Muni WWTP Process Improvement Team

Recommendations and Implementation Update

June 2021

Introduction

A group of supervisors and staff met several times in the Fall of 2020 to discuss the current permit backlog and ideas for addressing it. It was generally agreed that the current backlog is primarily the result of a gap between workload and resources. While that gap needs to be closed, we also discussed planning and prioritization; staff support and training; internal collaboration to share knowledge; and being open to stakeholder input.

Workload and Resources

Experience and observations suggest the permit backlog is the result of a disconnect between workload and resources although secondary factors may also play a role.

Recommendations:

1. <u>Re-examine our workload model for writing, issuing, and managing permits</u>.

    Currently, we do not have definitive data that quantifies the severity of the gap between our current workload and available resources. Past exercises have been conducted to gather this data, but they were incomplete and have become outdated for the current environment. We recommend conducting fresh exercises to give us insight into how our current staffing levels compare to the present workload, and how we could adapt our methods of assigning permit tasks to increase efficiency. As an initial estimate of resource needs, the program could look at staffing levels in the NWRO Municipal Unit when the unit reported no backlog (circa 2015).

    Over the longer term, to substantiate a strong business case and implement these changes in a data driven manner, we need an accurate and updated workload model.

    LEAD: David Giglio
    STATUS: Complete, and resulted in a budget request under development

2. <u>When evaluating or estimating workload, the program should consider factors such as:</u>
    a. Facility Complexity
        I. Plant classification
        II. CSOs
        III. Tributary jurisdictions
        IV. Status of Planning / Need for Improvements
    b. Regulatory Complexity
        I. Major facilities / Delegated or potential pretreatment functions
        II. Reclaimed water production and distribution
        III. WQBELs / 303d listings

     IV.   Compliance Issues

     V.   Stakeholder concerns

  c. Oversight Tasks[1]

     I.   Engineering Review and Planning

     II.   Permit Writing

     III.   Technical Assistance

     IV.   Enforcement Support

3. <u>Consider a WAC change that gives us authority to charge for engineering review hours beyond a certain limit.</u>

   This change would incentivize communities to work with consulting engineers that produce quality engineering plans. Well done engineering plans take less time to review and produce better facilities.

   LEAD: pending (David G for now)
   STATUS: This summer, as part of discussions about the muni cap with stakeholders, we will develop a clearer picture of services stakeholder support and how best to fund those (higher permit fee vs. fee-for-service model)

Priorities

Paying attention to priorities is always important, more so when resources are scarce. Secondary and even primary priorities that are resource limited also inform conversations about resource needs. In addition, guidance on setting priorities could be helpful if there is renewed interest in reducing the permit backlog or an interest in new initiatives absent new resources.

Recommendations:
While keeping the broader perspective in mind, this team has identified the following changes that Ecology can implement to obtain meaningful efficiency gains in our prioritization process:

1. <u>Maximize the utility of our existing prioritization strategy (Strategic Plan/Business Plans/PDPs) by protecting time for supervisors to fully engage in the strategic planning and PDP processes.</u>
   a. Our current prioritization tools could be more effectively utilized by protecting supervisor time for fully investing in PDPs.
   b. Ensure that the goals in Section Business Plans reflect staff work and can be clearly tied into PDPs by protecting sufficient supervisor time for participation in business planning.

LEAD: Section Managers
STATUS: Part of business planning, trying to ensure the permitting staff have enough capacity for their permitting work

2. <u>Establish a review process in the permit planning phase that documents the permit's expected trajectory over 5, 10, and 20 year timeframes, and establishes a compliance strategy for the permit prior to it being issued.</u>

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[1] The group discussed tracking time via budget codes for categories such as these; several people indicated a willingness to serve on subgroup to discuss this option in more detail.

This would help permit teams take a permit's compliance strategy into account when planning permits. It would also provide guidance in making permit management decisions and prevent knowledge loss in the case of turnover or reassignment of work.

LEAD: the Permit Writer's Workgroup
STATUS: not started

3. <u>Empower staff and supervisors to stick to established priorities and mitigate, to the extent possible, the effect of unexpected changes in course.</u>

    Unit Supervisors would benefit from additional guidance and communication supporting their authority to direct staff in saying "no" to certain requests at the expense of higher priority work.

    LEAD: shared responsibility within sections and units
    STATUS: ongoing

Tools & Strategies

Over the past few years, due to demands from high priority special projects, the staff person normally dedicated to serving as a centralized information resource for permit writers and engineers has been diverted often to other priorities. This has left a substantial vacuum that affects the efficiency of our municipal and industrial permitting process. In addition, as senior staff leave the workforce, it is clear that training needs are not being met.

Recommendations:
1. <u>Dedicate one full time position to supporting individual permit staff by performing the following roles:</u> [2]
    a. Lead the PWWG in updating and maintaining templates, shells and other guidance documents. Outdated shells slow down permit development. Guidance also needs to be kept updated from other relevant sources (reclaimed water guide, implementation guidance for groundwater, etc.).
    b. Serve as a central hub for Permit Writers and Engineers across all sections to share researching and collaborating with staff to identify solutions, and documenting these solutions to promote consistency in our approach statewide and streamline future cases.

2. <u>Provide periodic training to staff writing permits</u>

    A Permit Writer's training session would be helpful. It has been a long time since we have offered one and requirements continue to evolve. A training module focused on reduced monitoring for good performance would likely be well received by stakeholders and staff.

3. <u>Provide professional training for engineers</u>

    Wastewater engineering has evolved beyond what is traditionally taught in universities; and some of what our engineers do (checking contract documents) must be learned on the job. At this time,

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[2] Historically, there were two staff in PDS supporting regional and state-wide individual permitting functions.

Ecology does not offer meaningful training to its engineers which may have spillover effects as poorly trained staff require more time to complete standard tasks.[3]

LEAD: PWWG, pending arrival of new staff
STATUS: Dependent upon a successful budget request

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[3] Besides training, engineers also lack analytical tools (e.g. models) to check designs; some engineers have developed these (Excel spreadsheets) but they are not widely shared. Engineers also lack useable guidance on how to conduct a review – what to check and what to skip. Uniform training and tools might result in more efficient engineering review, freeing up time for permit work. The Orange Book Workgroup is the logical team to take on this task.

Better Internal Collaboration

We have discussed several ideas to improve collaboration within our Muni WWTP permit process to share knowledge. These involve improving collaboration within our engineering and permit teams, and between our permit writing and project funding processes.

Recommendations:

1. <u>Incorporate mutual support, mentoring, and joint problem-solving into the Permit Review Process.</u>
   a. Review outcomes of CRO pilot process of having three staff collaborate to write one permit.
   b. Build collaboration into the expectations/PDs for all members of a permit team and units to facilitate knowledge sharing.
   c. Update the PWG Charter to include guidance around collaboration and communication, including:
      I. Building a network of connections through the quarterly PWG meetings that encourage and facilitate communication across regions.
      II. Facilitate opportunities for permitting conversations across sections more frequently than quarterly PWG meetings
      III. Allow for easy searching for topics in PWG minutes.
      IV. Provide for broad distribution of minutes.

   LEAD: PWWG
   STATUS: needs additional staff to coordinate, pending budget request

2. <u>Create opportunities for engineers to talk about complex topics between regions; and to share knowledge, separate from permit support.</u>

   LEAD: needs additional staff to coordinate
   STATUS: pending budget request

3. <u>Have a conversation with FMS about reducing the slug-load of work associated with fall deadlines for financial assistance applications and engineering submittals.</u> Ideas to consider:
   a. Stagger application deadlines to avoid a spike of engineering reviews related to funding applications coming in at one time of the year. This pressures our permit staff to delay other work to review these documents.
   b. Create incentives for applicants to submit engineering plans early, for example by offering a rolling deadline for loan applications.
   c. New approaches to educate municipalities that they need to have their plans approved before they apply for funding. For whatever reason, some communities don't get the word. Empower engineering staff to implement the regulatory time frame of 60 days for review, and to deny last-minute requests for approvals.
   d. Discuss prioritizing sustainability for communities; facilities should be no more complicated than the community can bear.
   e. Mitigate pressures that arise from denying subpar applications and/or engineering reports, possibly through coordination with Regional Directors.

   LEAD: David G/PMT
   STATUS: adding grants staff in 2022 with more requested for 2023

Improved Community Relationships

We recognize that there are opportunities for Ecology to improve relationships with our local communities in ways that would increase cooperation and trust, and ultimately improve our business productivity and effectiveness. Increased consistency in our approach to enforcement, as well as improved visibility and communication with permittees are key focal points in improving our community relationships in ways that can produce a significant return on investment.

Recommendations:
To take advantage of these opportunities, we recommend the following actions:

1. <u>Train staff in communicating with communities through vision and standards, not specific directives, whenever possible.</u>
    LEAD: needs additional staff to coordinate
    STATUS: pending budget request

2. <u>Consistently follow our own enforcement policies and processes (from the bottom of the organization to the top).</u>
    a. One specific commitment in this area would be for permit teams to review submittals and do any necessary follow up. We also recommend tracking the workload associated with this follow up.
    b. It is also important that we ensure our permits maintain up to date requirements. This allows us to be consistent in our enforcement approach and maintain credibility.
        LEAD: within units and regions
        STATUS: ongoing

3. <u>Prioritize visibility with permittees by making sure that permit staff have time to visit and inspect facilities.</u>
    a. This promotes increased compliance and can provide secondary benefits through educating permittees about TA resources specific to their situation.
        LEAD: within units and regions
        STATUS: ongoing

Additional Recommendations

Over the course of this process we recognized the existence of some helpful recommendations that do not fit into a particular category. These recommendations are presented below.

1. <u>Deepen the pool of certified Wastewater Treatment Plant Operators in Washington State. These recommendations should be thoroughly discussed with responsible staff and other relevant parties before moving forward.</u>
    a. Make our OpCert program more accessible and welcoming to interested candidates (look to Idaho's program for ideas).
    b. Strengthen our OpCert partnership with Washington Department of Corrections.
    c. Take a more active approach to partnering with community colleges to offer additional certification opportunities.

    LEAD: PDS
    STATUS: tbd

2. <u>Secure time for permit staff to make use of Water Quality Standards compliance tools in Muni WWTP permits.</u>

   Currently, there are a number of potentially useful compliance tools developed by our WQ Standards team that are underutilized by permit staff, due to their complexity and the pressures on permit staff to quickly turn around permits.

   LEAD: PWWG with Watershed Mgmt Section, and within units and regions
   STATUS: ongoing