DRAFT ANNUAL STORMWATER MANAGEMENT REPORT Town of Lewisboro SPDES # NYR20A227 June 1, 2004

Executive Summary:

Phosphorous is the biggest stormwater pollutant in Lewisboro. Failing septics and overuse of lawn fertilizer are the main sources of this phosphorous pollution.

Phosphorous has led to the eutrophication of the Croton, Titicus and Muscoot Reservoirs, as well as our own Lakes Truesdale, Waccabuc, Rippowam and Oscaleta.

Septic system failure can be prevented with routine maintenance. This is critical in Lewisboro because most of our homes rely on septic systems. Over-use of lawn fertilizers can be reduced through education of our residents. Wetland buffers can help reduce phosphorous pollution by allowing nature to filter out phosphorous and other pollutants. Regular cleaning of catch basins allows the basins to trap the roadside run-off that carries phosphorous, nitrates, and sedimentation. These simple, inexpensive measures are the basis of our stormwater management program. If implemented, they will result in cleaner water for our residents.

The highlight of our year ending March 9, 2004 was the passing of the 150-foot wetland buffer ordinance. This will ensure that our wetlands and buffers will be protected, allowing them to continue to filter water pollutants. 111 acres of watershed land in the center of Lewisboro, including two streams and wetlands, were also preserved this past year. Water quality studies of two lakes were also completed. All our storm drains were mapped, and all basins in the lake communities were cleaned.

Minimum Measure 1: Public Education

A. Narrative Overview:

One third of Lewisboro residents live in lake communities and most residents rely on individual wells and septic systems. Because of this, residents are already very aware of water issues. In fact, a survey done in 2003 found that water quality was the third most important issue facing Lewisboro residents, ranking just after taxes and over-development.

B. Implementation of Best Management Practices:

Our Stormwater Management Plan's goal for year one was the selection of pamphlets on water issues to be used for future mailings, this has been done.

Additionally, an article on our stormwater management plan was published in the local paper. The Three Lakes newsletter covered our stormwater management plan, the lake study, maintenance of septic systems, formation of septic management districts and open space preservation tools. The Three Lakes and the Lake Truesdale studies were completed, released, and the subject or several public meetings. Water conservation tips were mailed to residents. Public hearings were held on our 150 foot wetland law. The Lewisboro Land Trust lectured on native plants and organic lawns. A Smart Growth conference was held at the High School. A workshop on conservation easements was held at the library. Fairs featured displays by DEP, Riverkeeper and the Lewisboro Land Trust on water issues. Students attended Federated Conservationists of Westchester County's Earth Day Summit and FCWC's stormwater conference.

C. Activities Planned for Upcoming Year:

Selected pamphlets will be mailed to residents and put on the town's web-site. The Three Lakes newsletter will report on recommendations to clean up the lake, wetland issues, storm drain maintenance, road salt reduction, development, and septic repair.

The new town television station will play taped presentations of last year's lake meetings and conservation easement workshops. The new Bedford Audubon headquarters will be opened with educational materials on conservation.

Minimum Measure 2: Public Participation

A. Narrative Overview:

All town meetings concerning stormwater management are properly noticed and held in ADA compliant meeting rooms.

Jim Nordgren remains the contact person for stormwater management. 914 763-3151, Box 500, South Salem, NY 10590.

B. Implementation of Best Management Practices:

Roadside clean-ups continued, done by the Lions Club and the Rangers. An article on the stormwater management plan appeared in the local paper.

Additionally, Bedford Audubon Society sponsored a stream-monitoring program. The town re-instituted Arbor Day, planting two trees. The CAC and Town Board participated in the reforestation of the Town Park with the help of the Watershed Agriculture Council. WAC also did tree surveys and helped educate residents about the value of trees. A survey on water quality issues was also done.

C. Activities Planned for Upcoming Year:

Groups will be formed to monitor stormwater pollution. The highway superintendent, wetlands inspector, and building inspectors have attended seminars on stormwater management and are doing their own monitoring in town. These town employees can be the leaders of a citizens' monitoring group.

Minimum Measure 3: Illicit Discharge Detection and Elimination

A. Narrative Overview:

The storm drain mapping study was completed and put on GIS.

B. Implementation of Best Management Practices:

The Trout Unlimited study was referenced, and the illicit discharge identified in the report, Cross River Plaza, was reported and is being corrected.

Additionally, DEP used cameras to study storm drains. We hope these results are shared with the town. Water testing was done as part of the two lake studies and as part of the Bedford Audubon study. Septic maintenance programs were required as part of wetland permits. Now, twenty homes around the lakes are on an annual septic inspection and maintenance program. WAC is doing a study on Echo Farm to control erosion. The town cleaned out several basins that had been clogged at Echo Farm. The highway department and wetland inspector began three stormwater enforcement actions. A felony charge was brought for illegal clear-cutting of trees in the town park. The Town Clerk publicized household clean-up days.

C. Activities Planned for Upcoming Year:

A mailing on septic maintenance will be drafted.

Minimum Measure 4: Construction Site Stormwater Runoff Control

A. Narrative Overview:

The Lewisboro Planning Board requires that all subdivisions have stormwater pollution prevention plans as part of their erosion and sediment control practices. The town engineer approves these plans.

B. Implementation of Best Management Practices:

Erosion and sediment control ordinances have been studied.

C. Activities Planned for Upcoming Year:

An erosion and sediment control ordinance will be drafted. Monitoring groups will be formalized, led by the wetlands' inspector, highway superintendent and the building inspectors. A steep slope ordinance has been drafted, regulating slopes of 15% or more.

Minimum Measure 5: Post-Construction Stormwater Management

A. Narrative Overview:

Post-construction stormwater management may provide the best opportunity to address Lewisboro's pollution problems because 20% of the town is still vacant and therefore is subject to the pressure of development. By using these post-construction stormwater management tools, the town's remaining open space can be developed in an environmentally sensitive manner.

An ecosysystem becomes impaired when impervious surfaces reach 10% of a region's surface area. Impervious surfaces in the Cross River, Muscoot and Titicus watersheds are still below this threshold, ranging from 5% to 7% of surface area. If new impervious surfaces can be kept to a minimum, natural conditions can filter much of the stormwater pollutants before they enter the water system.

B. Implementation of Best Management Practices:

The town passed the new wetland ordinance, regulating a 150 foot wetland buffer.

Additionally, the town also recommended that a steep slope ordinance be drafted, which the Planning Board is now doing. The town also held a public hearing on zoning changes that will exclude 15% slopes from the buildable area calculation, add impervious structures such as sidewalks, patios and terraces to the site coverage calculation, and require that septics and buildings be built only in the buildable area of a lot. The CAC is being encouraged to make recommendations on any zoning variance applications that may have an environmental impact. The town preserved 111 acres of sensitive watershed land. Twenty homes by wetlands now have deed restricted vegetative buffers.

C. Activities Planned for Upcoming Year:

The CAC is finishing the Open Space Inventory, which the Town Board can then adopt.

Additionally, the town has received funding from DEP to acquire 383 acres of open space around Lake Kitchawan and 15 acres of open space along the Cross River. These acquisitions should close this year. Another 145 acres by the Muscoot Reservoir will be preserved through the subdivision of five lots this year. Lewisboro is meeting with neighboring towns Pound Ridge and North Salem and the Wildlife Conservation Society to

change zoning to protect wildlife habitat, including wetlands, in the Eastern Westchester Biotic Corridor.

Minimum Measure 6: Pollution Prevention/Good Housekeeping

A. Narrative Overview:

Our highway superintendent and foreman, our two building inspectors and our wetland inspector all attended the County's two-day seminar on Phase II stormwater control.

B. Implementation of Best Management Practices:

Training material has been compiled for town employees from these seminars.

Additionally, all storm drains in the lake communities have been cleaned this year. The town bought a street sweeper and has been using it this spring. The highway department was successful in reducing road salt usage by 33% this winter. Two 'stormceptors' have been installed by lake inlets; a third is being put in this year. The highway department garage erosion has been repaired, testing of highway garage stormwater is planned. Town triangles and fields at Onatru Farm Park and other town facilities are being naturalized to provide a better buffer and reduce maintenance. Dirt roads have been stabilized. Vegetative swales are now being used by our highway department.

C. Activities Planned for Upcoming Year:

Most of the goals for pollution prevention/good housekeeping have been met.

Monitoring and Modeling Results:

Since we are only one year into our five-year plan, monitoring so far is limited to qualitative observations. On that scale, we are well ahead of our plan, and perhaps ahead of our five-year plan.

Summary of Funding:

DEP has pledged \$1,000,000 to fund the acquisition of 383 acres of watershed land in 2004. New York State DEC and Westchester County each provided \$1,000,000 in funding in 2003 to preserve 111 acres of watershed land.