Watershed Protection Standard Toolkit Fact Sheet

What is the Watershed Protection Standard (WPS)?

The WPS is a stormwater design standard that protects and restores water resources. It applies to sites being developed or redeveloped. Under the WPS, sites must be designed to achieve pre-development levels of groundwater recharge, which replenishes aquifers and prevents increases in off-site runoff and pollution. WPS compliance is measured through meeting a required runoff reduction volume, which depends on pre-development hydrologic soil conditions.

Implementing the WPS is practical when designers use smart strategies for site layout and stormwater control measure design. Thus, the WPS also requires an approach to site design that includes the following key strategies:

- Minimize impervious cover.
- Disconnect impervious cover.
- Preserve natural areas.
- Infiltrate wherever possible.
- Manage runoff as close to its source as possible, such that stormwater controls are distributed and natural drainage patterns remain intact.
- Place stormwater controls in soils with the greatest infiltration capacity and place impervious cover in soils with the poorest infiltration capacity.

The WPS offers alternative requirements for sites with conditions that make infiltration infeasible.

Where did the WPS come from?

The WPS was developed through years of research by the Environmental Protection Agency (EPA), which found that each new development project, even when held to current Massachusetts and Rhode Island stormwater design standards, incrementally degrades watershed hydrology and water quality. The research also determined the specific recharge and pollutant reduction values that, if met for a project, would attain pre-development conditions on an average annual basis. These values were determined using long-term continuous simulation modeling based on a 29-year rainfall record and serve as the basis of the WPS.

What is the WPS Toolkit and why was it developed?

The WPS Toolkit is a suite of materials developed to reduce the impacts of development by aiding municipalities, designers and other stakeholders in adopting and implementing the WPS.

The objective of developing the WPS Toolkit was to create resources that:

- motivate municipalities to adopt the WPS,
- demonstrate to stakeholders that meeting the WPS is feasible and practical,
- assist municipal staff in promulgating and implementing the WPS, and
- assist designers in efficiently complying with the WPS.

What resources are included in the WPS Toolkit?

The WPS Toolkit is comprised of five main components:

1. Fact Sheet (this document)
    - Provides a summary of the WPS Toolkit
2. Promotional Handout
    - Explains the WPS, its benefits, and the research behind its development
    - Primarily intended for municipal staff, municipal officials and the public
3. Template Regulatory Language for Adopting the WPS
    - Regulatory language that can be used by municipalities to adopt the WPS, annotated with instructions and context
    - Intended to be incorporated into a municipality's existing regulations or implemented in tandem with a model bylaw and associated regulations, which are also provided.
4. WPS Compliance Checklist
    - Checklist that pairs with the template regulatory language to help a municipal reviewer assess a project's compliance with the WPS
5. Site Examples
    - Real-world site examples that demonstrate site layout and stormwater treatment techniques that bring the site into compliance with the WPS
    - Intended for designers as well as municipal staff
    - Consists of a cover sheet and six 11x17 inch sheets, each displaying a three-dimensional model of a real site design that meets the WPS and annotations to demonstrate how each site meets the WPS.

Who developed the WPS Toolkit?

The WPS Toolkit was developed in 2025 by VHB in close collaboration with the University of New Hampshire Stormwater Center and the Southeast New England Program (SNEP) Network. During toolkit development, the project team was advised by the SNEP Low Impact Development & Nature Based Solutions Strategy Team and representatives from the Massachusetts Department of Environmental Protection and Rhode Island Department of Environmental Management.

The project was funded by the SNEP Network, which is run by the New England Environmental Finance Center. This product has been funded by the United States Environmental Protection Agency under Assistance Agreement [SE-00A01200] to the recipient. The contents of this document do not necessarily reflect the views and policies of the U.S. Environmental Protection Agency, nor does the U.S. EPA endorse trade names or recommend the use of any products, services or enterprises mentioned in this document.