

TOOL 2

Post-Construction Guidance Manual

Program & Budget Planning

This is one of several tools designed to assist local stormwater managers with the development of their post-construction stormwater program. The tools are a companion to the Post-Construction Guidance Manual (www.cwp.org/postconstruction). The following tools are available:

For more information on the Post-Construction Guidance Manual, contact the Center for Watershed Protection, 8390 Main Street, 2nd floor, Ellicott City, MD 21046, 410-461-8323
center@cwp.org
www.cwp.org.

Tool 1: Post-Construction Stormwater Program Self-Assessment

Tool 2: Program & Budget Planning Tool

Tool 3: Post-Construction Stormwater Model Ordinance

Tool 4: Codes & Ordinance Worksheet (COW)

Tool 5: Stormwater Manual Builder

Tool 6: Plan Review, BMP Construction, and Maintenance Checklists

Tool 7: Performance Bonds

Tool 8: BMP Evaluation Tool

USER'S GUIDE TO THE PROGRAM & BUDGET PLANNING TOOL

For many municipalities, the Public Works, Engineering or Planning department is responsible for developing a stormwater post-construction program. Depending on the size of the municipality, it will likely require staff participation from multiple departments. The task of developing a stormwater post-construction program can be difficult and questions may arise such as:

- Where should we start?
- What regulatory requirements are applicable?
- What should we include in our program?
- What is it going to cost?

The program & budget planning tool is a spreadsheet tool that is meant to assist stormwater managers with program planning, goal setting, and phasing. It is not meant to be a detailed budgeting tool but rather an overview of planning milestones. The spreadsheet enables the user to fill in the staffing needs and expenses, other program expenses, and potential revenue sources for each task and subtask. This tool should be modified by stormwater managers to fit the needs and characteristics of their individual programs.

The spreadsheet is modeled after Tables 1.6 through 1.9 which provides a template for the development and operation of a comprehensive post-construction program plan. The four tables represent four different phases of program development:

- Phase 1: Program Development, Linking to Land Use, and Adopting An Ordinance
- Phase 2: Developing Stormwater Guidance Manuals and the Stormwater Plan Review Process
- Phase 3: Inspecting Permanent Stormwater BMPs During Construction, Developing a Maintenance Program, and Tracking and Evaluating the Program
- Program operation: Putting the comprehensive program plan into practice

Table 1.6. Phase 1 of a Comprehensive Program Plan

Phase 1 Task	Relevant Guide Section or Tool
1. Program Development	
1.a. Assess Watershed & Community	1.6
1.b. Conduct Program Self-Audit	1.7, Tool #1
1.c. Develop Program Goals, Plan & Budget	1.8, Tool #2
1.d. Develop & Implement Public Involvement Strategy	each chapter

1.e. Hire Core Program Staff	Ch. 1
2. Link Stormwater to Land Use	
2.a. Establish Links to Planning Department	2.5
2.b. Evaluate Existing Land Use Codes	2.6, Tool #4
2.c. Assess Integrated Stormwater/Land Use Tools	2.7
2.d. Adopt Smart Growth Policies	Ch. 2, EPA docs
3. Adopt or Amend Stormwater Ordinance	
3.a. Scope Out Ordinance Task	3.2
3.b. Identify MS4 Permit Requirements & Commitments	3.2
3.c. Identify State, Regional, or National Model Ordinance	3.2, Tool #3
3.d. Decide Whether to Integrate Ordinance with Construction Stormwater & IDDE	3.2
3.e. Develop & Implement Stakeholder Participation Plan	3.5
3.f. Develop Draft Ordinance	Ch. 3, Tool #3
3.g. Project Plan Review, Inspection & Maintenance Loads	Ch. 3, 5, 6, 7
3.h. Adopt Ordinance Through Public Process	Ch. 3

Table 1.7. Phase 2 of a Comprehensive Program Plan

Phase 2 Task	Relevant Guide Section or Tool
4. Develop Stormwater Guidance Manual(s)	
4.a. Scope Out Design Guidance Task	4.3
4.b. Identify Local, State, or Regional Manual to use as Model or By Reference	Ch. 4, Tool #5
4.c. Decide Whether to Integrate Manual with Construction Stormwater (erosion & sediment control manual)	Ch. 4
4.d. Develop & Implement Stakeholder Participation Plan	4.15
4.e. Develop Policy & Procedures Manual	4.4, Tool #5
4.f. Develop Technical Design Manual	4.5 -- 4.13, Tool #5
4.g. Adopt the Manuals Through Public Process	Ch. 4
4.h. Provide Training on Use of Manuals	4.14 -- 4.15
5. Create or Enhance Stormwater Plan Review Process	
5.a. Scope Out Plan Review Process	5.3
5.b. Decide Whether to do Review In-House or Contract to Consultant	5.3 -- 5.5
5.c. Create Flowchart or Map Out Review Process	5.4
5.d. Create Forms, Applications, Instruction Materials & Checklists for Applicants & Review Staff	Ch. 5, Tool #6
5.e. Forecast Staff Needs & Acquire Staff	5.3 -- 5.5
5.f. Provide Training for Review Staff and Design Consultants	5.5 -- 5.6
5.g. Develop Web-based or Other Tracking System to Track Plans and Approvals	Ch. 8

5.h. Set up Performance Bond Process, Forms, and Tracking System	Tool #7
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Table 1.8. Phase 3 of a Comprehensive Program Plan

Phase 3 Task	Relevant Guide Section or Tool
6. Inspect Permanent Stormwater BMPs During Construction	
6.a. Scope Out Inspection Process	6.2
6.b. Decide Whether to use In-House Inspectors or Contractors	6.5
6.c. Create Checklists, As-Built Certification Forms, and Other Forms Needed for Inspection	6.4, Tool #6
6.d. Forecast Staff Needs & Acquire Inspection Staff or Utilize Existing Staff	Ch. 6
6.e. Provide Training for Inspectors & Contractors	6.5
6.f. Develop Web-based or Other Tracking System to Track Inspections & Enforcement Actions	Ch. 8
7. Develop Maintenance Program	
7.a. Scope Out Maintenance Program	7.3
7.b. Decide on Maintenance Approach & Make Level of Service Policy Decisions	7.4
7.c. Decide Whether to use In-House Inspectors, Contractors, or Rely on Responsible Parties for Maintenance Inspections	Ch. 7
7.d. Decide Whether to use In-House Resources, Contractors, or Responsible Parties for Routine & Structural Maintenance Tasks & Repairs	Ch. 7
7.e. Create Checklists, Inspection Forms, and Enforcement Tools	7.4, Tool #6
7.f. Forecast Staff and Equipment Needs and Acquire Resources	Ch. 7
7.g. Create & Disseminate Outreach Materials for Responsible Parties	7.4 -- 7.6
7.h. Develop Web-based or Other Tracking System to Track Inspections & Enforcement Actions	Ch. 8
8. Track, Evaluate & Monitor Your Program	
8.a. Scope Out Evaluation & Monitoring Tasks	Ch. 8
8.b. Decide on Monitoring Protocols	Ch. 8
8.c. Develop Tracking & Reporting Tools to Track Key Program Elements	Ch. 8

Table 1.9. Program Operation

Program Operation Task	Relevant Guide Section or Tool
4. Stormwater Guidance Manual(s)	

4.o.1. Update the Manuals At Least Every 5 Years	4.14
5. Stormwater Plan Review Process	
5.o.1 Review Stormwater Plans	Ch. 5, Tool #6
6. Inspect Permanent Stormwater BMPs During Construction	
6.o.1. Inspect BMPs During Construction	Ch. 8
7. Maintenance Program	
7.o.1. Inspect BMPs for Maintenance	Ch. 9
7.o.2. Conduct Maintenance Tasks	Ch. 10
8. Track, Evaluate & Monitor Your Program	
8.o.1. Write Annual Reports for Program Compliance & Other Program Reports & Documents	Ch. 8
8.o.2. Maintain the Tracking System	Ch. 8

In order to use this tool effectively, the following steps will be necessary:

1. Gather all existing or proposed expense and revenue data for the stormwater post-construction program. This includes labor costs for the personnel expected to be involved with the program's development or implementation, as well as non-labor costs like computers, vehicles, GIS, GPS, phones, printing, and other items or services.
2. Enter the estimated labor that will be necessary for each subtask. This tool uses the Full Time Equivalent (FTE) as the time unit for measuring labor. One FTE equals one year of labor for a given employee. Note that the subtasks in Phases 1-3 are one-time costs, while the subtasks in Program Operation are annual costs.
3. Enter the cost per FTE based on personnel salary and benefits. This value will not be the same for each subtask, as different personnel (with different salaries and benefits) will likely be assigned to different subtasks.
4. Enter non-labor costs for each subtask in the "Other Program Expenses" column. Again, the subtasks in Phases 1-3 are one-time costs, while the subtasks in Program Operation are annual costs.
5. Use the Potential Revenue Sources column to note where funding for the program may come from.

Once the budget items have been completed for each subtask, the total program development costs (the sum of costs from Phases 1-3) and the annual program operation cost (sum of costs from Program Operation page) will be displayed.

This tool is designed to assist in development of a stormwater post-construction program, but will be an equally effective resource for quantification of existing program costs or developing a wish list of program improvements.