

Using Project Funds for Construction of BMPs at Road-related Sites Guidance for NPS Watershed Projects

Maine Department of Environmental Protection

Applicability: Grantees and DEP staff are expected to apply this guidance during implementation of a NPS Watershed Project. NPS RFP users should consider this guidance when preparing a proposal for a NPS grant.

Purpose: This guidance is intended to help a NPS grantee make the best use of limited NPS grant funds when working on road-related NPS sites. Often a primary goal of a 319-funded NPS watershed implementation project is to stop or reduce sediment delivery to surface waters. During a watershed implementation project, NPS grant funds may be used to help pay for construction of BMPs at road-related NPS sites to reduce sediment delivery to surface waters. This guidance describes how to evaluate road-related NPS sites and determine if NPS project funds can be used to help a landowner pay for construction of road-related BMPs. The evaluation involves:

- Deciding whether a road-related NPS site is a source of sediment likely to reach surface waters; and
- Deciding whether the proposed work will be initial “first time” installation of road-related water quality BMPs and that the work is not normal maintenance and repair.

1. Is the Road-related NPS Site a Source of Sediment Likely to Reach Surface Water?

Estimate whether a specific road-related NPS site is a priority sediment source based on observation of site conditions and the likely path runoff will follow to reach surface water. These are estimates based on best professional judgment.

A. Soil Erosion Potential.

First, evaluate the potential for soil erosion at the site. Is there considerable potential for soil erosion at the site? Considerations:

- Bare exposed soil & soil texture (clay, silt, sand, gravel);
- Slopes or topography of the site;
- Visible signs of erosion: rills, gullies, bank slumping, exposed roots, deposited sediment;
- Look uphill, consider water runoff entering the site.

B. Sediment Delivery Potential.

Then, if there considerable potential for soil erosion at the site, evaluate whether sediment eroded from the site will reach surface water. Estimate the likely path runoff will follow to reach surface water. Given the flow path, will considerable sediment reach surface water or will most sediment be deposited on the land surface before reaching surface water? Considerations:

- Position of the site within the surrounding landscape (topography), proximity of the site to a ditch, channel, intermittent stream, stream or lake;
- Gradient - steep gradient flow path means fast water, sediment delivery is higher; a flat gradient flow path means slow water, sediment delivery is lower;

- Contributing land area, runoff volume - large volume, sediment delivery is higher; low volume, sediment delivery is lower; and
- Sheet Flow or Concentrated Flow. Sheet flow has less energy, sediment may be deposited only a short distance away. Concentrated flow has more energy and may transport sediment long distances.

C. NPS Watershed Survey Report.

NPS watershed survey report findings provide a reliable list of NPS sites that surveyors concluded were a source of sediment likely to reach surface water. However, conditions at a NPS site may change considerably after completion of a watershed survey.

Therefore, one should reconfirm the NPS site is a sediment source before committing to fix the site and working with the landowner to design and install BMPs. Also note, new priority NPS sites may come to your attention after the watershed survey.

2. Is This the “First Time” Installation of Needed Road-related BMPs?

A. Landowner Responsibility for Normal Maintenance & Repair

Project funds (grant or match) can not be used to pay for normal maintenance and repair. It is the responsibility of a landowner or road association to maintain a road or road-related water quality BMPs. Normal maintenance & repair means activities regularly conducted to maintain, repair, or restore a road to an acceptable condition. Road components include the road surface, sub-base, shoulders, cross culverts, ditches and stream crossings.

B. Use of NPS Project Funds

Project funds may only be used to help pay for installation of road-related BMPs when:

1. It is likely that sediment from the road-related NPS site can reach surface water;
2. The work involves initial “first time” installation of the road-related BMPs; and
3. The road association or landowner must agree in writing to maintain the installed BMPs.

C. Considerations:

Grantees should exercise their best professional judgment to consider:

1. Whether the landowner(s): reasonably maintained their road in recent years; and is likely to make a good faith effort to maintain the road in future years;
2. Using the most durable, long lasting, low maintenance BMPs; and
3. Working with an established road association, if road is privately owned.

3. Use of NPS Project Funds for Technical Assistance at Road-related NPS Sites

NPS grant funded staff may provide technical services to help landowners maintain, repair or improve roads and road-related BMPs to reduce sediment delivery to surface waters. Technical services include, but are not limited to: prepare road maintenance plans, develop road associations; recommend BMPs for sites; prepare design plans to install BMPs; oversee construction or monitor the condition of BMPs.

4. Examples – Road-related NPS Sites & Use of Funds

This guidance advises that project funds (grant or match):

- may be used to help pay for construction of BMPs at road-related NPS sites to reduce sediment delivery to surface waters; and
- may not be used to pay for normal maintenance and repair of a road or existing road-related BMPs.

The table provides several examples to help grantees and DEP staff decide if NPS project funds may be used. This is guidance, not mandatory rules. The evaluation of a site involves considerable professional judgment. DEP acknowledges at times, this will not be a clear black and white decision.

Examples		
Road Feature	Normal Maintenance & Repair May Not Use Project Funds	May Use Project Funds
Road Surface or Road Base	Replace or repair pavement	Install pavement or other road surface material on gravel road when it will stop chronic and severe erosion of the road surface.
	Adding gravel to maintain a road surface	Improve road segment with inadequate road base or road surface to manage drainage, such as, stabilize the road base, elevate the road and install a crowned road surface.
	Grading to maintain a crowned or super-elevated road surface & shoulders	Grading for first time installation of a crowned or super-elevated road surface.
	Replace a broad-based dip, water bar, rubber razor bar, or open-top culvert across a road surface.	Install a broad-based dip, water bar, rubber razor bar or open-top culvert at a new location across a road surface. Replace an open-top culvert with broad-based dip, water bar or rubber razor bar.
Ditches	Grading to maintain or rebuild existing ditches	Create a new ditch or substantially reshape a ditch and installation of a durable ditch lining (riprap or vegetation)
	Cleanout, remove accumulated sediment, winter sand & debris	First time installation of a durable ditch lining (riprap or vegetation)
	Cleaning or reshaping of existing ditch turnout	New ditch turnout to buffers or significant improvement to existing ditch turnout
	Replace existing check dams in a ditch	Install check dams at new locations in a ditch
Cut Slopes or Fill Slopes	Repair existing cut slopes or fill slopes.	Substantial grading and first time installation of erosion control BMPs to stabilize cut or fill slopes.
Cross Culvert	Replace an existing cross culvert for cross-drainage	Install a cross culvert or a rock sandwich at new locations. Increase the diameter or length of an existing inadequate cross culvert.
	Replace inlet and outlet protection BMPs	First time installation of inlet and outlet protection BMPs
Stream Crossing	Replace a deteriorated stream crossing because the culvert or bridge has aged beyond its service life.	Improve a stream crossing by increasing the size and/or alignment of an undersized culvert or bridge to handle storm flows & provide for passage of fish & other aquatic life.