



DRINKING WATER & POLLUTION CONTROL PROJECT AUDITS

Event Date - February 2014

The role of the auditor was to conduct a thorough evaluation of all financials on all completed drinking water and pollution control projects funded with State Revolving Fund (SRF) monies. Prior to Lean ~1,100 out of 2,160 accounts remained open.

A new approach was needed to tailor the level of audit to the level of account risk, and to streamline the closeout process to eliminate the backlog of open accounts and reallocate unspent project funds.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Eliminate the backlog by March 2016.
- Return unspent funds to the State Revolving Fund (SRF).

STATUS

KPI Total as of August 2015	
Funds Returned	\$1,596,944
Accounts Closed	803

- Process changes resulted in a 73% reduction in the backlog or 298 open accounts at the end of August 2015.
- New "Audit as We Go" method, implemented a front-end spot-check audit process to prevent addition of accounts to the backlog.

% Open Accounts Jan 2014 - March 2016



Goal - decrease open accounts to 0% by March 2016

PETROLEUM CLEANUP FUND Event Date – February 2014

The lead-time to issue reimbursement checks to our customers (tank owners and their consultants) was too long. Redundancy in the review and appeal process duplicated efforts and increased the length of time it took to receive a reimbursement from the State.

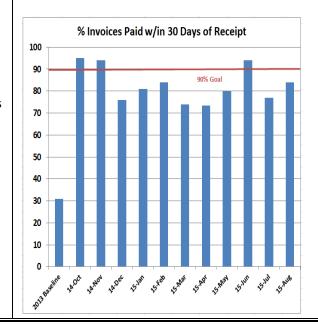
An innovative approach was needed both to free-up staff time involved in reimbursement activity and money owed to the public and consulting community.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- 90% reimbursement w/in 30 days of claim receipt date.
- Reduce internal processing time by over 50%.

STATUS

- For August, 84% of claims were paid within 30 days of receipt vs. 2013 baseline of 31%.
- For August, ANR internal processing time average was 25 days versus our 2013 baseline of 47 days, a 46% reduction.
- In both July and August, processing times were significantly slowed due to vacations. Backup training is needed.
- We piloted our new stakeholder dashboard that uses our online Environmental Research Tool. A broad launch will occur in September and will allow consultants to readily see the status of their proposed budgets and claim submissions.
- Our revised goal for starting pilot testing is end of September/early October.







WETLANDS PERMITTING Event Date – February 2014

Wetlands staff did not have effective or efficient tools for general project management and standard tasks, eating away at time for important wetland protection work.

Innovative technology and standardized methods were needed to streamline tasks and to organize project data, allowing a shift in staff time to higher value wetland protection efforts such as outreach and technical assistance.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Shift staff time to proactive wetland protection:
 "Good State" >25% staff time vs. baseline of 19%; and
 "Great State" >50% of time.
- 100% appropriate documentation for all permits and site visits are entered into database versus the 2013 baseline of 60%.
- Increase time spent on proactive site visits: "Good State" <50% of site visits
 - "Great State" <80% of site visits

STATUS

- For 2015 to August 31, 23% of staff time was spent on proactive protection; shown on chart in green.
- Program is close to launching a way to enter data directly into the database via phone as a step closer to automatic site reports for landowners. Expect to launch this month.
- Program is nearly ready to launch a new application form and corresponding consultant training to reduce application errors and staff review time. Expect to launch this month.

Breakdown of Wetlands Staff Time Outreach Field Compliance Bioassessment Mapping Development Training Project Review Travel Administrative/IT Correspondence Data Entry

GRANTS AND CONTRACTS Event Date – May 2014

Efficient and effective processing of grants and contracts has been a challenge, given the individual requirements, types and signoffs needed. DEC previously had over 60 staff managing approximately 225 active grants and contracts at any given time. The former process involved 67 steps and required 72 hours of hands-on time, 394 days of desk time per grant/contact. The inefficient process strained the capacity of both our fiscal staff and our technical staff who could be doing higher priority work.

Our new process has reduced the number of staff managing the administrative work of an agreement down to 5 and reduced the steps down to 38 steps.

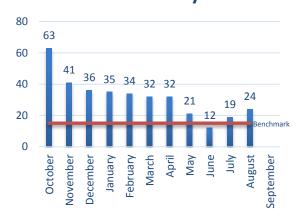
GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Average number of days from invoice date to date of payment is less than 30 days.
- Request for Proposal (RFP) posted on the Electronic Bulletin Board (EBB) within 10 days of assignment to a Grant Management Specialist (GMS).
- Vendor notification within 10 days of bid closing.
- Executed Agreement date within 30 days of vendor award notification.

STATUS

- The time elapsed from the date of invoice to date of payment rose again from 19 days in July to 24 days in August due to processing of outstanding FY15 Sites Management invoices.
- Average time for RFP to be posted on the EBB is 18 days.
- Average time for vendor notification from date of bid closing is 25 days.
- Our goal for Executed Agreement from date of vendor notification is 30 days and currently our average time is 56 days

Average Days From Date of Invoice to Payment



Goal – make payment within 30 days





SOURCE PROTECTION PERMITS Event Date – May 2014

Drinking water source permitting involves a series of tests and technical determinations, including duplicative processes and notices that delay permitting.

Standardized processes were developed to reduce re-work and increase the number of complete applications. Source protection plan approval was shifted to be done in parallel with construction permitting, allowing the applicant to move more quickly through the source permitting process.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Increase administratively and technically complete applications by 10%.
- Reduce hydrogeologist processing time by 42%.

STATUS

- On track to meet 2015 goal for average processing time.
- Baseline data being gathered on the current number of administratively and technically complete applications.
- Permit template generator completed which will lead to more timely, consistent and accurate source permits.
- Parallel review of source water plans and construction permits implemented. 13 projects are using the new process.
- The effort to reduce formal public notices required from two to one requires a legislative fix. Legislation pending.
- Permit application was updated, simplified, and posted on website. Stakeholder feedback requested.
- New FTP site is live and actively being used by consultants.

Source Permitting Processing Time 140 119 120 86 86 86 81 69 40 20 Readine Actual Act

STORMWATER GENERAL PERMIT Event Date – May 2014

This project seeks to improve efficiencies in the processing of stormwater permit applications under General Permit 3-9015.

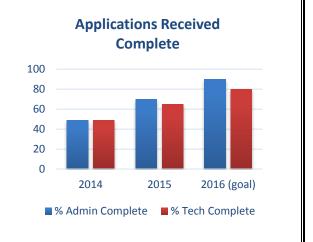
Lean is used to identify strategies to increase the percentage of complete applications, automate billing functions, and reduce redundant data entry. Recovered staff resources resulting from the Lean process are dedicated to continuing investments in process improvement.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- 90% of applications received administratively complete.
- 80% of applications received technically complete (no revisions required).

STATUS

- Revised application forms and guidance were introduced in May 2015.
- The new database will be operational by 1/1/16. The new database will alleviate multiple deficiencies that are present in the existing database, and will provide a functional platform for improving automation of data management. The next phase (Phase II) of the database project will use nForm to automate permit application and issuance processes.







DEC INCIDENT TRACKING Event Date – July 2014

The goal of this event was to better understand how the current Department-wide incident tracking system was performing and being used by DEC staff and then to make improvements to increase usage.

Benefits include: quicker, coordinated complaint responses; increased assurance that complaints have been addressed; the creation of a record; and the ability to see trends or compliance issues across the Department.

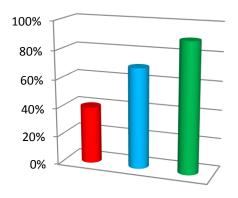
GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- 70% of staff utilize incident tracking database (good state).
- 90% of staff utilize incident tracking database (great state).

STATUS

- Continued to work on the rebuild of Program Code and Investigator access lists – taking longer than anticipated
- Continued to develop a training schedule and agenda training being given week of August 10th
- Finished work on correcting data anomalies
- Finished work on correcting the time out issue

Tracking Database Usage



Present State - Good State - Great State

AIR QUALITY & CLIMATE DIVISION FACILITY INFORMATION SHARING Event Date – October 2014

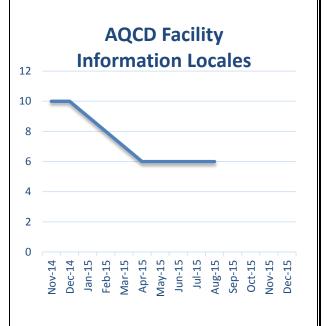
Three sections of the Air Quality & Climate Division (AQCD) manage facility data for 200+ facilities independently of one another, yet rely on each other's information to perform their own duties. The consolidation of the various locales of facility information into one shared database will allow AQCD staff to collect and analyze data more efficiently, resulting in increased work product and public service. The Lean process has given the AQCD the time, resources and a framework to complete such a large-scale consolidation.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Decrease the number of data locations for permits, registration and compliance data by 50%.
- Increase amount of cross-referencing of information by sections, and decrease amount of time taken to complete cross references.
- Increase number of permits available online by over 600%.

STATUS

- The remaining registration facility files are in the process of being transferred to the temporary Y:Drive facility file location.
- Initial database structure continues to be in development.







RECEIPTS PROCESSING Event Date – October 2014

In 2014, we received over \$11 million in receipts. Receipts are handled inconsistently by several staff through mostly manual and paper processes, which on average were 21 days from receipt to deposit. We will reduce receivable processing time from 21 days to 3. We will accept different types of online payments and encourage vendors to submit their payments using alternate forms of electronic payments, including ACH/Wire payments.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Shift from receiving paper checks to electronic payments; electronic receipt pre-event baseline 15%, "good" state goal 50% and "great" state goal 95%.
- Develop standard operating procedures across the department by creating a department policy and individual division procedures. (Accomplished)
- Reduce time from receipt to deposit from 21 days to 3 days.
- Minimize data entry (duplication) from input of information.

STATUS

- We have shifted to quarterly reporting rather than monthly which is a better indicator of our progress.
- We continue to work with programs to encourage entities to pay via ACH by including a brochure in with our billings for those programs that we send bills out.
- The random audit for August was the UST program. There were 8.57 days between date of the check and deposit, and 3.21 days from date of receipt to date of deposit.

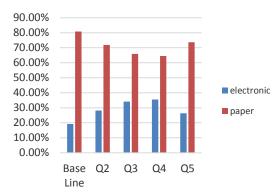
GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Reduce the number of different public notice processes from 85 to 5 (94%), requiring a new subchapter to V.S.A. Title 10.
- Consolidate the number of webpages for notices from 5 to 1.
 An improved Environmental Notice Bulletin (ENB) will be the one-stop web location for public notices, and will include a subscription service.
- Enroll 250 interested parties in the online subscription service within 6 months of launch.

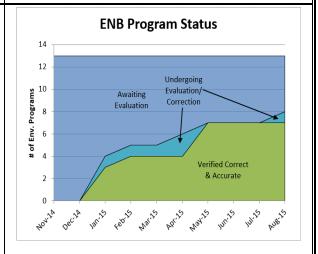
STATUS

- The Vermont Senate introduced the public notice lean event bill (S.123) but did not take up the proposal this session. Stakeholder outreach is ongoing.
- We are working with 13 programs to re-stablish the data flow of current Environmental Notice Bulletin (ENB) – see chart at right - and have created a project plan to determine functionality of a new public notice portal.
- We are working with EPA to ensure notices for federally delegated permit programs meet minimum fed standards.

Percentage of Receipts Received Electronically vs. Paper



Good State Goal – 50% electronic payment Great State Goal – 95% electronic payment



Goal - 100% green chart, i.e., all 13 ENB programs are evaluated and corrected to ensure accuracy of Environmental Notice Bulletin.

PUBLIC NOTICE

Event Date - October 2014

We currently have public notice processes for 85 different permits. Nearly all have unique federal or state-required processes that result in inconsistent notice and comment periods for even permits that address the same project. This can cause an applicant and the public to be confused as to how to effectively participate in the process.

The inconsistent requirements increase DEC costs and create administrative inefficiency: staff is required to provide multiple/different notice types; and may be required to attend multiple public informational meetings for a project.





CONSTRUCTION PROCUREMENT Event Date – March 2015

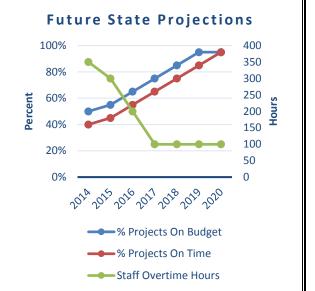
The scope of this project covers the roughly 2.5 years of construction procurement process: putting contracts out to bid, award, execution of the contracts which includes billing and paying, change orders, and site visits through the end of the 1-year warranty period when loan repayment begins. The process starts with "60% design review" where our Facilities Engineering Construction Section coordinates with Clean Water and Drinking Water staff to ensure that the design/specs are biddable and constructible and meets design standards.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Efficiency measures reduce overtime by 15% by December 2015.
- DEC process time reduced by 15% by December 2016.
- 10% increase of on-time projects by December 2016.
- 10% increase of on-budget projects by December 2016.

STATUS

- Revising meeting schedules, developing checklists, and creating training documents.
- Establishing baseline data for on-time and on-budget projects.
- Field-testing first generation of selected checklists.
- Shifted workload to FED Auditor to resolve inefficiencies with Davis-Bacon Act.
- Implementing signature line to contract front end documents as a result of EPA and State Auditor.



IDENTIFICATION & PRIORITIZATION OF WATER POLLUTION RESTORATION PROJECTS

Event Date - March 2015

Finding and funding priority surface water remediation projects is critical to sediment and nutrient pollution reduction efforts. This project reimagined approaches by which remediation projects are identified, prioritized, and funded by the Watershed Management Division (WSMD). The project capitalizes upon recent process improvements in the tactical planning and ecosystem restoration programs. The result is a significantly increased likelihood that the most important projects are identified and funded 100% of the time, with the greatest level of efficiency.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Replace redundant business processes with one streamlined process. 50% (good) to 100% (great) of tactical basin plan pollution control projects follow new process by January 2016.
- 50% of incoming projects by June 2016, 75% of incoming projects by 2017, and 100% of incoming projects by 2019 provide pollution reduction estimates.
- Implementation tables for tactical basin plans are updated continuously. 50% of plans by April 2016 and 100% of plans by October 2016 updated.

STATUS

- Prioritization/funding criteria are being finalized as a result of several inter-program meetings.
- Draft prioritization/funding criteria have been drafted and are being evaluated by staff among media programs.
- Initiation of database structures for housing implementation tables is delayed due to competing workload priorities. This will commence once the tracking and modeling specialists associated with Act 64 are in place. New target date Nov. 2015.
- Two new Tactical Plans with prioritized implementation tables are now public.

Key Indicators of Tactical Basin Planning







VTRANS-ANR TITLE 19 Event Date – March 2015

Title 19 requires VTrans to consult with ANR on instream projects like culvert replacements, road embankments, and other instream work. Currently, Title 19 projects follow two VTrans pathways: a Maintenance and Operations Bureau (MOB Districts) pathway and a Project Delivery Bureau (PDB) pathway.

This Lean project seeks to standardize and clarify both pathways given the site context, leverage technology for improved efficiencies, improve tracking of Title 19 projects at the District level, and reduce re-do loops. This project will also develop low-risk criteria for specific project types in an effort to reduce review time by ANR staff.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- 100% of Title 19 projects have full documentation by March 30, 2016.
- 80% of Title 19 projects come through PDB without loop backs by March 30, 2016.
- 25% reduction in Title 19 consultation times by March 30, 2017 (pending programmatic agreement).

STATUS

- Setting up a field review of MOB projects and a subsequent meeting with partners
- Reviewing feedback on MOB SharePoint use
- Reviewing internal design checklists for both structures and highway safety and design
- Reviewing the impact of feedback on preliminary plans and discuss next steps
- Starting process of revising culvert procedures

Project identified as Title 19 100% consultation with ANR required Future State Project identified as Title 19 High Risk (100% consultation with ANR Required) Low Risk (minimal consultation with ANR required)

Groundwater Reclassification Event Date – July 2015

This Lean event was conducted with the goal of improving the process to reclassify contaminated groundwater to class IV. The current reclassification process lacks clarity, takes too long to complete (12 sites in 20 years averaging roughly 15 months each) and often leads to improper submittal of information and materials. Roles and responsibilities of involved parties are not well defined, re-do loops are common, and the process lacks transparency. Finally, there is a concern that once a reclassification does occur, there is inconsistent portrayal, distribution and use of the mapped data.

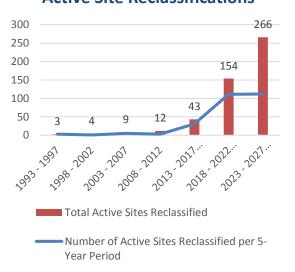
GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- Improve timeliness of reclassifications
- Increase transparency
- Complete 31 reclassifications by the end of 2017, bringing the total active site reclassifications since 1993 to 43 (up from 12).

STATUS

- Defining the universe of sites requiring reclassification has been completed.
- Revising the reclassification procedure is underway.
- Developing a standard reclassification checklist is nearly complete.
- We are scheduled to attend the September 17 Groundwater Coordinating Committee meeting to discuss their changing role from decision-making to advisory.
- Incorporating changes to the reclassification process into the Investigation and Remediation of Contaminated Properties Rule underway.

Active Site Reclassifications







ECO AmeriCorps Event Date – July 2015

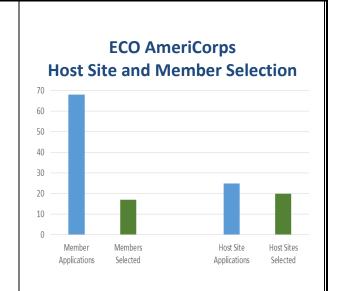
In June 2015 DEC Received funding to implement a statewide AmeriCorps program The program is placing 20 AmeriCorps members focused on water quality focused positions with a variety of non-profit and governmental entities through the state. As a brand new program with a unique federal grant management system, this Lean event focused on internal and external coordination, member training and administration, including grant reporting and compliance.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

- 80% of member applications received complete (100% great)
- 100% of host site positions filled
- 90% of members enrolled by 09/30/2015 (100% great)

STATUS

- 17 members recruited and committed to serving as of 9/1/2015. (85%)
- Temporary position to assist with administrative support for member enrollment is under recruitment
- Job specification for Program Coordinator is under review by the Department of Human Resources
- Program is on target, member orientation is scheduled
 September 14th-16th in coordination with Vermont Housing
 Conservation Board AmeriCorps.



Licensing and Certification (L&C) Event Date – July 2015

There is an opportunity to think of licensing and certification at a department level. While there are no fewer than six L&C programs, many share a number of key attributes: renewal processes; continuing education tracking; fee processing requirements; and some share the same customers.

This Lean event looked to explore how creating a shared database solution and potentially a shared process can benefit our staff, IT, the public, and provide a ready built tool for other DEC programs to proactively engage their professional communities with new training and outreach opportunities.

GOALS AND KEY PERFORMANCE INDICATORS (KPIs)

• % of programs with consolidated data management system

STATUS

- Created implementation team
- Held start-up meeting
- Added more detail to implementation plan
- Contacted Colin Benjamin, Secretary of State's (SOS) Office of Professional Regulation (OPR)
- Developing spreadsheet to capture current revenues, what revenues might disappear to OPR, what time is potentially saved, if additional revenues are proposed
- Meeting with program staff to populate spreadsheet and update interest in evaluating OPR solution

Potential Delegation of Licensing and Certification Tasks

