

Erosion and Sedimentation

Erosion and Sedimentation is a natural process, but can be accelerated when land is disturbed during development, forestry, agricultural and mining activities. Erosion can result in the release of soil nutrients that can result in algal blooms, water plant proliferation and accelerate eutrophication. Eroded soil, suspended in water and deposited can destroy plant and animal habitat and degrade water quality. Studies have shown direct relationships between these conditions and a loss in property values. Also affects flood control ability of streams, lakes.

Current Strategies	Recommended Strategies	Rationale & Information
<p><u>Meredith</u></p> <ul style="list-style-type: none"> ▪ E & S Ordinance adopted in 1984 <ul style="list-style-type: none"> - applies to all “earth disturbing” activities - Requires a plan at various thresholds and conditions. - Uses County Conservation District and US Soil Conservation Service (now NRCS) as technical guide ▪ Use NH DES Stormwater Manual as a guide (revised in 2008) ▪ Can require construction inspector. ▪ Require performance guarantee ▪ Require pre-construction conference 	<ul style="list-style-type: none"> ▪ Integrate E & S with stormwater, wetland, and steep slopes regulations. ▪ Improve construction inspection and requirements for construction sequencing. ▪ Require formal development agreements ▪ Develop thresholds for off site water quality impacts ▪ Expand ordinance to include logging ▪ Consider different standards for temporary erosion control plan ▪ Include Low Impact Development Techniques 	<ul style="list-style-type: none"> ▪ Some water quality trends influenced by erosion. ▪ Flushing rate of receiving body can help or hurt. ▪ Site development and lot conversion identified as two of seven major NPS issues. ▪ Site development #2 priority risk in the watershed ▪ Current ordinance doesn't differentiate between temporary & permanent erosion controls ▪ Recently experienced clear cut (logging) of large lot and couldn't apply ordinance
<p><u>Gilford</u></p> <ul style="list-style-type: none"> ▪ E&S Plan required under certain conditions. ▪ Includes plan evaluation criteria ▪ Allows for Conservation Commission review ▪ Subject to surety requirements ▪ Special regulations for elevations greater than 1300' with slopes greater than 15% ▪ Applies to all ‘construction’ on the land, including driveways, streets, and roads. 	<ul style="list-style-type: none"> ▪ Move the E&S control plan from part of the Site Plan and Subdivision Regulations to a Zoning ordinance ▪ Review thresholds & conditions requirements ▪ Incorporate Low Impact Development Techniques ▪ Vegetative Buffers 	<ul style="list-style-type: none"> ▪ Strengthen plan by putting under Ordinance ▪ Lowe's site only one recently that had E&S Plan and that site still had problems ▪ Stormwater Protection Plan (SWPP)

Erosion and Sedimentation

Current Strategies	Recommended Strategies	Rationale & Information
<p><u>Laconia</u></p> <ul style="list-style-type: none">▪ E & S Ordinance updated 2001▪ Uses NH Stormwater Manual as a standard manual▪ Applies to all construction and development activities.▪ Requires a plan at various thresholds with conditions.▪ Can require construction inspector: <i>professional erosion control inspector paid for by applicant. This is a practice, not in the ordinance.</i>▪ Use of Conditions of Approval and Maintenance Agreements.▪ City Staff conduct site inspections▪ Require site security.	<ul style="list-style-type: none">▪ Tighten up construction sequencing and inspection.▪ Work w/DES to adopt more state of the art stormwater technology▪ Draft and implement a steep slope ordinance▪ Send out proactive reminder letters to developers▪ Incorporate Low Impact Development Techniques into Zoning and Regulations.▪ Require pre-construction meetings (do on some, but should do so with most). Require developer and DPW to sign off	<ul style="list-style-type: none">▪ NH Stormwater Manual updated in 2008. Engineers rely heavily on this. Legally, the ordinance says must be in compliance with NH DES Stormwater Manual.▪ At slopes 15-25% significant problems can occur