

Phosphorus Control Plan (PCP) Template - Appendix R.1

1 PCP Approach Guidance

Goal: Workflow to create a prioritized list of tools and strategies for your municipality to gain a better understanding of existing capacity, and need for capacity-building, with respect to program development over subsequent Permit terms.

After selecting your PCP Area, determining your Baseline, changes since 2005 due to development, and then quantifying credits from existing structural and non-structural BMPs, you next need to develop a plan moving forward to achieve your PCP goal of reaching your Allowable Phosphorus Load. This Approach Guidance Tool aims to walk you through major factors influencing decisions that shape your PCP, since no two PCPs are likely to be the same.

To start, we first walk you through an inventory of current resources and practices that may be able to play a role in your stormwater management program going forward, if they are not already. This exercise will help you frame opportunities for overlap between achieving Permit compliance and other community goals, such as increasing tree canopy or open space, protecting natural spaces, and adapting to climate change. These co-benefits may eventually factor into BMP prioritizations down the line.

Assessing the tools currently available to your community and where there are resource gaps is critical to developing a path to achieving Permit compliance. Tools can be anything from the staff you have available, to available land to install BMPs, to political will for policy changes that may drive P-reductions. The tools described below are some, but not all, of the tools to consider during your initial assessment. They can be categorized in a variety of ways, but for our planning exercise, we have organized them into four buckets: **Organizational Tools**, **Natural/Infrastructure Assets or Constraints**, **Policy/Social Tools**, and **Economic Development Context**.

Phosphorus Control Plan (PCP) Template - Appendix R.1

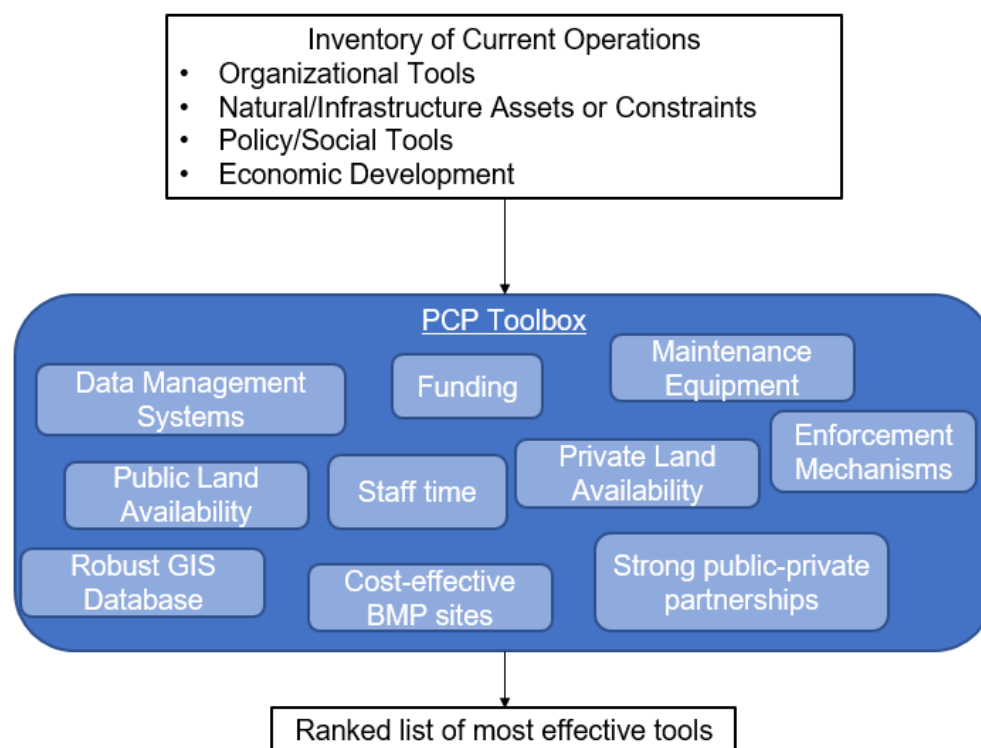


Figure 1. Schematic of Workflow Goals

Perform Inventory

Inventory the current tools at your disposal. Under each category provide quantifiable responses where possible (e.g. number of staff in departments that may undertake the PCP, amount of funding available, etc.). Add any other tools in each category that may be used to develop or implement your PCP.

Example Assessment Criteria – Use this to guide how you build your inventory.

- What is your estimated future stormwater program budget over the next 3-5 years?
- Available equipment, and do you have the capacity to purchase more equipment?
- What existing stormwater-related contracts do you have (non-structural practices, maintenance, planning and design, etc.)?
- Current FTEs available for your municipal stormwater program (i.e. for maintenance, enforcement, inspections, site visits, plan review, education/outreach, etc.)? Across multiple departments including:
 - DPW/Engineering
 - Conservation
 - Parks/Open Space
 - Planning Department
 - Other
- Any existing plans/designs that could be leveraged (open space plans, past subwatershed plans, concept designs, community supported designs, climate action plans, etc.)?
- Have you performed assessments of additional funding sources (Stormwater utility feasibility study, grants, CPA, etc.)?

Phosphorus Control Plan (PCP) Template - Appendix R.1

- Review your legal analysis, what tools are in place or planned to require or incentivize BMPs on private property?
- Review your legal analysis, what data reporting and record-keeping requirements are in place or planned to require or incentivize BMPs on private property?
- Available space (street, public parcels, parking lots, parks, schools, etc.)
- Opportunities for savings (Water Management Act permit compliance, I/I reduction, flood mitigation)
- Technical expertise
 - In House
 - On boards/commissions that provide project review
 - Available for free (MAPC technical assistance, local watershed associations, regional stormwater groups)
- Technical tools (Accurate and up to date GIS data, stormwater system model, Flood Models, BATT, OptiTool, asset management system, BMP installation and tracking spreadsheets)
- Existing /potential public-private partnerships or public-public partnerships (DCR, DCAMM, MassDOT, Army Corps, etc.)
- Town master plan/data on rate of development/redevelopment, upcoming development/redevelopment projects
- Strength of enforcement mechanisms, and capacity to conduct enforcement inspections

Organizational Tools

- Staff Resources: (number, training status, experience, etc.) _____

- Funding Source: (enterprise/utility, general fund, etc.) _____

- IT Infrastructure: (Asset Management System, GIS, database management, BATT, etc.)

- Other _____

Natural/Infrastructure Assets or Constraints

- Equipment Inventory: (street sweeper/type, Vac Trucks, GI maintenance, etc.) _____

- Open Space: (ac. publicly held, privately held, conservation/protection status, etc.)

Phosphorus Control Plan (PCP) Template - Appendix R.1

- Wetland Resources: (ac. Under development constraints, etc.) _____

- Planned capital projects: _____

- Municipally owned land (including buildings, roads and parking lots): _____

- Climate adaptation/resilience actions identified through the MVP process that will have stormwater control benefits: _____

- Other: _____

Policy/Social Tools

- Regulatory Controls (which of these do you have, not any requirements for phosphorus removal):
 - Stormwater ordinance/ bylaw & regulations: _____
 - Local wetlands ordinance/ bylaw & regulations: _____
 - Large project / subdivision review: _____
 - Board of health regulations: _____
 - Other: __________

- Community Support _____

- Complementary Municipal Planning Initiatives and Priorities (i.e. open space plan, master plan, zoning review, climate mitigation and adaptation plans, etc.) _____

Phosphorus Control Plan (PCP) Template - Appendix R.1

Economic Development Context

- Build out status and rate of growth _____

- Land Use (type, conversions, new/redevelopment, etc.) _____

Rank & Prioritize Tools

Populate the table below with the specific items inventoried above. Rank each on a scale of 0-5 to assess the strength of each tool, such that:

- 0 = No available resources
- 1 = Minimal available resources, capacity is very stressed by our current program
- 2 = Some available resources, capacity is not quite enough to meet the needs of our current program
- 3 = Capacity is meeting the needs of our current program
- 4 = Capacity is meeting the needs of our current program and could be expanded
- 5 = Strongly developed tool readily available for near-term PCP implementation

This table will help you to prioritize your tools across each of the categories against each other, documenting the strengths your municipality already has to build this program and where your growth opportunities are. Some items are already filled in to start, but add in as many specific tools as possible.

For example, while the phosphorus reduction benefits of non-structural BMPs can be relatively small, they are widespread and often already a part of a permittee's operations.

Table 1. Ranked Tools

Tool	Ranking	Notes
<i>Staff size</i>	<i>2</i>	<i>Ex: Do not have sufficient staff to maintain BMPs currently, and therefore would need to invest in additional staff if we plan to install significantly more to reach our PCP goals.</i>
<i>Staff Training</i>	<i>4</i>	<i>Ex: Existing staff is well trained on maintaining BMPs</i>

Phosphorus Control Plan (PCP) Template - Appendix R.1

2 Matching Tools to Strategies and Quantifying Benefits

Goal: Develop tailored PCP implementation strategies and program capacity assessment.

The PCP Approach Guidance Tool above detailed the exercise for you to best understand your biggest strengths for potential PCP implementation strategies in the near term and guide growth in the long term. Based on the tools you ranked as highest, select strategies that align and would be easiest to implement in your community immediately.

Examples of high-priority tools, and associated strategies that align with each, are included in Figure 4-1. This is not an exhaustive list, but rather a set of examples meant to help guide strategy selection.

Of course, every municipality will have a different list of tools and strategies, based on the ranked list in the PCP Approach Guidance above. However, the top items in Figure 2– non-structural BMPs and structural BMPs on Town-owned land – tend to be two strategies that are good starting places for any community.

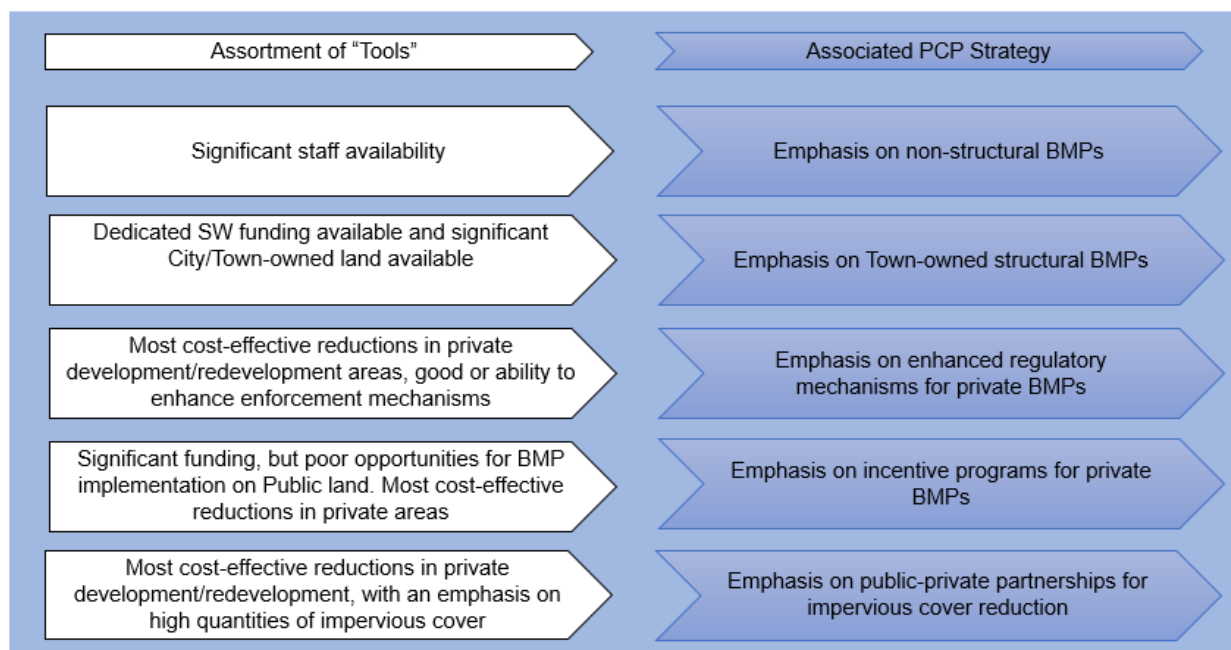


Figure 2. Example Tools and Associated Strategies

As you select strategies, you shall then begin estimating planning level phosphorus credits that can be realized from each strategy. These estimates can be calculated via multiple tools, which are expanded upon below. Continue adding strategies, moving down your ranked list from Table 1, until your planning level analysis illustrates your suite of strategies will achieve your overall PCP target. Be sure to work from the augmented values in reported in your PCP Template and the Calculation Support Worksheets in Appendix R.1, which accounted for actions taken since 2005.

Phosphorus Control Plan (PCP) Template - Appendix R.1

phosphorus loads. This updating of annual loads to current conditions (i.e. calculating Item 2.1) is not static – as development continues to happen, your loads will change. This will move the dial on how much is required to achieve your goal, since the static target is your Allowable Phosphorus Load (Item 1.3). So while this exercise in Table 3 below is meant to chart your entire path, know that significant development and increases in load over the Permit term could create a larger reduction requirement needed to achieve your Allowable Phosphorus Load.

Table 3. Strategy Accounting Table

Tool	Strategy	Estimated P Credit	Notes
<i>Ex. Well trained staff and Town-owned maintenance equipment</i>	<i>Employ enhanced street sweeping program – Monthly</i>	<i>Calculate P credit using Attachment 2 for total area swept.</i>	<i>Assuming monthly was selected because it maximized credit while maintaining an implementable plan.</i>
Keep adding columns above as needed.			
TOTAL P CREDIT		Sum of above columns	

The strategies in Table 3 will directly feed your written Phosphorus Control Plan.