

Work Plan

NPDES Permitting Program Review

June 2016

Prepared for
Oregon Department
of Environment Quality

Prepared by
MWH Americas [now a part of Stantec]
in collaboration with
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List of Acronyms and Terms

Consultant	MWH (<i>now a part of Stantec</i>) and Subconsultant Larry Walker Associates
CWA	United States Clean Water Act
DEQ	Oregon Department of Environmental Quality
EPA	United States Environmental Protection Agency
FTEs	Full time equivalent employees
NPDES	National Pollutant Discharge Elimination System
RACI Chart	Responsible, Accountable, Consulted, Informed Chart
RPA	Reasonable Potential Analysis
TMDL	Total Maximum Daily Load

SECTION 1

Introduction

The State of Oregon, like many other states, faces numerous challenges in implementing its Clean Water Act (CWA) responsibilities. The timely adoption and enforcement of high quality National Pollutant Discharge Elimination System (NPDES) permits ranks highly among them.

The difficulty of balancing the regulated community's desire to have reasonable permit requirements with which they can reasonably comply while simultaneously maintaining compliance with USEPA and Oregon legal requirements and schedules cannot be underestimated.

For over 15 years, the Oregon DEQ and Legislature have actively pursued improvements to its NPDES permitting program; from formulating a Blue Ribbon Committee, to internal work teams, to an independent audit and quality improvement efforts. Even with this significant effort and detailed recommendations, important permitting goals still elude the department.

In 2015, the Oregon Legislature, concerned about the backlog in renewing water quality permits, authorized DEQ to hire an outside consultant to evaluate the Water Quality NPDES permitting program. Goals of the program are: 1) to issue permits that are environmentally relevant by regulating discharges so Oregon's waters meet state water quality standards; 2) to reissue permits before the existing permits expire; and 3) to reduce the number of administratively extended permits to less than 10 percent.

MWH Americas (now a part of Stantec) with subcontractor Larry Walker Associates (consultant) was retained to conduct this 3rd party program review. In particular, the consultant is focusing on strategies for successful issuance and renewal of NPDES permits to achieve the goals listed above and to set a course for achieving realistic permitting metrics.

The project is divided into 4 tasks, and each task includes the consultant working cooperatively with DEQ, and regular, written and verbal status updates to the DEQ project team on a biweekly frequency. The final consultant deliverable is a detailed implementation plan that encompasses both short and long-term strategies to support timely and high quality permit issuance. Started in Spring 2016, the project is slated for completion in late Fall 2016.

1.1 Purpose

This Work Plan is prepared in fulfilment of Contract DASPS 1589-16, Oregon DEQ, Task 2 and provides a description of the activities to be undertaken to complete contract Task 3: Evaluation and Task 4: Implementation Plan.

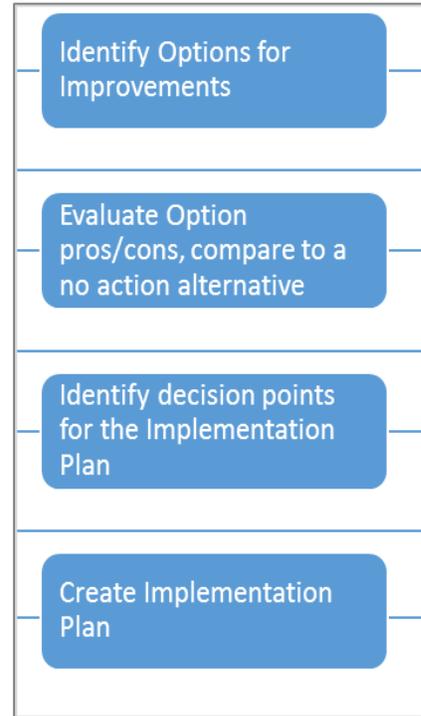
1.2 Approach and Objectives

The workplan outlines the specific steps the consultant will undertake to utilize existing information, research and stakeholder feedback obtained during the Task 1: Situation Assessment.¹ It also describes data needs and supplemental investigations necessary to evaluate the program, develop recommended improvements, and outline implementation approaches necessary to significantly reduce the number of administratively extended NPDES wastewater permits.

Figure 1. Illustrates the key activities of the next phases of work. The objectives for the remaining phases of work are to refine the vision for program success, identify options for improvements, evaluate the benefits and disadvantages of implementing the described improvements (as compared to no action), establish the decision points and decision makers needed to enact change, clarify priorities, and create an implementation/action plan for the selected improvements.

A separate Communications Strategy is a companion document that supports the Work Plan and suggests strategies for use once the Implementation Plan is adopted. The purpose of the Communications Strategy is to promote a transparent, stakeholder informed work product and to utilize a best practice for change management.

Figure 1. Work Plan Key Activities



¹ Stakeholders are defined as any person, organization, social group, or the society at large with a stake in the project outcome. The stakeholders primarily involved in the project directly include the State of Oregon Legislature and Executive Branch, DEQ personnel, the United States Environmental Protection Agency (EPA), and the regulated and environmental communities; however a much larger stakeholder group, including the general public and the press, are stakeholders and must be considered in deliberations .

Work to Date

During the Task 1: Situation Assessment the consultant team refined the problem statement, reviewed the substantial body of work already completed and gathered stakeholder views. The results of this investigation were sobering yet, when shared with interviewed stakeholders, unsurprising. Stakeholder reactions ranged from frustrated to resigned. In fact, very few stakeholders expressed confidence that real change was even possible.

Over time, multiple investigations have been conducted with attendant recommendation reports. While flaws may be identified for one or more of the efforts, in total, reviews were consistent with best practices and recommendations would be predicted to be effective in reducing the NPDES permit backlog. Where implemented, past recommendations appeared to have yielded some benefits; even so, many recommendations were not implemented due to a variety of reasons, and other factors have limited the benefits of enacted change.

An overwhelming conclusion of this initial review was that the problems were multiple, stacked and complex. There was little shared understanding about problems or the definition of success between the stakeholder sectors and, in some cases, one sector attributed problems to one or more of the other sectors. Further, stakeholder perspectives were directly related to the points of contact with the system. Very few stakeholders described the issues in the context of a larger system.

Our approach to future tasks embodies several core assumptions:

- NPDES Permit Backlog improvements will require changes by all the stakeholders.
- Dysfunctional interactions within the system are normal and predictive given the situation and problem history. These dysfunctions include cynicism, resignation and passive and other forms of aggression among the stakeholders.
- Fault finding will not be useful to solution creation.
- Recommendations and implementation approaches must be framed with a systems orientation. In this context, system means the configuration of parts connected and joined together by a web of relationships that seemly operate independently but are influenced by the totality of the relationships acting as a whole. For this effort that includes the entire CWA regulatory system comprised of water quality standards, Total Maximum Daily Loads (TMDLs), NPDES permits and the full complement of regulatory tools under the EPA regulatory system, as well as the social systems that operate within this larger contest.
- Traditional quality improvement methods to achieve efficiencies will be unsuccessful without a systems perspective.

- Given the failure to implement previous recommendations, change management will be critical to success.

The goals for improvement are also being applied to a moving target. NPDES permitting occurs in a dynamic regulatory, legal and technical setting. NPDES permits are significantly impacted by changes in EPA rules and water quality standards, by changes in Oregon's water quality standards and policies, by TMDL developments and by watershed management planning at the local level. NPDES permitting is also constrained by past decisions regarding effluent limitations, compliance schedules and monitoring programs. The influence of these factors must be considered in setting expectations and adaptively managing for continuous improvement of the NPDES permitting program.

As a result of these findings the focus of work for Task 3 and Task 4 will be to move beyond standard recommendations, many of which have been made in multiple previous endeavors, and instead focus on high impact, critical path recommendations and the accompanying barriers to improvement.

1.2.1. Task 3: Objectives and Approach

The objectives of Task 3 are to build upon existing information, research and stakeholder feedback obtained from Task 1, gather additional needed information, evaluate the barriers to backlog improvement and develop recommended improvements specific to the process for issuance of individual NPDES wastewater permits. This includes:

- o Bottlenecks and roadblocks
- o Permit compliance (feasibility of attainment of permit requirements)
- o Permit issuance planning
- o Permit quality assurance
- o Resource and workload allocation
- o Staff skills and training
- o Achievement of metrics and goals for the program

This will be accomplished in a 4-step process:

1. Continue analysis and evaluation, recommendation development including evaluation of additional information identified in this workplan (thus not already received). This activity also includes verification and validation of findings with DEQ. (June-mid July)
2. Prepare draft final report to DEQ summarizing findings. (July 18, 2016)
3. Conduct an external 3rd party independent review to receive technical advice on the draft final evaluation report (mid July)
4. Prepare a review summary from the 3rd party review (August 8, 2016)

1.2.2. Task 4: Objectives and Approach

The objective of this task is to solidify a prioritized plan of action which, when implemented, will advance program goals to issue timely, environmentally relevant permits that regulate discharges so Oregon's waters meet state water quality standards, and reduce the number of administratively extended permits.

The approach will utilize the concept of beginning with the end in mind. Because many recommendations have been previously identified in earlier efforts by other investigators, this task is oriented to identify and examine barriers to change and to construct options to address them. This task will also include considerations of potential recommendations that have not been previously identified. Work on this task will begin concurrently with Task 3 and be refined as Task 3 activities, such as the external 3rd party independent review, are conducted. This will be critical to ensuring the viability of final recommendations.

Results will be shared in an initial report of findings and detailed recommendations, including both short and long-term strategies for improvements based on Task 1, 2 and 3 (September 15, 2016). Contents of the report will be presented in a stakeholder workshop (September 30, 2016).

The implementation plan will highlight those recommendations suitable for testing or piloting. Although this will be outside of the period described in this workplan, the implementation plan will describe an approach to innovate and refine the recommendations after implementation. The recommendations will also identify how implementation will help DEQ meet realistic metrics and program goals.

A final draft implementation plan, informed by stakeholder input, will be produced with specific steps and actionable strategies to be executed by Agency staff and other stakeholders (October 15, 2016). This final draft plan will be presented in a facilitated workshop for stakeholders and DEQ (October 28, 2016), with a final implementation plan submitted to DEQ by November 18, 2016.

2.1. Task 3. Activities and Work Breakdown Structure

The following activities are identified for Task 3. They are composed of six general subtasks.

2.1.1. **Analysis and Evaluation – Permit Writing** continues information gathering begun in Task 1.

2.1.2. **Analysis and Evaluation – Related Information Requests** gathers additional information related to the working hypotheses developed in Task 1.

- 2.1.3. **Vision and Goals** initiates the development of the recommendations report required in Task 3.
- 2.1.4. **Recommendation Development** describes the process for recommendation development
- 2.1.5. **External 3rd Party Independent Review** outlines the convening and process for obtaining outside review of recommendations.
- 2.1.6. **Areas of Investigation** outlines the methods for identifying key findings and recommendations for use in the Recommendations Report and Implementation Plan.

2.1.1. Analysis and Evaluation – Permit Writing

The following information retained by DEQ and requested by consultant has been identified as needing additional analysis and evaluation:

Item	Specifications	Timeframe
1. 15-year Time series depiction of NPDES permit backlog <ul style="list-style-type: none"> ○ Years should mirror DEQ annual evaluation cycles (by fiscal or calendar year) 	List by year of: <ul style="list-style-type: none"> • Applications received • Applicant name/type • Location of facility • Initial backlog volume at year start and age of permit in backlog by permit. • Permits issued ○ Time of permits in system (application date/completed date) • Annual backlog volume year end and age of backlog by permit • Assigned permit writer (if known) • Completing permit writer (if known) 	Data Request 06.01.16 DEQ transmittal 06.06.16 Analysis June 2016
2. 15-year Time series of actual NPDES FTEs (devoted to writing individual wastewater NPDES permits) <ul style="list-style-type: none"> ○ Years should mirror annual cycle requested in item 1 	List by year of: <ul style="list-style-type: none"> • Authorized full-time equivalent employees (FTEs) • Filled positions (versus authorized but vacant) • Classification • General assessment of level of experience 	Data Request 06.01.16 DEQ transmittal 06.06.16 Analysis June 2016

Item (by fiscal or calendar year)	Specifications	Timeframe
3. 15-year Time series of DEQ Budget <ul style="list-style-type: none"> ○ Years should mirror annual cycle requested in item 1 (by fiscal or calendar year) 	List by year of: <ul style="list-style-type: none"> • Budget allocation • (If available) Water Quality Program Budget • Changes to allocation 	Data Request 06.01.16 DEQ transmittal 06.06.16 Analysis June 2016
4. Process maps of NPDES permit writing process	Consultant to work with DEQ staff during two, 2.5 to 3-hour, on-line working session with Senior Permit Writers to: <ul style="list-style-type: none"> • Update selected 2001 process maps prepared by the Wastewater Permitting Improvement Team • Augment selected maps to include time scale and identify process owners for each step and any process dependencies • Annotate selected maps to note regional or other differences • Document variation process 	Day 1 – Week of June 6 Day 2 – Week of June 20.
5. Essential data needs for NPDES permit writers	List of data needs by: <ul style="list-style-type: none"> • Process map steps <ul style="list-style-type: none"> • By application forms, templates and Reasonable Potential Analysis (RPA) spreadsheets. • By timeframe (when needed) • Annotated with any special requirements for data quality 	Data Request 06.01.16 DEQ transmittal 06.06.16 Analysis June 2016
6. Tracking Tools	Copies of Permit Planning tracking reports, beginning with initial report and reports to date.	Data Request 06.01.16 DEQ transmittal 06.13.16
7. Cause/effect between specific litigation	List of permits identified as delayed due to litigation by:	Data Request 06.01.16 DEQ transmittal 06.13.16

Item	Specifications	Timeframe
outcomes and permit issuance	<ul style="list-style-type: none"> • Specific case or opinion that resulted in the permit not being issued • Recent comment letters on NPDES permits that highlight current legal and policy issues 	Analysis June & July 2016
8. Cause/effect between specific EPA decisions and permit issuance	List of permits identified as delayed due to EPA decision by: <ul style="list-style-type: none"> • Specific decision that resulted in the permit not being issued • Recent comment letters that highlight major policy issues impacting NPDES permits 	Data Request 06.01.16 DEQ transmittal 06.13.16 Analysis June & July 2016

We believe that much of this information already exists but perhaps not in the requested format. In order to meet project frames, DEQ may deliver information in an unformatted form, reference previously provided documents, or provide web links if the source documents include the specified analysis elements.

2.1.2. Analysis and Evaluation – Related Information Requests

The following information retained by DEQ and requested by consultant has been identified as needing additional analysis and evaluation:

Item	Specifications	Timeframe
1. Recruitment Methods	1-hour on-line meeting with appropriate DEQ or other state personnel to identify employment practices related to recruitment and retention issues identified in the situation assessment. Meeting topics to include: <ul style="list-style-type: none"> • General state classifications, testing and recruitment methods for permit writers, including temporary, permanent, part-time and retired • Perceived availability of labor pool (success of previous recruitment efforts) • Potential options for recruiting at above entry level personnel 	Data Request 06.01.16 Meeting - week of 06.06.16

Item	Specifications	Timeframe
	<ul style="list-style-type: none"> • Critical barriers or limitations of the system • Typical hiring timeframes • Current plans for managing a large volume of anticipated retirements 	
2. Contracting Methods	<p>1-hour on-line meeting with appropriate DEQ or other state personnel to identify contracting practices related to augmenting permitting functions requiring specialized skills or skill sets beyond those required for civil service personnel. Meeting topics to include:</p> <ul style="list-style-type: none"> • General state contracting requirements for personal services • Issues of concern related to maintaining the integrity of the civil service • Perceived availability of contract resources • Critical barriers or limitations of the system • Typical contracting timeframes for similar requests 	Data Request 06.01.16 Meeting - week of 06.06.16
3. Data Storage and Acquisition Methods	<p>1.5-hour on-line meeting with appropriate DEQ or other state personnel to identify data acquisition, storage and sharing practices related to permitting functions. Agenda to include:</p> <ul style="list-style-type: none"> • Current status • Status and timeline of planned upgrades • Identified data issues not scheduled for resolution • Promising options for data sharing 	Data Request 06.01.16 Meeting - week of 06.06.16
4. Permitted Facilities	<p>List of Permitted Facilities by:</p> <ul style="list-style-type: none"> • Name • Location 	Data Request 06.01.16

Item	Specifications	Timeframe
	<ul style="list-style-type: none"> Permit date Map 	DEQ transmittal 07.01.16
5. Workload Analysis	<p>1.5-hour phone meeting to discuss on-going workload study being completed by DEQ to quantify permit writer tasks and time.</p> <p>1.5-hour on-line meeting with DEQ to discuss results of analysis.</p>	<p>Initial meeting week of 06.06.16</p> <p>2nd meeting week of 06.27.16</p>

2.1.3. Vision and Goals

The situation assessment identified a lack of shared meaning² between stakeholder sectors regarding problem definition and the vision and goals for successful backlog reduction. Backlog is both a problem and symptom of other issues in DEQ’s administration of requirements under the CWA.

The consultants have translated background research and stakeholder input into working definitions which will be used in crafting recommendations and revisiting the 2035 vision with stakeholders. The draft working definition for a high-functioning DEQ water quality regulatory system is:

Implementation and delivery of a CWA permitting system that recognizes the interconnectedness of water quality standards, TMDLs, and permits and achieves Oregon’s 2035 Vision’s desired environmental results. This administration:

- *Confronts on going limitations, especially related to funding and state authority, and dynamically manages the program to meet attainable water quality standards.*
- *Provides for ongoing monitoring based on key metrics to provide on-going feedback on the status of the backlog and achieving the 2035 Vision.*
- *Stakeholders work collaboratively to achieve the desired state.*

Similarly, there is a desire for Quality Permits but there is not a broadly deployed definition. For the purpose of crafting recommendations and identifying potential metrics, the working draft definition for quality permits is:

Quality permits are legally defensible and result in implementation actions that protect beneficial uses, provide desired environmental benefits, and can be explained to rate payers as proper utilization of limited resources. In other words, quality permits must work from both the top down (regulator, NGO) perspective

² Where there is share meaning each party to the communication accurately understands both the definitions and intentions of what an author or speaker presents. This can often be very different than what the reader or listener thinks is being said.

(i.e. meets WQ standards, EPA requirements) and from the bottom up (i.e. meets interests of regulated community).

Adoption of this workplan will confirm concurrence with these working definitions, which may be further modified through Tasks 3 and 4.

Item	Actions	Timeframe
1. Working definition of the desired state	<ul style="list-style-type: none"> Included in Section 2.13 of Work Plan 	DEQ receipt 06.01.16
2. Working definition of a Quality Permit		DEQ response with Work Plan June 2016

2.1.4. Recommendation Development

Recommendations development, including evaluation of additional information identified in this workplan (thus not already received), includes verification and validation of findings in the situation assessment with DEQ and will continue through mid-July. As noted in Section 1.2.2, based on the Situation Assessment findings, we will begin some Task 4 activities (consideration of implementation) concurrent with Task 3.

Recommendations will focus on high impact, critical importance issues and be framed in the context of alternative futures. This will be accompanied by a description of the pros and cons (for DEQ and stakeholders) and likely outcomes within specified time frames. The actions will also be considered relative to:

- No Action (business as usual) and the resulting impact to the baseline condition
- Strict adherence to EPA and court mandates in NPDES permit writing
- Strategic approach using EPA tools to achieve the DEQ vision
- Legislative approach to align the federal (EPA) approach with Oregon’s Vision
- Anticipated barriers to implementation
- Span of control (those items under DEQ control or influence)

This activity also includes ongoing communication with DEQ project management staff (June-mid July) in bi-weekly project management meetings and preparation of a draft final report to DEQ summarizing findings.

Item	Actions	Timeframe
1. Verification and validation of findings	<ul style="list-style-type: none"> Include as discussion topic in bi-weekly project management meetings 	On-going June-July 2016

Item	Actions	Timeframe
2. Draft Final Recommendations Report	<ul style="list-style-type: none"> • Prepare report utilizing structure described in Work Plan Section 2.1.4 	DEQ receipt 07.18.16 DEQ response 08.05.16

2.1.5. External 3rd Party Independent Review

The Draft Final Recommendations Report will also be reviewed by up to three external 3rd party independent reviewers. Reviewers will be recognized experts in the water quality permitting field based on stature in professional associations and/or academic credentials. Reviewers will be asked to offer technical advice on the report topics with a particular focus on accuracy related to EPA standards and utilization of known best practices. They will also be asked to identify any case studies where similar recommendations have been implemented.

Reviewers will be invited to review the document in advance and offer written and verbal comments.

A summary of results from the 3rd Party review will be prepared and transmitted to DEQ and attached as an appendix to the Recommendations Report prepared as part of Task 4.

Item	Actions	Timeframe
1. Convene Reviewers	<ul style="list-style-type: none"> • Identify, make invitations and solidify participation of reviewers. 	June 2016
2. Conduct Review	<ul style="list-style-type: none"> • Prepare reviewer instructions. • Transmit draft recommendations report to reviewers for comments. • Receive comments in written and/or verbal form • Conduct one, 2-hour webinar meeting to allow reviewers to consider one-another's comments. 	Transmittal mid-July Receipt of Comments 07.29.16 Webinar week of 08.01.16
3. Summary Report	<ul style="list-style-type: none"> • Compile comments from written and verbal input • Prepare Summary Report • Transmit to DEQ • Include as Appendix to Task 4 Recommendations Report 	DEQ receipt 08.08.16 Recommendations Report 09.15.16

2.1.6. Areas of Investigation

As previously discussed, recommendations will focus on high impact, critical importance activities relevant to resolution of the NPDES permit backlog problem.

The investigation will center on:

- Verifiable issues and projected outcomes
- Identified issue areas deemed to be a significant driver of backlog
- Short term & Long term activities

The review will also identify issues within DEQ control versus outside DEQ control, and those issues that stakeholders can positively influence. For example, disapproval of standards by the judicial system was identified as creating a significant disruption in the NPDES process. The focus of recommendations in this case would center on overcoming barriers.

The **Investigation Topics Table** on the following pages provides a detailed overview of activities to be conducted to formulate recommendations.

Investigation Topics

Item	Investigation Topics	Actions
<p>1. Adequacy of Data Systems to the extent they are a barrier to NPDES permit production</p>	<ul style="list-style-type: none"> • Data system adequacy • Access to data by permit writers and stakeholders 	<p>June 2016</p> <ul style="list-style-type: none"> • Interview DEQ information technology managers and permit writers to clarify issues and identify options
<p>2. NPDES permit writers workload and multitasking</p>	<ul style="list-style-type: none"> • Potential for teaming approaches to augment support for the permit writers and to meet other organizational needs • Prioritization of NPDES permit preparation ahead of other tasks • DEQ workload assessment • Tasks done by permit writers that can be re-assigned without a drop in NPDES permit quality or program effectiveness (e.g. enforcement, inspection reports, technical assistance) 	<p>June 2016</p> <ul style="list-style-type: none"> • Review results of workload assessment • Review updated process maps • Conduct one 2-hour on-line meeting with Senior permit writers • Prepare options for workload <p>Early July 2016</p> <ul style="list-style-type: none"> • Review options with Managers and Senior Permit Writers in one 2-hour online meeting • Revise options as needed for inclusion in recommendations report
<p>3. Leadership/Management approaches</p>	<ul style="list-style-type: none"> • Management of permit exceptions and delays • Management of expert v. Manager model • Alignment of other priorities that override attainment of permit issuance plans. • Management of issues associated with decentralization, including communications and decision making • Alignment of all change efforts, particularly related to hand-offs and trade-offs between Standards, TMDL and Permit Writing functions • Change management and accountability for execution of high value improvement measures 	<p>June 2016</p> <ul style="list-style-type: none"> • Review materials requested in other Work Plan Sections • Conduct phone interviews with DEQ Standards and TMDL managers to verify initial findings related to process hand-offs, as they relate to permit issuance. • Conduct one 2.5-hour on-line meeting with designated management to review management findings and review options. <p>July 2016</p> <ul style="list-style-type: none"> • Include results in Draft Final Recommendations Report

Item	Investigation Topics	Actions
	<ul style="list-style-type: none"> • Level of integration and collaboration in policy and standards development. 	
4. Management tools	<ul style="list-style-type: none"> • Availability of clear, transparent, decision making processes such as decision trees, RACI Charts,³ etc. • Dashboards and other tracking mechanisms to create visibility and transparency for progress in achieving desired changes • Standardization and use of tools, templates and guidance • Systems for tracking permit issuance and schedule variance 	<p>June 2016</p> <ul style="list-style-type: none"> • Work with DEQ project team to identify existing tools, tools utilization and tool effectiveness • Determine needs for additional tools <p>July 2016</p> <ul style="list-style-type: none"> • Include results in Draft Final Recommendations Report
5. Permit Writing Tools	<ul style="list-style-type: none"> • Adequacy/availability of tools, templates and Internal Management Directive (IMD) guidance • Improvement of essential tools • Utilization of essential tools 	<p>June 2016</p> <ul style="list-style-type: none"> • Conduct one, 1-hour phone meeting to work with DEQ Senior Permit Writers and identify existing tools, tools utilization and tool effectiveness • Determine needs for additional tools <p>July 2016</p> <ul style="list-style-type: none"> • Include results in Draft Final Recommendations Report
6. Stakeholder Engagement	<ul style="list-style-type: none"> • Role of stakeholders in framing policy and engage as appropriate. • Utilization of Blue Ribbon Committee 	<p>June 2016</p> <p>Work with DEQ project team to:</p> <ul style="list-style-type: none"> • Identify existing and future policies that will impact NPDES permit adoption • Revisit role and charter of Blue Ribbon Committee • Determine needs for revisions

³ RACI Charts outline the roles of individuals responsible for action. RACI is the acronym for Responsible, Accountable, Consulted and Informed. There are rules for construction of the charts and the term encompasses those rules.

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Item	Investigation Topics	Actions
		<p>July 2016</p> <ul style="list-style-type: none"> • Include results in Draft Final Recommendations Report
7. Staff skills and training	<ul style="list-style-type: none"> • Degree of required expertise • Availability and retention of skilled staff • Guidance documents, including Permit Writers Guide, NPDES Permit and Fact Sheet Templates • On-going training, topics and timeliness 	<p>June 2016</p> <ul style="list-style-type: none"> • Include discussion and option for improvement of skills and training issues in one, 1-hour meeting with DEQ project team and two experience permit writers <p>July 2016</p> <ul style="list-style-type: none"> • Reflect results in Draft Final Recommendations Report
8. Regulated Community	<ul style="list-style-type: none"> • Role of regulated community in permit production (e.g. permit application completeness, ambient and effluent data) 	<p>June 2016</p> <ul style="list-style-type: none"> • Conduct one, 1-hour phone meeting with the DEQ project team and appropriate senior staff to review practices in other states. Discuss DEQ options and potential for shifts to improve the backlog. <p>July 2016</p> <ul style="list-style-type: none"> • Reflect results in Draft Final Recommendations Report
9. Future Regulatory Context	<ul style="list-style-type: none"> • Future WQ standards or TMDL waste load allocations (WLAs) on NPDES permit requirements and/or treatment improvements. 	<p>June 2016</p> <ul style="list-style-type: none"> • Review current DEQ process for projecting future issues during bi-weekly project team meeting. Discuss DEQ options and potential for shifts to prevent increases to the backlog. <p>July 2016</p> <ul style="list-style-type: none"> • Reflect results in Draft Final Recommendations Report
10. Resource Availability	<ul style="list-style-type: none"> • Allocation of personnel to NPDES permit issuance functions • Workload analysis 	<p>June 2016</p> <ul style="list-style-type: none"> • Utilize information gathered under Work Plan Section 2.1 to assess situation

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Item	Investigation Topics	Actions
	<ul style="list-style-type: none"> • Utilization of personnel • Funding uncertainty • Funding adequacy 	<p>July 2016</p> <ul style="list-style-type: none"> • Reflect results in Draft Final Recommendations Report
11. Succession Planning	<ul style="list-style-type: none"> • Management of known retirement of knowledgeable personnel 	<p>June 2016</p> <ul style="list-style-type: none"> • Review current DEQ process for projecting future issues during bi-weekly project team meeting. Discuss DEQ options and potential for changes to prevent increases to the backlog. <p>July 2016</p> <ul style="list-style-type: none"> • Reflect results in Draft Final Recommendations Report
12. Cultural Context	<ul style="list-style-type: none"> • Customer service v regulatory roles • Desire and need for staff autonomy • Standardization v. customization 	<p>June 2016</p> <ul style="list-style-type: none"> • Utilize information gathered in Task 1 and from information gathered under Work Plan Section 2.1 to assess situation and outline options to manage issues associated with the context <p>July 2016</p> <ul style="list-style-type: none"> • Reflect results in Draft Final Recommendations Report
13. Legal Constraints	<ul style="list-style-type: none"> • Degree of impact to backlog <ul style="list-style-type: none"> ○ EPA determinations (for example, issues related to water quality trading) ○ Litigation (pending or active) ○ Implementing judgements or settlements 	<p>June 2016</p> <ul style="list-style-type: none"> • Utilize information gathered in Task 1 and from information gathered under Work Plan Section 2.1 to assess situation and outline options to manage issues associated with the context. • As needed discuss specific issues with DEQ Counsel and EPA via phone meetings. <p>July 2016</p> <ul style="list-style-type: none"> • Reflect results in Draft Final Recommendations Report

2.2. Task 4. Activities and Work Breakdown Structure

The objective of this task is to solidify a prioritized plan of action which, when implemented, will advance program goals. As noted in previous sections, the task is oriented to identify barriers to change and to construct options to address them. Work on this task begins concurrently with Task 3 and with refinements provided through the multiple inputs. This will be critical to ensuring the viability of implementation tactics.

An essential element of this task is overt, transparent decision making. As described in Work Plan Section 2.1.4, recommendations will focus on high impact, critical path issues framed in the context of alternatives (similar to what is done in looking at alternatives in National Environmental Policy Act (NEPA) documents. This will be accompanied by a description of the pros and cons (for DEQ and stakeholders) and likely outcomes within specified time frames. We (the consultant) will offer a list of prioritized preferred alternatives; however, DEQ and its stakeholders will ultimately need to consider the actions to implement relative to significant choice points including no action and some options that significantly depart from business-as-usual. Evaluation of recommendations will consider barriers to implementation.

2.2.1. Steps to Structure Final Recommendations

Findings and Recommendations will be shared in a draft report with detailed recommendations including short and long-term strategies for improvements based on Task 1, 2 and 3 (September 15, 2016). The report will be presented in a stakeholder workshop (September 30, 2016).

Stakeholder Workshop Topics

1. Recommendations and alternatives
 - General perspective, input regarding recommendations and alternative analysis
 - Prioritization of recommendations
 - Degree of Impact
 - Quick wins, early feasibility
 - Dependencies among recommendations (what recommendations are dependent on others being implemented or could be accelerated or hampered by various combinations?)
 - Recommendations suited to implementation as a short term pilot project
2. Identification of the parties necessary to success and/or likely to be impacted by the recommended changes

3. Identification of barriers and suggestions for overcoming barriers.

Other factors or suggestions related to recommendations. Item	Actions	Timeframe
1. Final Recommendations Report	<ul style="list-style-type: none"> • Make revisions based on feedback from DEQ on Task 3 Draft Final Recommendations Report. • Transmit to DEQ and Stakeholders for Review 	Transmit to DEQ 09.15.16
2. Stakeholder Workshop	<ul style="list-style-type: none"> • Set Workshop Date • Distribute Recommendations report and agenda 10 days in advance • Conduct Workshop • Provide Summary to DEQ 	Set date by 06.06.16 Conduct by 09.30.16 Summary Notes by 10.15.16

2.2.2. Steps to Structure Implementation Plan

Feedback from the workshop will be considered by MWH in the prioritization of final recommendations.

During this phase of work, we will identify with DEQ and stakeholders any other parties that will be needed to be involved to ensure successful implementation of the final recommendations. We will then utilize a change management communications approach in structuring an implementation plan for the recommendations moving forward. These communications will clearly articulate the change to be implemented, describe changes as they impact stakeholder segments and define the methods to achieve it. Our goal will be to cement the idea that failing to change is the least viable option.

The implementation plan will also highlight those recommendations suitable for testing or piloting to innovate and refine the recommendations. The Implementation Plan will also identify how taking action will help DEQ meet program goals.

A final draft implementation plan, informed by stakeholder input during the Recommendations Plan workshop, will be produced with specific, actionable steps and strategies to be executed by DEQ staff. This final draft plan will be reviewed in a facilitated workshop for stakeholders and DEQ with a final implementation plan submitted by November 18, 2016.

Item	Actions	Timeframe
1. Final Draft Implementation Plant	<ul style="list-style-type: none"> • Prepare text • Transmit to DEQ and Stakeholders for Review 	Transmit to DEQ 10.15.16
2. Stakeholder Workshop	<ul style="list-style-type: none"> • Set Workshop Date • Distribute workshop agenda report and agenda 10 days in advance • Conduct Workshop • Provide Summary to DEQ 	Set date by 06.06.16 Conduct by 10.30.16 Summary Notes by 11.15.16
3. Implementation Plan	<ul style="list-style-type: none"> • Update based on Stakeholder input • Transmit to Stakeholder and DEQ for action 	Transmit to DEQ by 11.18.16

3.1. Assumptions and Constraints

Time and data access are both recognized constraints to achieving the project goals. Our ability to address issues identified in Table 6 and to provide associated content in the draft and final reports will be contingent on timely receipt of information from DEQ as described in this work plan and the time constraints for this work may limit the depth of analysis in some areas.

Final work products will feature the most promising improvement approaches. For that reason, the draft and final reports will not necessarily include recommendations for each of the investigation topics described in Table 6. High impact actions will be identified and prioritized from the larger list of potential actions.

Draft and final recommendations will not necessarily be constrained by short term feasibility – some actions may require significant, focused long term efforts by DEQ and stakeholders to develop necessary strategies and resources.

Input received in the September and October stakeholder meetings will be considered by MWH in the development of final recommendations. Time constraints may limit the ability to make significant modifications to the draft documents in response to input received. The overall project schedule does not allow preparation of formal responses to comments received in the workshops.

4.1. Schedule

Following is the July through November project schedule.

Task	Objective	Complete By Date
DEQ Review Final Draft Workplan	Ensure Workplan is accepted, clear and understandable.	7/15/2016
DEQ Review Draft Communication Strategy	Ensure Communication Strategy is consistent with DEQ needs and expectations.	7/15/2016
MWH send to DEQ and third party reviewers the Draft Recommendations Report for concurrent review	Task 3 deliverable	7/18/2016
Webinar with MWH, DEQ and Reviewers to receive and discuss Reviewers' written comments on Draft Recommendations Report	Allows MWH and DEQ to hear and discuss/get clarification on feedback/comments from outside reviewers.	Early August
Final Recommendations Report to DEQ from MWH	Final recommendations report with 3 rd party review and DEQ review comments incorporated as appropriate.	9/5/2016
Stakeholder Workshop Materials to DEQ from MWH	All materials that will be used for the September 19 th Stakeholder Workshop submitted to DEQ for review.	9/8/2016
1-Hour Meeting MWH and DEQ to Review Stakeholder Workshop Materials and comments (if any) on Final Recommendations Report	Obtain agreement on materials to be used at the September 19 th Stakeholder Workshop.	9/13/2016 Afternoon
MWH send Workshop Materials to workshop attendees	Allows participants to prepare for session	9/14/16
STAKEHOLDER WORKSHOP	Stakeholder feedback on Recommendations Report	9/19/16
Rolling Review period for Task 4 deliverable	Draft Implementation Plan to be delivered in segments as ready for advance DEQ review to accommodate tight time frame as feasible.	As feasible in advance of 10/14
Complete Draft Implementation Plan from MWH to DEQ	Complete Task 4 deliverable	10/14/2016
Stakeholder Workshop Materials to DEQ from MWH	All materials that will be used for the October 28 th Stakeholder Workshop submitted to DEQ for review.	10/14/2016
DEQ provides comments on Draft Implementation Plan	Ensure Implementation Report is clear and understandable. Ensure no unidentified	10/21/16

DEQ Program Review Workplan

Task	Objective	Complete By Date
1-Hour Meeting MWH and DEQ to review Draft Final Implementation Plan comments and Stakeholder Workshop Materials	roadblocks exist, ensures feasibility of implementation. Obtain agreement on materials to be used at the October 28 th Stakeholder Workshop.	10/21/2016
MWH send Workshop Materials to workshop attendees		10/22/16
STAKEHOLDER WORKSHOP	Stakeholder feedback on Draft Final Implementation Plan	10/28/16
DEQ begin preparing for public distribution of the report	Communication plan, website updates, fact sheets, legislative report, etc.	10/31/16
Final Implementation Plan to DEQ from MWH	Final Implementation Plan with input from DEQ and Stakeholders.	11/18/2016
DEQ submit report to legislature and post to website		December

The figure on the following page illustrates the full project timeline.

Minor adjustments to the schedule and timeline are permissible, with the joint concurrence of MWH and DEQ, to accommodate vacation schedules or unanticipated delays not under the immediate control of the parties.

Timeline

NPDES Permitting Program Review		Weeks																									
Activities	Responsible	1-Jun	10-Jun	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	28-Oct	4-Nov	11-Nov	18-Nov	
Workplan Development																											
Draft Workplan Submitted	MMWH Team																										
Comments Due	DEQ																										
Final Workplan Submitted	MMWH Team																										
Draft Communications Plan Submitted	MMWH Team																										
Comments Due	DEQ																										
Final Communications Plan Submitted	MMWH Team																										
Data Requests																											
List of requested information	MMWH Team																										
Transmittal of requested items	DEQ																										
Validation and Verification Meetings																											
Meetings as outlined in information requests	DEQ and MMWH																										
Project Management																											
Bi-weekly Project Team Mgs.	DEQ and MMWH																										
Reports																											
Draft Final Recommendations Report	MMWH Team																										
Comments Due	DEQ																										
Final recommendations Report	MMWH Team																										
Draft Implementation Report	MMWH Team																										
Comments Due	DEQ																										
Final Implementation Plan	MMWH Team																										
Task 3 Analysis																											
Evaluate and verify information	MMWH Team																										
Collaborate with DEQ Project Team	DEQ & MMWH																										
3rd Party Review																											
Convene	MMWH Team																										
Transmittal of docs & instructions	MMWH Team																										
Comments Due/ Webinar	Reviewers																										
Summary Report	MMWH Team																										
Stakeholder Workshops																											
Set Workshop Dates	DEQ & MMWH																										
Materials in advance	MMWH Team																										
Reports																											
Draft Final Recommendations Report	MMWH Team																										
Comments Due	DEQ																										
Final recommendations Report	MMWH Team																										
Draft Implementation Report	MMWH Team																										
Final Implementation Plan	MMWH Team																										
KEY																											
MMWH Task																											
DEQ Task																											
MMWH & DEQ Shared																											
3rd Party Reviewers																											