Environmental Protection

Environmentally Efficient Stormwater Solutions

What: Generally, stormwater practices are designed to provide treatment for the wide range of pollutants found in stormwater, including sediment, nutrients like phosphorous and nitrogen, metals, and the overall volume of water. While these practices provide broad benefits for water quality, there are certain designs that are best suited when targeting specific pollutants. Put another way, the techniques that will provide the greatest reductions of phosphorus in stormwater are different from those best able to reduce nitrogen or control volume. For example, to reduce phosphorus, infrastructure is needed to capture and slow water so that it soaks into the soil; to reduce nitrogen, a different suite of techniques, such as gravel wetlands, perform best.

Why: The total maximum daily load ("TMDL") program recognizes that every watershed faces a unique set of pollution problems, requiring the development of pollutant-specific budgets. Retrofitting existing development with stormwater controls is more complicated and expensive than incorporating stormwater treatment practices into new development or planned redevelopment. It is also clear, however, that retrofitting existing parcels where stormwater is currently unmanaged is an essential component of achieving our clean water goals. Stormwater treatment practices should be tailored to address the specific pollutants of concern in a watershed.

In Vermont, the pollutant of concern in many of our lakes – including Champlain, Memphremagog and Carmi – is phosphorus. Yet, in areas on eastern-side of Vermont, where water drains to the Connecticut River and ultimately into Long Island Sound, the primary pollutant of concern is nitrogen. These two regions require different stormwater treatment practices to effectively address the different nutrient pollutants. Vermont's Clean Water Act (Act 64) does not currently distinguish between the stormwater strategies that are best suited to target phosphorous-reduction needed in the Lake Champlain and Lake Memphremagog watersheds from the nitrogen-reduction strategies critical in the Connecticut River watershed.

How: The ability to prioritize pollutant-specific strategies is essential. Statutory change is needed to support environmentally-sound, cost-effective implementation of stormwater treatment on large sites built prior to 2002. These sites had previously been "grandfathered" under state regulations.

The Administration supports legislative changes that target phosphorous-reduction strategies in the Lake Champlain and Lake Memphremagog watersheds. If enacted this session, these changes will not affect the timing of implementation of stormwater retrofit projects. Further, the Administration is recommending tying stormwater management work in the Connecticut River watershed to the issuance of the TMDL that the U.S. Environmental Protection Agency is currently developing for the Connecticut River basin and Long Island Sound. This will ensure investments in stormwater retrofit practices are consistent with pollutant-specific goals for these waterways, once established.