Low Impact Silt Removal
What Is Silt?
What do you call it?

- Silt
- Slime
- Mud
- Sludge
- Mire
- Sediment
- Muck
Sediment/Silt From Construction
30 Years of Organic Deposits
Sediment/Silt Deposits
Poor Water Quality
Typical Problems with using ordinary excavation equipment to do maintenance sediment removal from ponds and basins:

- Site Accessibility for Heavy Equipment
- Area Needs to be Dewatered
- Bottom Damage Can Occur if Not Dewatered When Working in the Blind
- Rainy Weather Stops Work
- Material Removal Messy
- Not Friendly to Aquatic Life
Traditional Sediment Removal
Traditional Sediment Removal
Low Impact Silt Removal

Sediment Removal For Maintenance of:
- Lakes, Ponds, Reservoirs
- Coves & Inlets
- PVC, Rubber or Clay Lined Ponds
- Canals & Channels
- Marinas & Docks
- Golf Course Ponds
Low Impact Silt Removal

Mini Dredge Solution
Low Impact Silt Removal

Easily Accessible to Confined Area
Low Impact Silt Removal

No Need for Dewatering Lake or Pond
Low Impact Silt Removal

Immediate Results
Low Impact Silt Removal

Fish Remain in Lake
Low Impact Silt Removal

Sediment Containment
Polymers

- Many different types
- Classified by the Affect on Partial Charge, Molecular Weight or Molecular Configuration
- Charges Cationic, Anionic and Non-Ionic
- High, Middle, or Low Molecular Weight
- *Organic or Metallic*
- *Matched to the type of Material to be Removed*
- *Typically 1-30 mg/l*
- *Allows for a 2 to 1 – 5 to 1 reduction in material*
Cross Section of Bag
Geotextile Tube Placement
Geotextile Tube Placement
Geotextile Tube Placement
Geotextile Tube Placement
Industrial Application
Clean Water Returns to Waterway
Clean Water Returns to Waterway
Silt Volume Reduction
Consolidated Material Removal
Low Impact Silt Removal
Onsite Use of Material
In Place Silt Disposal

Once dredging is completed redistribute soil stock piles over collection bags - bags to remain in-place. All disturbed areas to be graded smooth and re-seeded.
Reservoir Project
Reservoir Project

Profile of Dredge Pump Line from Collection Bag Location to Normal Pool 650+’ Long and 40+’ of Elevation Change
Reservoir Project
Ohio River Landing Project
Low Impact Silt Removal

Benefits of Mini Dredge System

- Accessibility / Versatility
- Minimal Restoration
- No Dewatering of Lake or Pond
- Immediate Results
- Sediment Containment & Reduction In Volume
- Maintains Water Quality
- More Environmentally Friendly
- Reduction in Carbon Footprint
Low Impact Silt Removal

QUESTIONS?