



Winter Is Coming...Time to Button Up!

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An ounce of prevention is worth a pound of cure. Nowhere is this more true than in preparing construction sites for a New England winter and the following spring. While soils on most sites freeze solid during the cold months, spring snowmelt can trigger significant erosion issues. Establishing vegetative cover is a key means of insuring stable soils.

Due to a short growing season, specifications for permanent seed mixes typically suggest planting by August 15. Even temporary seed covers suggest planting by September 15. Unfortunately, in preparation for winter, many projects focus on closing buildings and paving roads rather than stabilizing slopes. After these dates, contractors need to switch to cold tolerant seed mixes with high annual rye content. Winter rye is also an option. Although

these are quick-germinating seed mixes, there remains a possibility that there will not be sufficient growth to protect the soils. Sufficient mulch must also be used. This can be hay (2-3 tons/acre) that is properly anchored, either by machine tracking or by use of a tackifier. Erosion control blankets can also provide an adequate cover for steeper slopes.

Areas where water concentrates will require either a heavy-duty blanket, turf reinforcement mat or riprap. In addition, stone check dams are a critical feature in reducing the velocity and erosive power of water.

Finally, consider replacing all aged silt fence and hay bales with fresh perimeter controls. This is especially critical because during the spring when the snow is melting and mud is forming, it is often too wet to

install new controls where needed.

Visit the Environmental Protection Agency's National Pollution Discharge Elimination System for more stormwater and BMP information:

www.epa.gov/npdes



Proper stabilization prior to the onset of winter helps avoid issues during spring snowmelt.

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Changes to Alteration of Terrain Rules

Proposed changes to the Alteration of Terrain Rules (also known as "Site Specific") have come under review by the Associated General Contractors of New Hampshire and the Home Builders & Remodelers Association of New Hampshire. Concerns of both or-

ganizations include the potential of increased time for permit review, added costs for preparing an application and the overlapping authorities of the Site Specific Bureau with other bureaus in the New Hampshire Department of Environmental Services. The

proposed expansion of the rules from protecting surface water quality to also protecting ground water quality has led to the necessity of setbacks from water supply sources, source control plans and infiltration testing. These issues will need to be resolved before the rules will be implemented.



Indirect project impacts such as habitat fragmentation are experiencing greater scrutiny at the federal level.

“GES has recently seen an increase in federal requests for specific documentation regarding these resources—even in projects that accrue less than 3,000 square feet of wetland impact..”

Federal Regulators Intensify Permit Oversight

The federal review team has streamlined their review and comment process for wetland permitting projects. Each month, the review team, consisting of USACE, EPA, USFWS and NMFS, meet at NH DES to review all projects under their jurisdiction. As individual environmental concerns come into the spotlight (i.e. vernal pools, habitat fragmentation, indirect impacts, etc.) federal regulators are bringing the agencies together and recording their comments in a new memorandum put on record in the applicants file. GES has found that this new process has several implications for our clients: 1) it speeds the federal comment

review period and 2) it results in a more detailed review of projects with smaller wetland impact.

The internal comment form consolidates the agencies’ remarks so each group can easily cross-reference their comments with that of another agency. Overall, this appears to result in faster review of small projects by the federal agencies. However, this process has resulted in a need to provide more detail during baseline documentation of projects in anticipation of heightened federal scrutiny.

This elevated scrutiny is manifested in more questions about concerns such as vernal pools,

habitat fragmentation and indirect wetland impacts. In the past, these concerns have typically been associated with the individual review process designated for large projects. However, GES has recently noted an increase in requests for specific documentation regarding these resources—even in projects that accrue less than 3,000 square feet of wetland impact. In light of this, GES has implemented a new baseline documentation protocol and now makes clients aware that a more detailed environmental assessment will likely be asked of them during the federal comment period, even for projects falling under the State Programmatic General Permit (SPGP).

PROJECT SPOTLIGHT Cumulative and Indirect Impacts Result in Positive Compromise

A recent case study illustrates the effect that new federal scrutiny of wetland applications and state awareness of cumulative impacts is having throughout New Hampshire on projects with small wetland impacts. Waterford Development, a Massachusetts-based developer of notable residential complexes, retained GES to guide a 487-unit project located in Manchester through the wetland permitting process. Despite significant efforts to avoid and minimize wetland impacts (2,903 square feet), a Minimum Impact Expedited Dredge and Fill Application was rejected by the NHDES Wetlands Bureau based on concerns surrounding cumulative impacts resulting from past activities adjacent the project site by different development groups. Additionally, due to concerns regarding nearby conservation lands and potential indirect impacts to vernal pools, the project was subjected to additional scru-

tiny by the EPA and Army Corps of Engineers; unusual activity for a project with minimal wetland impact.



An innovative plan to avoid purple loosestrife establishment proved instrumental in obtaining a wetland permit

GES worked closely with the EPA, Army Corps and Waterford Development to document the location of sensi-

tive natural resources on the project site and to create a buffer plan that protected vernal pools while still allowing project goals to be achieved. Additionally, an onsite invasive species management plan was developed to satisfy the concerns on conservation land management groups. Through negotiations, Gove Environmental Services was able to release the project from cumulative and indirect impact concerns through a voluntary mitigation donation to The Nature Conservancy. Ultimately, the project was permitted without loss of any proposed units or significant engineering modifications.

Project managers should be aware, however, that this oversight is becoming more common. Taking steps to avoid cumulative and indirect impacts will streamline both the federal and state wetland permitting process for projects of all sizes.

Invasive Species Emerge as Threat to Mitigation

Invasive plants are particularly well adapted to aggressively colonize and dominate disturbed areas where the natural plant community may have been removed. This presents a serious problem to land managers who try to create, restore or maintain native plant communities in mitigation, restoration or conservation areas.

The Invasive Plant Atlas of New England (www.IPANE.org) offers up-to-date information on invasive plant biology and management. GES can help assess invasive plant problems, develop management plans, recommend licensed professionals for control, and perform cost analyses. Invasive plant man-

agement usually requires a combination of mechanical, chemical and biological control methods as well as monitoring to create and maintain a native plant community. So, whatever interest you have in confronting this "alien invasion", we want to be a part of your solution. Eric Fontaine (ext. 13) runs this program at GES.

Invasive species can present a serious threat to land managers attempting to maintain native plant communities within mitigation areas.

2006 INTERNATIONAL ANNUAL MEETINGS SOIL SCIENCE SOCIETY OF AMERICA

James Gove, President of GES, will present an oral paper at the 2006 International Annual Meetings of the Soil Science Society of America in Indiana. He will speak on the history and application of High Intensity Soil Surveys in New Hampshire. His presentation is part of a daylong session: "Symposium – High Intensity Soil Surveys". The session will include several authors from around the country who are either developing standards for HISS mapping or are using HISS maps to make land use decisions. Mr. Gove will also take part in the panel discussion at the end of the session.

Stream Assessments Identify Threats to Water Quality

Increased rates of stormwater runoff associated with commercial and residential development in New Hampshire pose threats to the ecological health of the region's streams.

Gove Environmental Services, Inc, in conjunction with the New Hampshire Department of Environmental Services Watershed Management Bureau, performs water quality sampling and analyses of the chemical health of streams. In addition, GES also conducts biomonitoring, including collection and identification of stream organisms, to evaluate overall stream health. Once this data is collected and analyzed, GES consults with

clients to remediate existing and potential threats to streams through the implementation of appropriate BMP's including erosion and sedimentation control techniques and alternatives to chemical fertilizers.

Late spring to early fall is the ideal time for water quality monitoring while mid-summer to early fall provides an opportune window for biomonitoring. Winter is the ideal season for communities to begin determining candidate streams for ecological assessment during the 2007 field season.

Luke Hurley (ext. 14) coordinates the comprehensive stream monitoring program at GES.



Stream invertebrate surveys can provide an accurate analysis of the chemical and physical threats that are impacting water quality in NH communities.

Staff Biography— Jeff Cantara

Jeff Cantara has been working as a Wetland and Wildlife Ecologist, GIS Coordinator and Project Manager with Gove Environmental Services for five years. Prior to joining GES, his travels as a biologist took him to the wilds of Alaska, Oregon, Washington and Montana. At GES, Jeff works to facilitate issues asso-

ciated with major wetland impact projects at both the federal and state level through GIS analysis. "GIS is a tool with a vast power for remotely analyzing numerous parcels with regard to natural resources and development or conservation potential" notes Cantara. He also performs intensive wildlife inventories

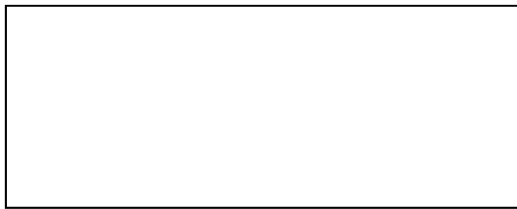
and impact assessments in the field. Mr. Cantara is also a Certified Professional in Erosion and Sediment Control and conducts construction inspections throughout New England. Jeff loves the outdoors and is an avid hunter and salt-water fly fisherman. He also owns and operates a large organic farm with his wife. "I like to stay busy" he laughs.





Visit GES online at
www.gesinc.biz

Focused on Diligence, Responsiveness and Quality



GES is an environmental consulting firm based in Exeter, in the heart of the seacoast area of New Hampshire. Our projects emanate in an approximately 200-mile radius from the central office, from New Hampshire to Maine through to Vermont and Massachusetts. We are also proud to announce the recent opening of our satellite office in Concord, New Hampshire.

GES utilizes classic and innovative field and technological analysis to assist clients ranging from home owners to large municipalities and school administrative units, from small surveying firms to large multinational corporations, and from regulatory officials and management bodies to those seeking regulatory and legal relief, among other entities.

Our purpose is to assist with and advance the highest quality balance between development and surrounding ecosystems, particularly wetlands, and to do so in both a cost-effective and beneficial manner to all.

GES Announces New Office Locations

Gove Environmental Services, Inc. has moved to a new location in the Exeter Business Park. Our new office is easily accessible using Exit 9 on NH Route 101. Our new address is:

**Gove Environmental Services
8 Continental Drive, Unit H
Exeter NH 03833- 7507**

Our phone numbers, fax number and e-mail addresses have not changed.

On November 1st, our Concord office will be relocated to the Concord Center to better serve our clients. The new address is:

**Gove Environmental Services
10 Ferry Street, Unit 420A
Concord NH 03301**

We look forward to serving you from our new facilities.

Quick Answers to Common Permitting Questions

Question: If a project impacts wetlands that are contiguous to Prime Wetlands in a neighboring town (not the town where the work is being implemented), is the applicant required to adhere to Prime Wetland rules?

Answer: No. The Prime Wetland rules are based on local zoning regulations and local zoning regulations do not cross political boundaries.

Question: What changes are occurring with regard to vernal pool regulations in Maine?

Answer: The Maine legislature recently enacted new rules covering significant wildlife habitat. Beginning on September 1, 2007, vernal pools meeting certain criteria based on amphibian and invertebrate abundance will be subject to a 250-foot "no disturbance" buffer. Implications for pending projects are under review by attorneys at this time.

What We Do

- Wetland Delineation and Permitting
- HISS and Site Specific Soil Mapping and Analysis
- Environmental Design
- Wetland Restoration and Mitigation
- GIS Analysis
- Wildlife and EIA Assessments
- Stormwater, Sediment and Erosion Control
- Construction Monitoring
- Municipal Review