assistance

**Performance Measure 1:** Percent decrease in wastewater treatment facility permit backlog

**Performance Measure 2:** Number of compliance and inspection-related site visits

**Performance Measure 3:** Number of entities receiving technical assistance

- C. Strategy: Enhance flow protection at existing wetlands, shorelands and rivers projects

**Performance Measure 1:** Number of projects with enhanced protection

**Performance Measure 2:** Number of river miles enhanced

- D. Strategy: Restore water quality through timely implementation of Total Maximum Daily Loads (TMDLs) for Lake Champlain, Long Island Sound, Lake Memphremagog, and Lake Carmi and new water quality legislation (Act 64)

**Performance Measure 1:** Number of priority projects funded

**Performance Measure 2:** Percent of required pollutant reduction achieved on VTrans highways and related facilities

**Performance Measure 3:** Percent of required pollutant reduction achieved on developed land (non-road)

**Performance Measure 4:** Percent of municipal roads meeting stormwater management standards

## Goal 5: Manage infrastructure to protect the health safety of Vermonters

- A. Strategy: Reduce potential for dam failure risks

**Performance Measure 1:** Annual number of dams rated in poor condition that have been upgraded to fair or good condition

**Performance Measure 2:** Annual number of dams in fair condition that have been upgraded to good condition

## Goal 6: Develop and maintain a culture of continuous process improvement

A. Strategy: Increase number of electronic transactions

**Performance Measure 1**: number of electronic submittals (permit applications, reporting and certification programs)

**Performance Measure 2**: Number of unique visitors on the Department's main web page

B. Strategy: Implement Permit Process Improvement plan to increase transparency, provide opportunities for public input earlier in decision making, timely decisions

**Performance Measure 1**: Number of different public notices processes used by the Department

C. Strategy: Develop and apply diversified portfolio of Lean tools and evaluate effectiveness.

**Performance Measure 1**: Number of Lean events completed

**Performance Measure 2**: Number of Lean projects that are fully implemented

**Strategic Plan Cycle: FY16-FY18**

Outcome	Population Based Indicator	Target	Baseline or 2015	2016	2017	2018	Reference Period	Frequency of Monitoring
Clean Air	Total greenhouse gas (GHG) emissions per capita - in annual metric tons of "equivalent carbon dioxide" (CO <sub>2</sub> e) per capita		13.21				CY	
	Total concentration of mobile source air pollutants							
	# of days with air quality alerts	0	4				CY	
Clean Water	% of river miles with water quality that meet designated uses (i.e. swimmable, fishable, boatable)		89.3%				SFY	
	% of sampled watersheds in Vermont where aquatic biota rated "good" or "better"		62.7%				SFY	
	# of previously impaired waters meeting standards based on corrective actions		39				SFY	
Healthy and Safe Communities	Disposal rate of municipal solid waste (lbs./person/day)	2.69	3.44				CY	
	# of acres that has been or will be cleaned up/redeveloped based on sites through Brownfields Program		1410				SFY	
	% of communities with asset management plans related to environmental infrastructure							
	# of dams reporting an upgrade in condition							
	%of land in Vermont preserved to reduce to reduce flood and fluvial erosion hazards							
	% of community water systems in compliance with health based standards	100%	94%				SFY	
Efficient and Effective Government	# of Lean (process improvement) events successfully completed across state government		14				SFY	

Department of Environmental Conservation Scorecard

**Strategic Plan Cycle: FY16-FY18**

Strategic Plan Goal	Strategy	Performance Measure	Target	Baseline	FY16	FY17	FY18	Reference Period	Frequency of Monitoring
Goal 1: Reduced public health exposure and risk from air and climate pollution	Support clean and efficient wood burning	# of uncertified wood stoves replaced with new certified units							
		% of monitoring locations where particulate Concentration trends (PM2.5) are decreasing during the heating season							
	Advance clean car initiatives	# of plug-in hybrid and all-electric vehicles registered							
		Proportion of air pollutants from mobile sources							
		# of charging stations funded in part by the Department							
Goal 2: All Vermonters have safe drinking water	Ensure communities have technical and managerial capability to provide long-term public health protection through public drinking water systems	% of communities that have asset management plans							
		% of public water systems in compliance with health-based standards							
	Promote public trust as a paradigm for groundwater management and protection	# of towns with groundwater protection included in their town plans.							
		# of groundwater samples collected analyzed for arsenic, radionuclides, nitrates, manganese, radon, and other emerging contaminants.							
		# of wastewater systems permitted by the on-site wastewater program since 1989 that have not failed							

Strategic Plan Goal	Strategy	Performance Measure	Target	Baseline	FY16	FY17	FY18	Reference Period	Frequency of Monitoring
Goal 3: Materials sustainably managed and properties returned to productive use	Ensure that all communities have approved Solid Waste Implementation Plans to fully implement Universal Recycling Law	# of Solid Waste Planning entities with approved Solid Waste Implementation Plans							
		# of public and private funding dedicated toward Universal Recycling Infrastructure							
	Secure adequate funding to support and promote superfund cleanups and Brownfields redevelopment	\$ available each year for Brownfields and Superfund cleanups							
		\$ leveraged for Brownfields redevelopment							
Goal 4: Protect, Maintain, Enhance and Restore Vermont's Surface Waters	Protect our surface waters through flood resiliency and resource protection; protect and restore wetlands, lakes, floodplains and rivers through conservation and protection strategies.	# of acres protected							
		# of reclassifications or designations for protection							
	Maintain oversight of regulatory programs; reduce wastewater treatment facility permit backlog; increase site visits and technical assistance	% decrease in wastewater treatment facility permit backlog							
		# of compliance/inspection site visits							
		# of entities receiving technical assistance							
	Enhance flow protection at existing wetlands, shorelands and rivers projects	# of projects with enhanced protection							
		# of river miles enhanced							
	Restore water quality through timely implementation of Total Maximum Daily Loads (TMDLs) for Lake Champlain, Long Island Sound, Lake Memphremagog, and Lake Carmi and new water quality legislation (Act 64)	# of priority projects funded							
		% of required pollutant reduction achieved on VTrans highways and related facilities							
		% of required pollutant reduction achieved on developed land (non-road)							
% of municipal roads meeting stormwater management standards.									

Strategic Plan Goal	Strategy	Performance Measure	Target	Baseline	FY16	FY17	FY18	Reference Period	Frequency of Monitoring
Goal 5: Manage infrastructure to protect the health safety of Vermonters	Reduce potential for dam failure risks	# of dams rated in poor condition that have been upgraded to fair or good condition per year							
		# of dams in fair condition that have been upgraded to good condition per year							
Goal 6: Develop and maintain a culture of continuous process improvement.	Increase number of electronic transactions	#of electronic submittals (permit applications, reporting and certification programs)per year							
		# of unique visitors on the Department's main web page per year							
	Implement Permit Process Improvement plan to increase transparency, provide opportunities for public input earlier in decision making, timely decisions	# of different public notices processes used by the Department							
		Develop and apply diversified portfolio of Lean tools and evaluate effectiveness.	# of Lean events completed.						
			#of Lean projects that are fully implemented.						