

Annual Report



The Vermont Department of Environmental Conservation's (DEC) Business Transformation Initiative (BTI), housed within the Administration and Innovation Division, is an effort to build a system of continuous improvement with the goal of better servicing the Vermont public through more efficient, timely and transparent processes. This initiative includes the deployment of a "Lean" process improvement methodology along with modern information technology tools.

Background

The term Lean, coined by Jim Womack in the 1990 book *The Machine that Changed the World*, describes a manufacturing paradigm established by Toyota. The mantra of Lean is to:

“Develop the highest quality products, at the lowest cost, with the shortest lead time by systematically and continuously eliminating waste, while respecting people and the environment.”

This is accomplished by merging management systems, organizational culture, and continuous improvement tools. When in alignment, these three elements create an environment where employees are encouraged to identify and solve problems, which leads to more effective and efficient processes. Numerous organizations, both private and public, have found success using this model.

DEC, following other state agencies in the region, decided to adopt Lean as a process improvement methodology and management philosophy in July 2013. With support from the Vermont General Assembly, DEC took a structured approach to its Lean implementation, dedicating both staff and resources to the effort. This decision was crucial in not only getting Lean quickly off the ground, but also in sustaining it for the long-term.

This annual report provides an accounting of DEC efforts to deliver on the [3-year implementation plan](#) covering FY2017-FY2019.

FY 2018 Projects: By the Numbers

16 

PROJECTS IN-PROGRESS

 12

KAIZEN/MINI-LEAN STYLE
EVENTS

6 

CLOSED OUT

ANR Permit Process Improvement

Per the Targeted Action Plan: ANR, in conjunction with inter-agency partners, will develop and implement improvements aimed at how the public first contacts state government and the ease of navigating what can be seemingly complicated laws and regulations. *Activities completed:*

- **Develop Project Charter**
- **Understand Customers and Context**
- **Define Requirements and Measurements**
- **Plan to Measure Results to Collect Data**
- **Collect Data via survey**
- **Assess Current Capability**
- **Characterize Effects and Assess Impact**

- **Develop and Compare Solutions**
 - **Refine Solutions**

Next Steps:

- Implement
- Prioritized Ideas

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Achievements for FY 2018

DEC's Public Notice - The new Environmental Notice Bulletin is an interactive one-stop public website that provides capability for the public to: view application and permit information; submit public comments; request public meetings; and receive email updates on topics of interest.

Air Quality & Climate Division Facility Information Sharing - AQCD reduced the number of locations of facility information from 10 separate permit databases to one facility information database. The new database has allowed the division to now make all active permits available to customers online.

DEC's Incident Tracking - Significant improvements in management of data and communications between DEC's environmental programs and DEC's enforcement officers.

DEC's Financial Monitoring and Compliance - Resulted in several standardized processes and monitoring procedures across DEC's Administration & Innovation Division and Facilities Engineering Division, which administers the multi-million-dollar Clean Water and Drinking Water State Revolving Loan Programs. Greater transparency, information flow and continuity of operations have resulted.

ANR Land Acquisition Projects - Retainer contracts are in place for the next four years for services associated with land acquisition (appraisers, surveys and attorneys), replacing prior practice of three contracts per project. Speeds up execution of a project and better utilize staff time.

DEC & AAFM Enforcement Process - Improved understanding of cross-Agency compliance and enforcement actions that address water quality impacts from agricultural activities.

Successes

+

- Standardizing work across departments
- Projects conducted across multiple sections and divisions within the Department of Environmental Conservation
- New or improved databases are being brought online across the agency, enabling more access and efficiency than ever before

Challenges

△

- Working more closely with cross-agency and cross-departmental efforts
- And, after the event:
 - Prepare for enduring success that outlives the lifetime of the event
 - Embrace a project mindset, with clear expectations before, during and after the event



35 Total DEC Employees Trained this FY (Green, Yellow or White Belts)

43% Cumulative Participation in Lean Events

Across the Agency this FY



12 New Events Occurred this FY



3-YEAR PLAN METRICS

Lean Active Projects List

The following is a selection of current continuous improvement efforts in DEC supported by AID*.

- **DEC Ecosystem Restoration Program Grants Process** – Overarching goal to improve staff workload balance and increase transparency for the public and applicants.
 - Design a process that is commensurate with the limited staff resources that are available to manage it.
 - Restructure the RFP to encourage higher quality of applications.
 - Simplify the process for applicant
- **DEC Find and Fund II** – Identifying, developing and prioritizing, as well as transparently displaying Clean Water project information for implementation of water quality improvement projects statewide.
- **DWGWPD Permit to Construct** - Develop a workflow for processing and prioritizing permit applications in a timely manner.
- **Permit Performance Standards** – Create consistency across DEC divisions and programs.
- **FED Construction Procurement** – Better manage staff resources.

Clean Water Initiative Projects Dashboard

The Projects Dashboard will make information on clean water projects, funded by state agencies, available online to the public.

- Displays aggregated data, including interactive maps
- Incorporates stakeholder input
- Enhances transparency and results-based accountability of public investments in clean water projects
- Improves State’s ability to respond to information requests
 - Complements data presented in the *Vermont Clean Water Initiative Annual Investment Report*

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- **DWGWPD Groundwater Reclassification** - prepare a Class IV reclassification petition.
- **Act 250/Section 248** – Improving accuracy and timing of Act 250 agenda items to staff to ensure completeness.
- **Petroleum Cleanup Fund Reimbursement** – Improve lead time to issue checks to customers.
- **NRB Act 250 App Processing** – Natural Resources Board update process/ tools to be applied more consistently across districts to be handled by smaller staffs.

*This list is not all inclusive. Smaller or especially complicated projects may not be listed here. Visit the [Lean SharePoint site](#) to view all active projects.

DEC Staff Involvement in Lean

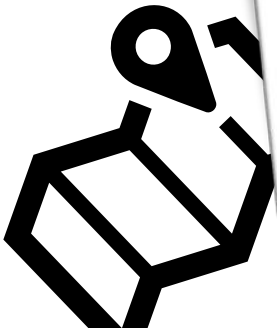
DEC has 28 active green belts trained across multiple divisions within DEC including, but not limited to Administration and Innovation Division, Drinking Water and Groundwater Protection Division, Watershed Management Division, Environmental Assistance, Air Quality Division, Facilities Engineering Division and Waste Management and Prevention Division. This comprehensive divisional coverage allows a large array of expertise throughout the department for a variety of facilitation needs.

Projects have included staff across many of the same divisions, tapping into the diversity of staff greenbelts in the DEC and even, occasionally, staff in other

agencies. This provides a flexibility that will serve DEC moving forward. Additionally, with 7 yellow belts (a 2-day Lean toolbox instruction) and 38 white belts (a 1-day introduction to continuous improvement), the pipeline is full of potential facilitators. And, as the Center for Achievement in Public Service (CAPS) takes over training responsibilities, even more opportunities can be anticipated.

Training also continues, orchestrated through the statewide Lean effort. 18 DEC employees have received at LEAST one belt in the last fiscal year. Several new green belts have been graduated in the last fiscal year and are ready to handle new facilitation projects.

28 Active
Green
Belts



Where Are We Going?

In FY2019, we will evaluate the current 3-year plan. We have learned a great deal about Continuous Improvement over this period. Lean itself should be subject to the same continuous improvement expectations as any other process. Are our communications effective? Are our metrics relevant to the needs of the department? Where should we be directing our efforts? Let us know! If you have a project idea or suggestion, email or call. *We Lean Together!*



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