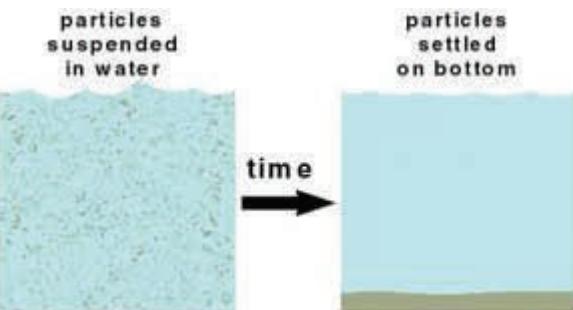


The Problem

Greenwood Lake is has been identified as being "impaired" by the New Jersey Department of Environmental Protection and the New York Department of Environmental Conservation, primarily due to an overload of nutrients. The lake contains an excessive amount of organic rich fine sediment. It has been discovered that several feet of sediment has accumulated in the lake since its creation in 1836, over 150 years ago. This sediment has been transported into the lake from the surrounding watershed.



How This Happened

The process of **Sedimentation** occurs when **Stormwater Runoff** (excess rainwater that has not seeped into the soil after a significant storm) breaks up soil and causes individual soil particles to detach or erode. These soil particles, along with any chemicals or nutrients such as phosphorus, are then deposited into your lakes and streams.

For questions and comments
please visit our website at
www.gwlc.org
Or write or call

**The Greenwood Lake
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The Dredging of Greenwood Lake



**An Important Step
Toward
The Enhancement
Of Your Beautiful
Lake**

Dredging : To dig out loose, excess sediment (sand, silt, mud etc.) from the lake bottom

Effects of Sedimentation

Aesthetic

Greenwood Lake is often cloudy and brown due to sediments deposited into the lake. Sediments are re-suspended during certain seasons and give the lake a very cloudy appearance. As time passes, the lake becomes more and more unappealing.

Water Quality

Chemicals and nutrients such as phosphorus and nitrogen from fertilizer and septic runoff adhere to soil particles and create water quality problems when they are deposited into the lake. Excessive nutrients stimulate the growth of aquatic plants and algae. This is currently being experienced by Greenwood Lake

Ecological

Increased sediments will significantly alter the ecological balance of the lake. Sediments clog fish gills and smother fish eggs and other forms of aquatic life. They also reduce the amount of sunlight penetrating lakes. This affects water temperature and other processes as well.

Dredging will benefit those living and enjoying recreational activities on Greenwood Lake. It will also improve the ecology and fish habitat of this popular resource.

This will be accomplished in several ways...

Increase the depth of the lake, thereby improving boating and other recreational opportunities

- Water depths range from 4 to 7 feet in proposed dredging locations
- Increase these depths to around 10 feet

Restore overall storage capacity of Greenwood Lake

- Water supply
- Flood control
- Increase of over 200 million gallons than what it is today

Provide a tangible benefit to the water quality and supplies of downstream reservoirs

- Wanaque River
- Wanaque Reservoir
- Monksville Reservoir
- 3.5 million people served

Reduce the amount of sediments as well as the nutrients and chemicals attached to the sediments

Facilitate potential flood control measures

Remove rooted nuisance aquatic plants along with sediments

