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Milfoil: Man's Best Friend

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Milfoil: Man's Best Friend



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Kevin McCullough, Kenny Murray, Cara Worcester*



Location



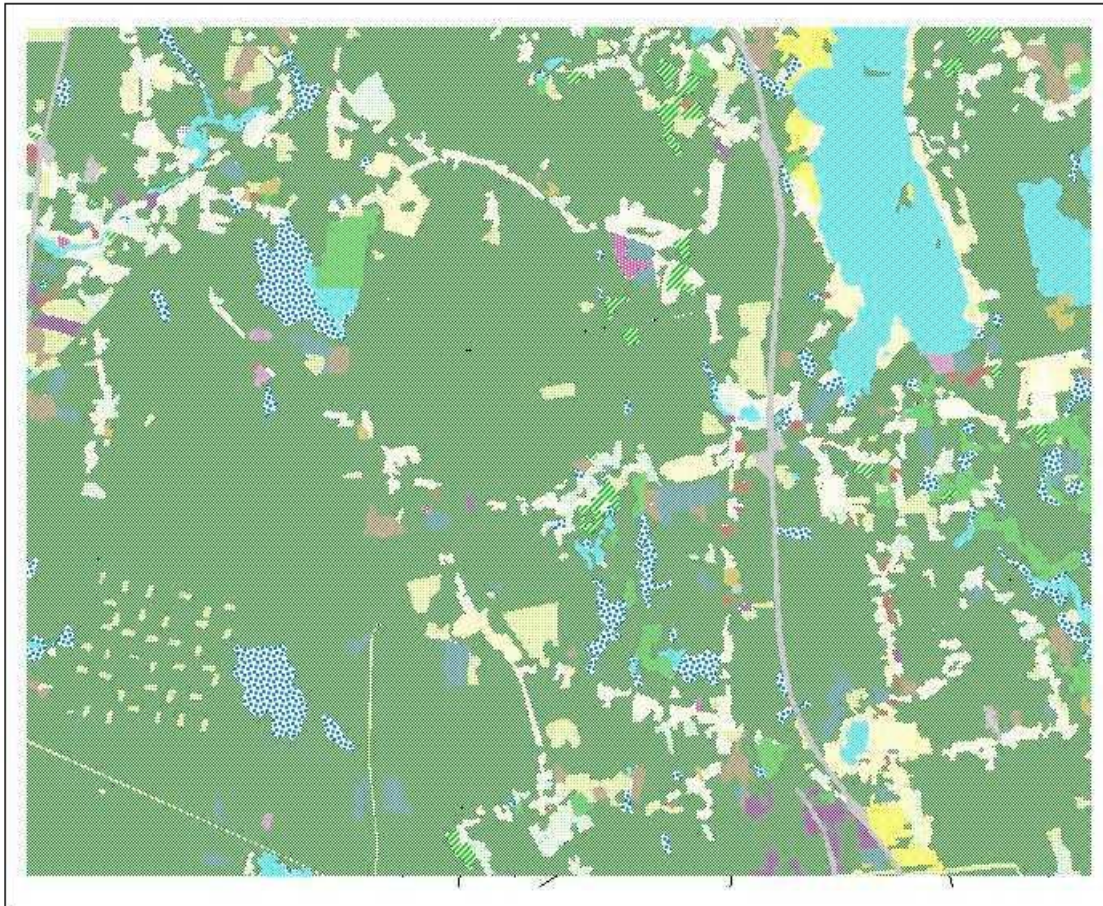
Located north of exit 8
(Freetown exit) on Route
140, roughly two miles
from Apponequet High
School.

At a Glance...

- ✓ Part of the larger Taunton watershed
- ✓ 10.31 square miles
- ✓ Connected to Long Pong and Assawampsett Pond
- ✓ Third order stream, surrounded by medium to light residential, industrial, and recreational areas, as well as wetlands and agricultural areas.
- ✓ Affected by agricultural runoff

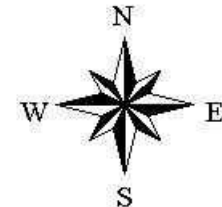


Land Use for Fall Brook Subbasin



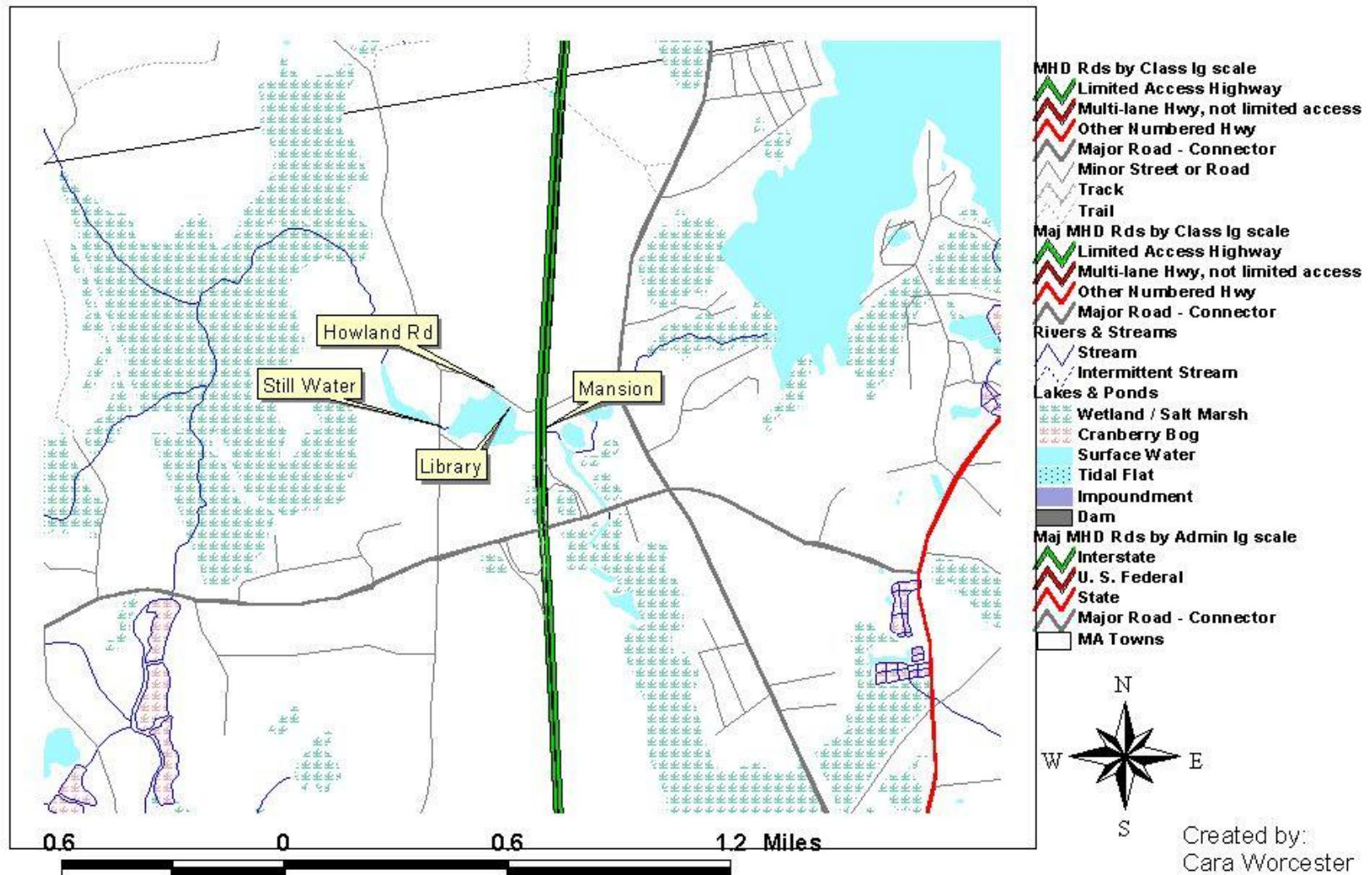
1 0 1 2 3 4 5 6 Miles

- Land Use
- Crop Land
 - Pasture
 - Forest
 - Non-Forested Wetland
 - Mining
 - Open Land
 - Participation Rec.
 - Spectator Rec.
 - Water-based Rec.
 - Multi-Fam. Res.
 - High Density Res.
 - Medium Dens. Res.
 - Low Dens. Res.
 - Salt Water Wetland
 - Commercial
 - Industrial
 - Urban Open
 - Transportation
 - Waste Disposal
 - Water
 - Woody Perennial
- Lakes & Ponds
- Wetland / Salt Marsh
 - Cranberry Bog
 - Surface Water
 - Tidal Flat
 - Impoundment
 - Dam
- Rivers & Streams
- Stream
 - Intermittent Stream
 - MA Towns

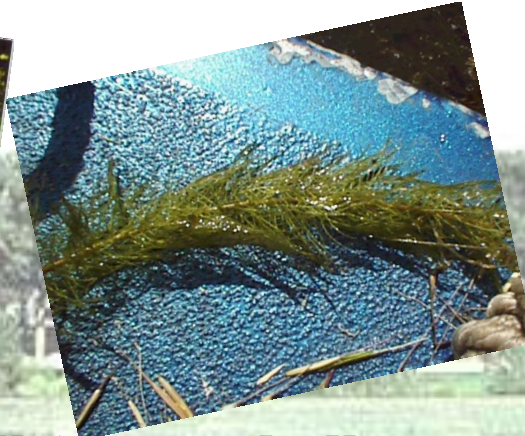
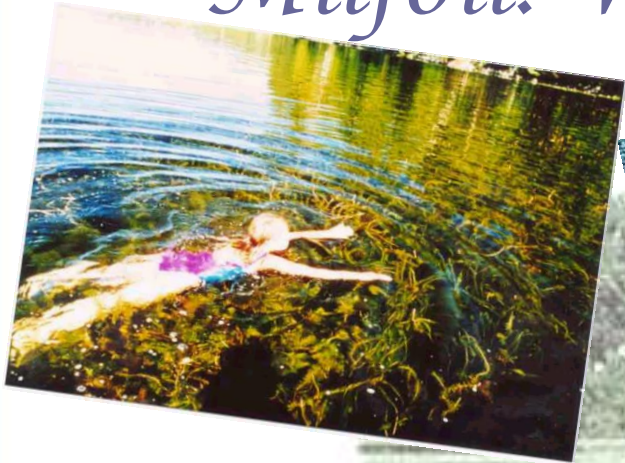


Created by Kevin McCullough

Fall Brook Sample Site Map



Milfoil: What's It All About?



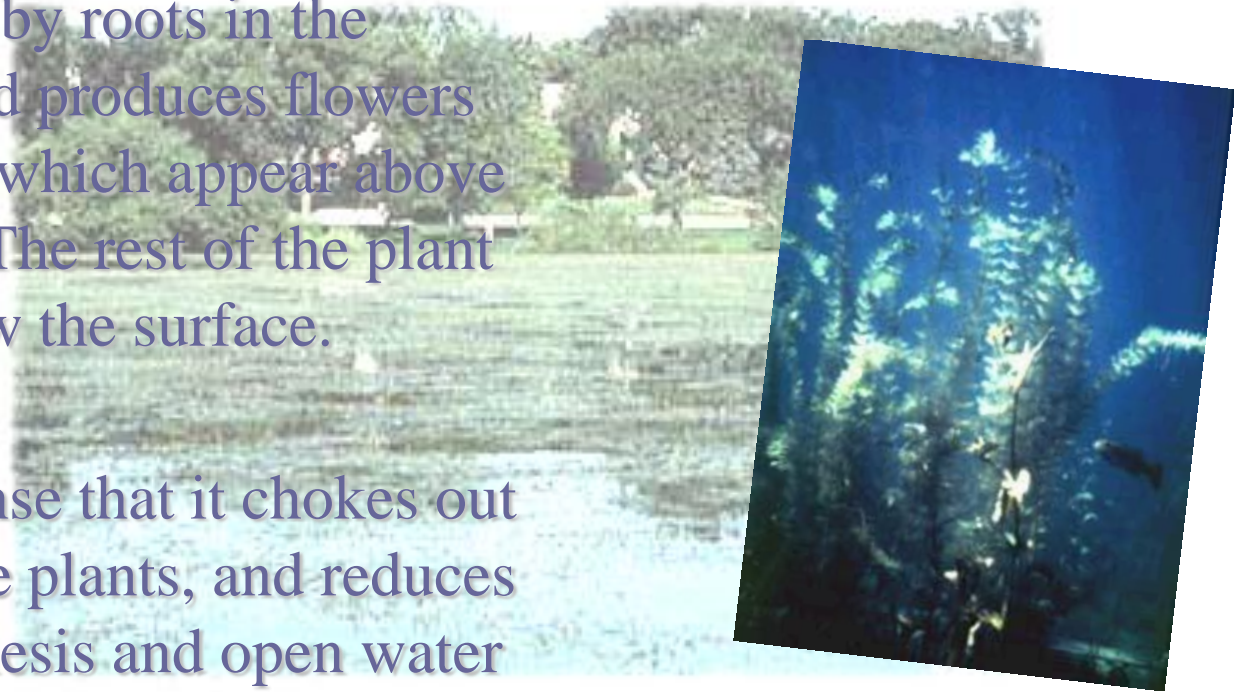
Eurasian Water Milfoil (*Myriophyllum spicatum* L.)

- ✓ Quickly spreads, exhibiting rapid growth
- ✓ Thrives in lakes, ponds, shallow water reservoirs, and slow-moving rivers and streams.
- ✓ Only requires a fragment of plant to grow roots and overtake a water system. Even boats carrying the plant on the bottom of a keel can cause overgrowth. Milfoil is an extremely resilient plant.

That Tricksy Milfoil...

✓ Spreads by roots in the ground, and produces flowers and seeds, which appear above the water. The rest of the plant drifts below the surface.

✓ Is so dense that it chokes out most native plants, and reduces photosynthesis and open water space.



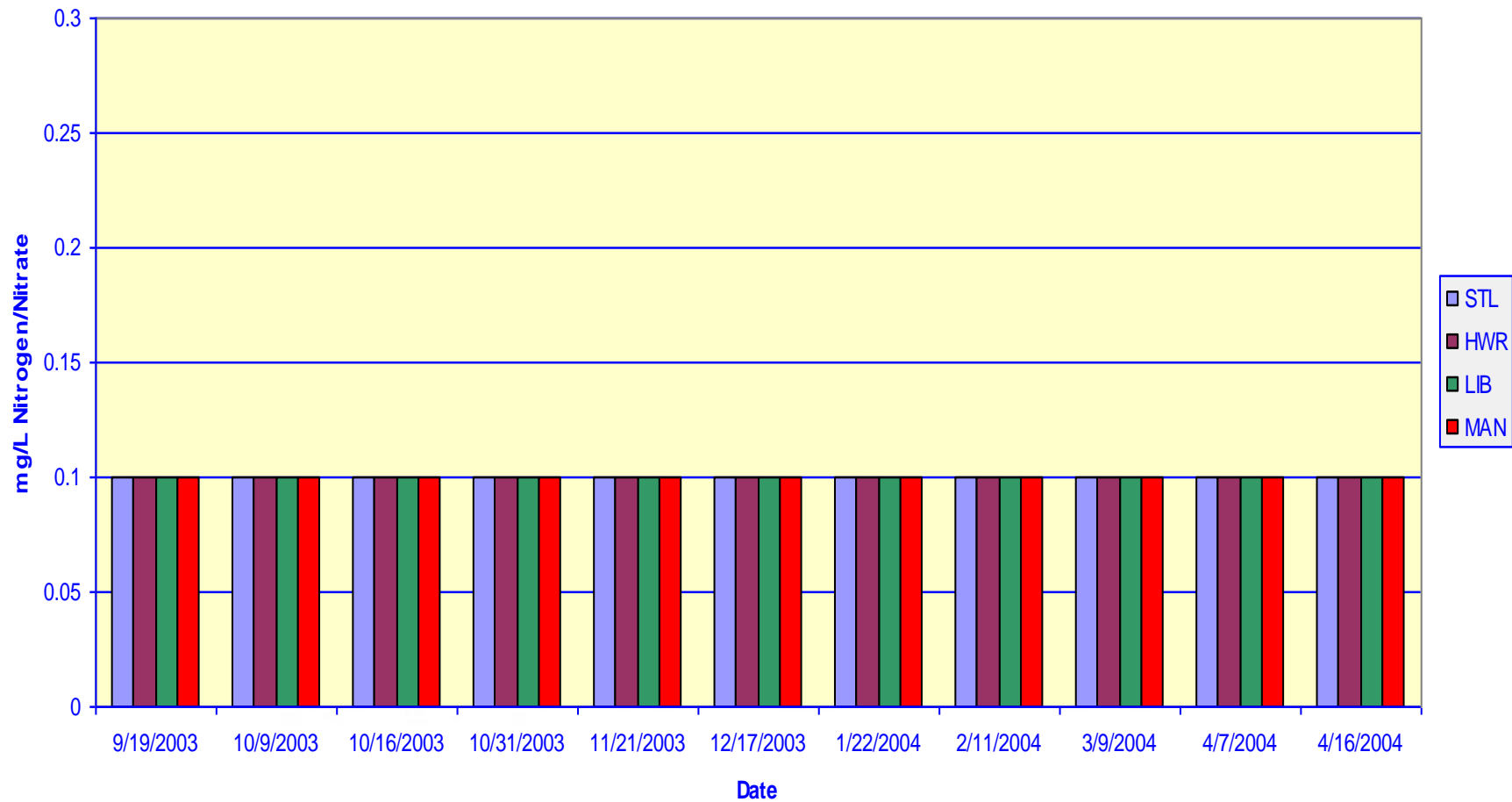
Methods of Eradication

A few alternatives to acceptance of milfoil overgrowth:

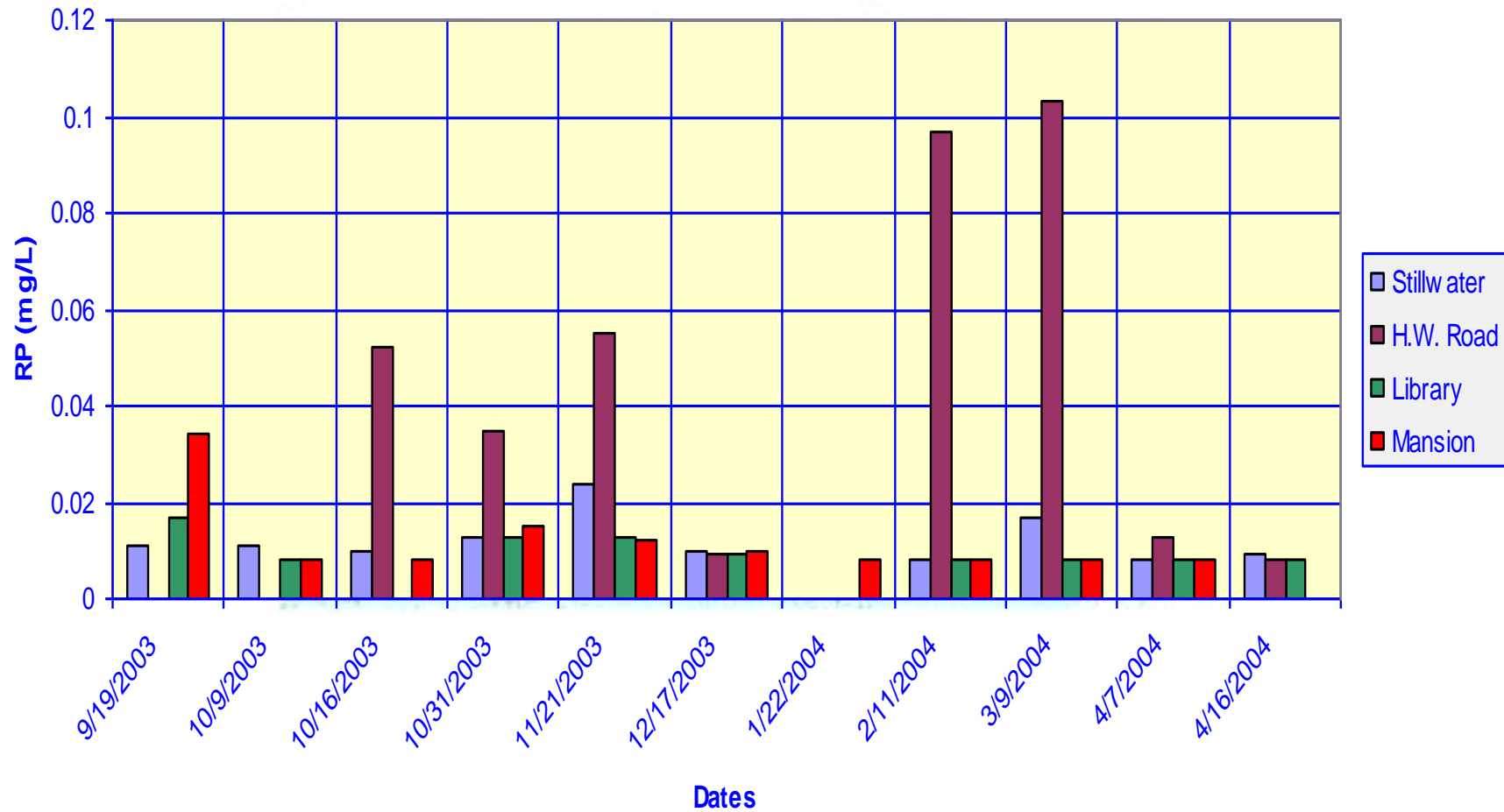
- ✓ Mechanical Harvesting
- ✓ Diver Dredging
- ✓ Benthic Barriers
- ✓ 2,4-D Herbicide
- ✓ Fluridone Treatment



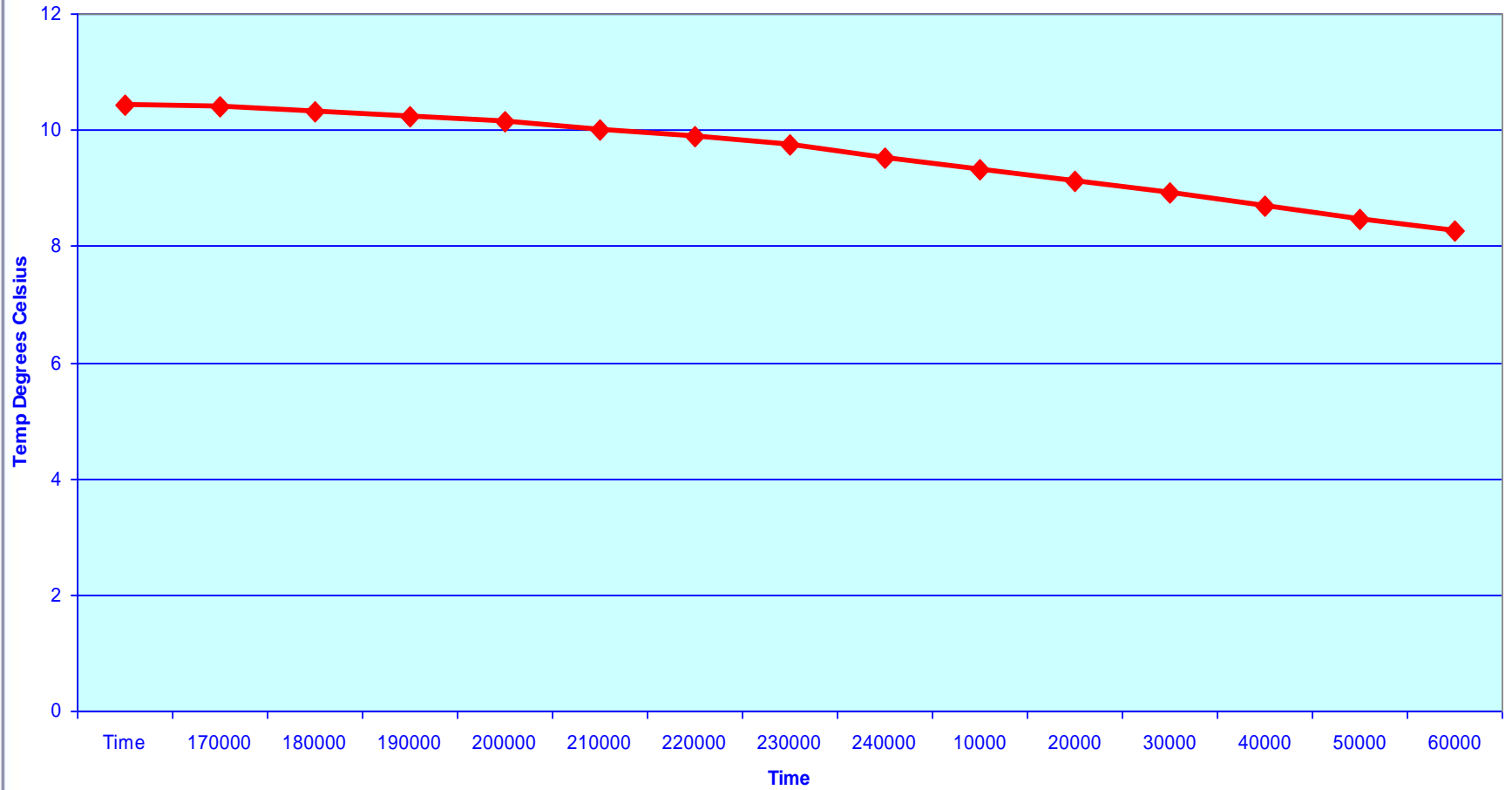
Nitrogen/Nitrate (mg/L): Fall Brook 2003-04 (Corrected)



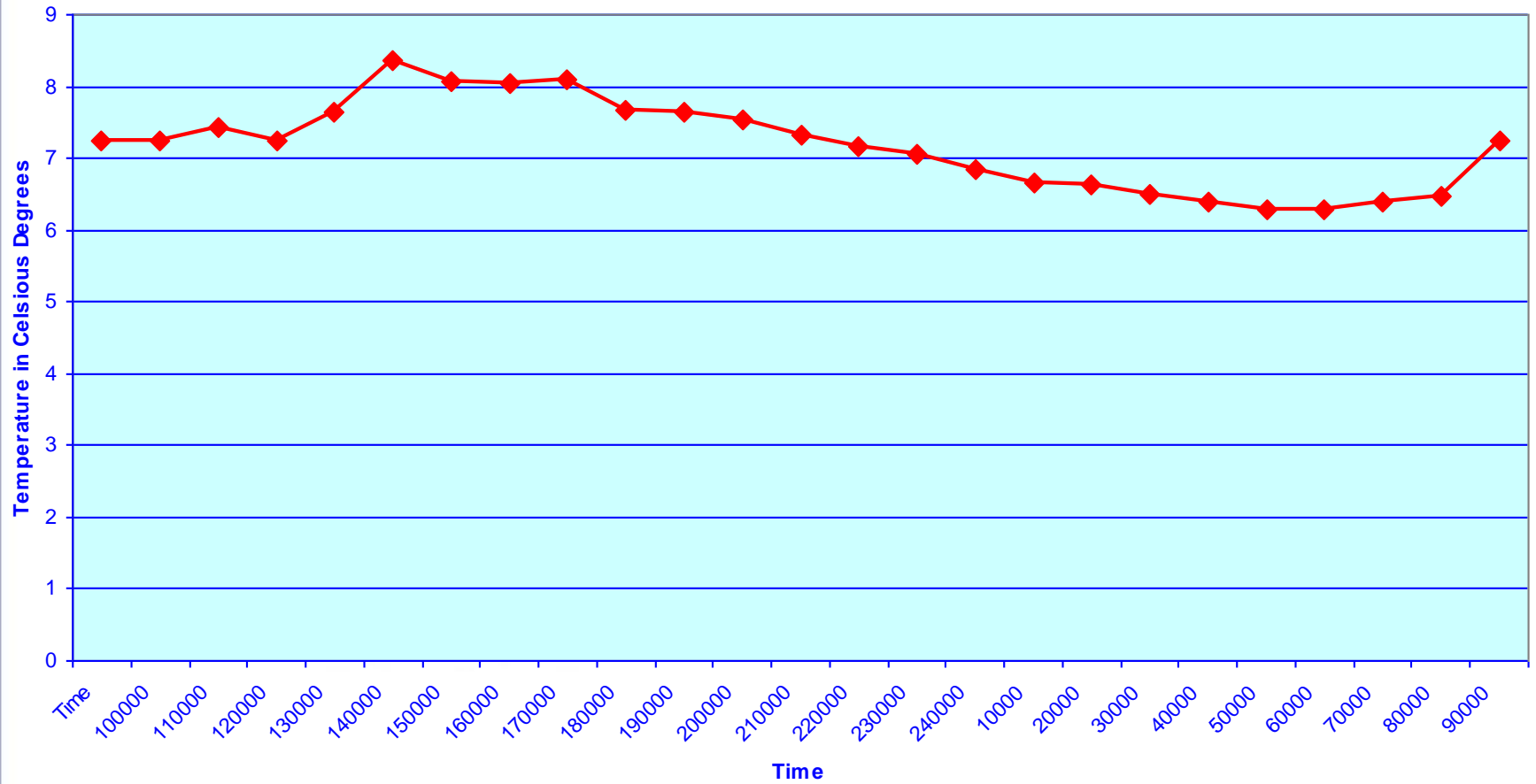
Reactive Phosphorus vs Time, Fall Brook 2003-2004



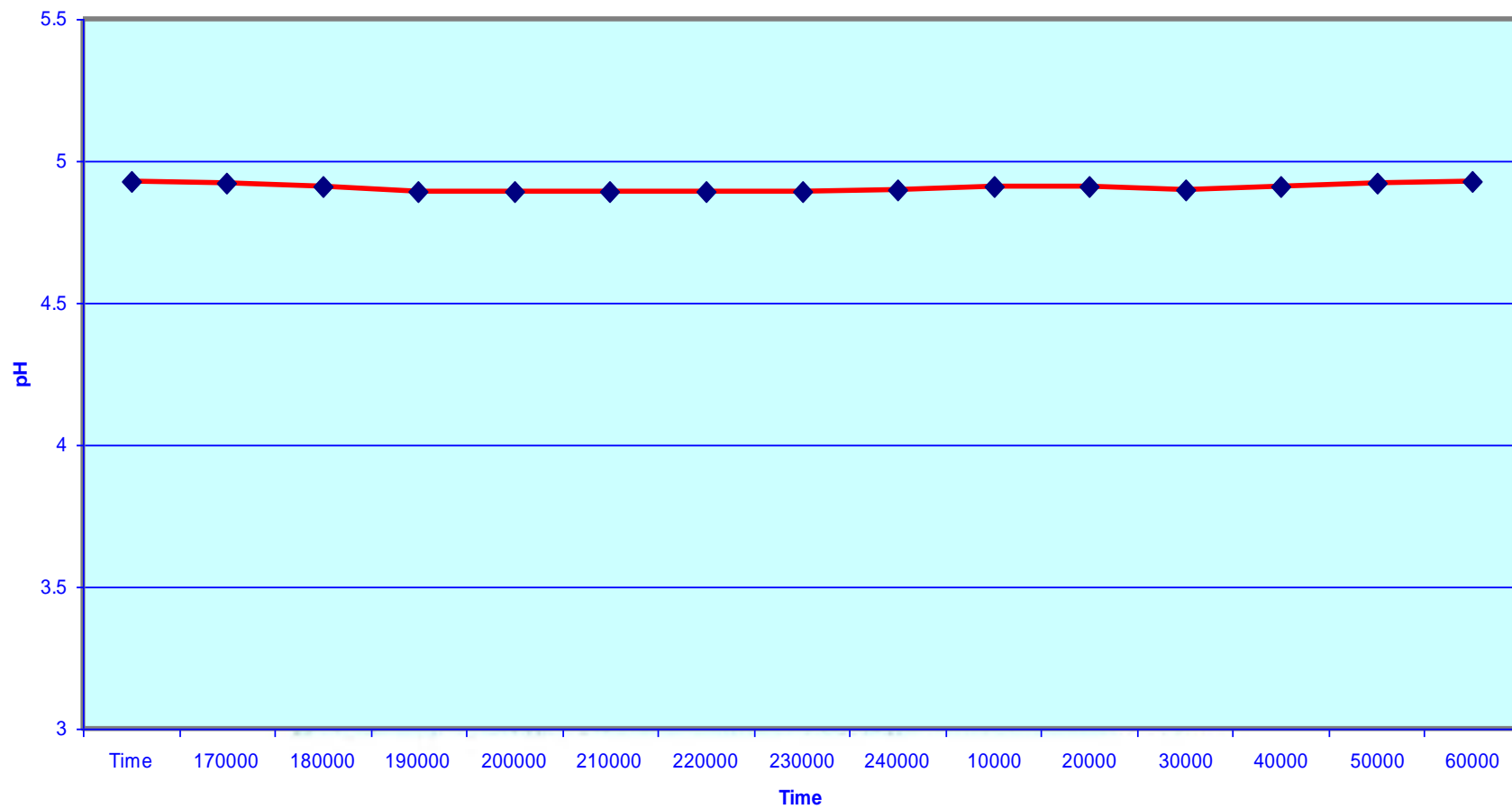
Temperature Fall Brook, Library
April 15-16, 2004



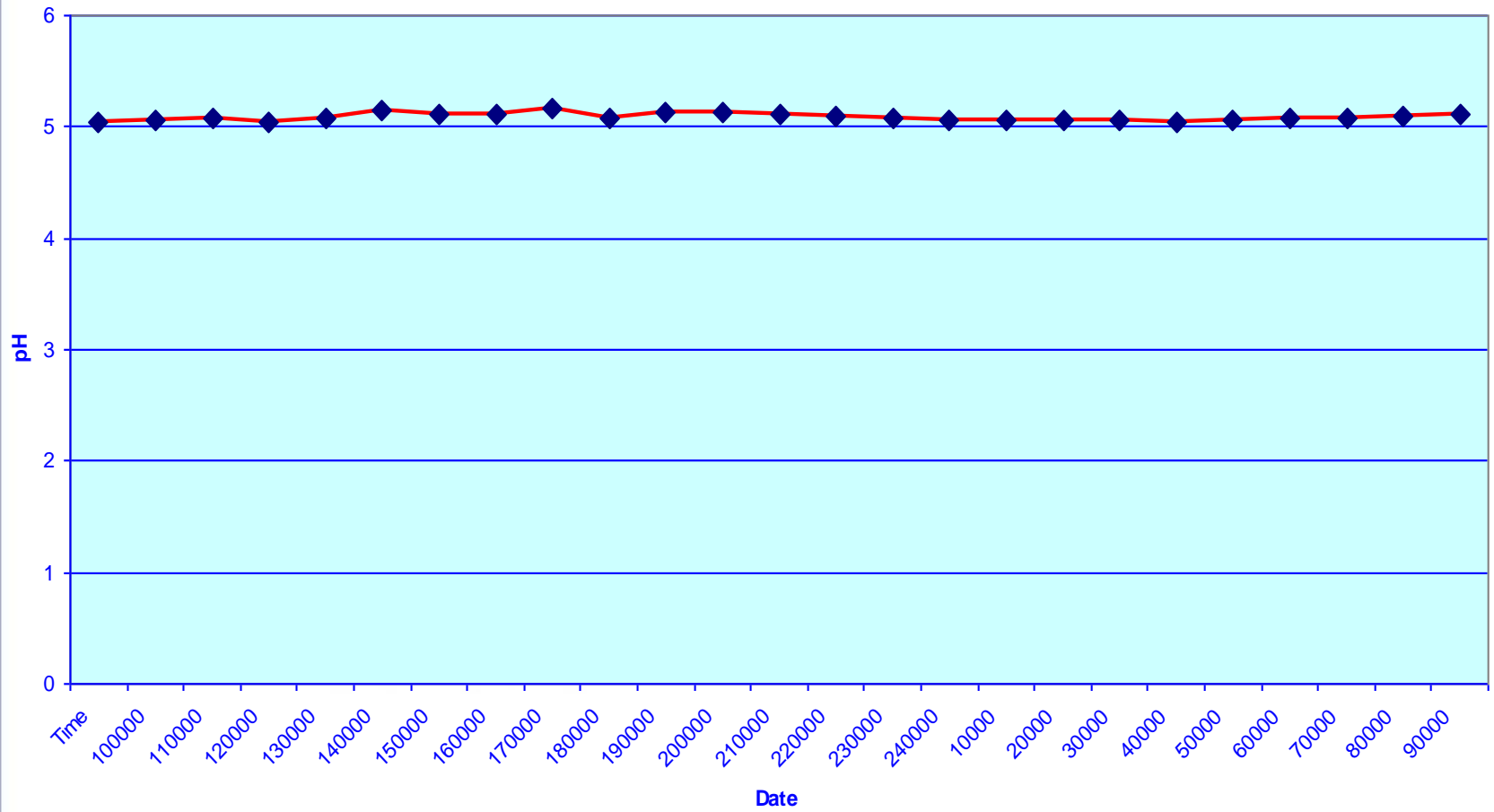
Temperature, Fall Brook, Howland Road
April 7-8, 2004



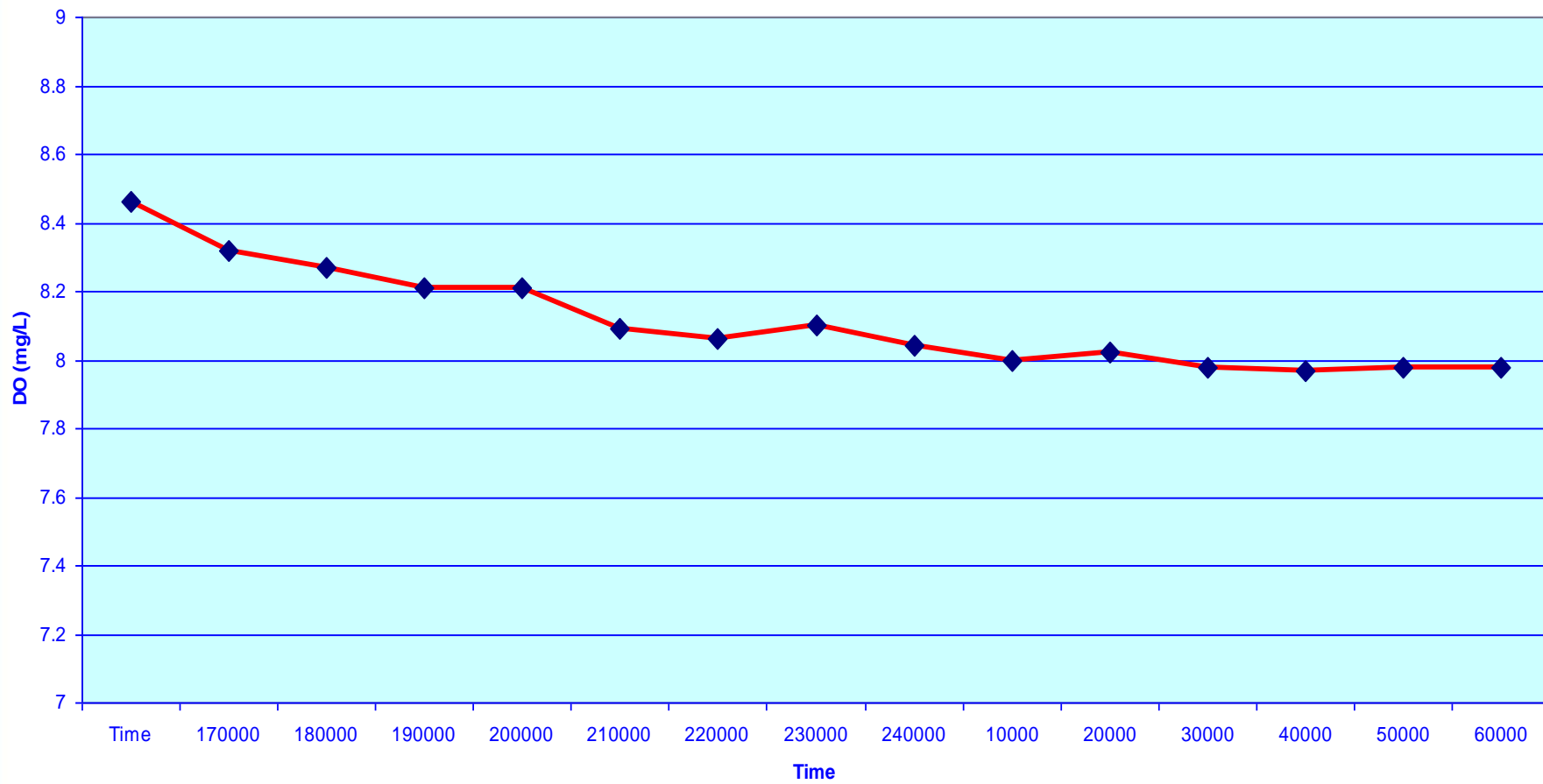
PH Fall Brook, Library
April 15-16, 2004



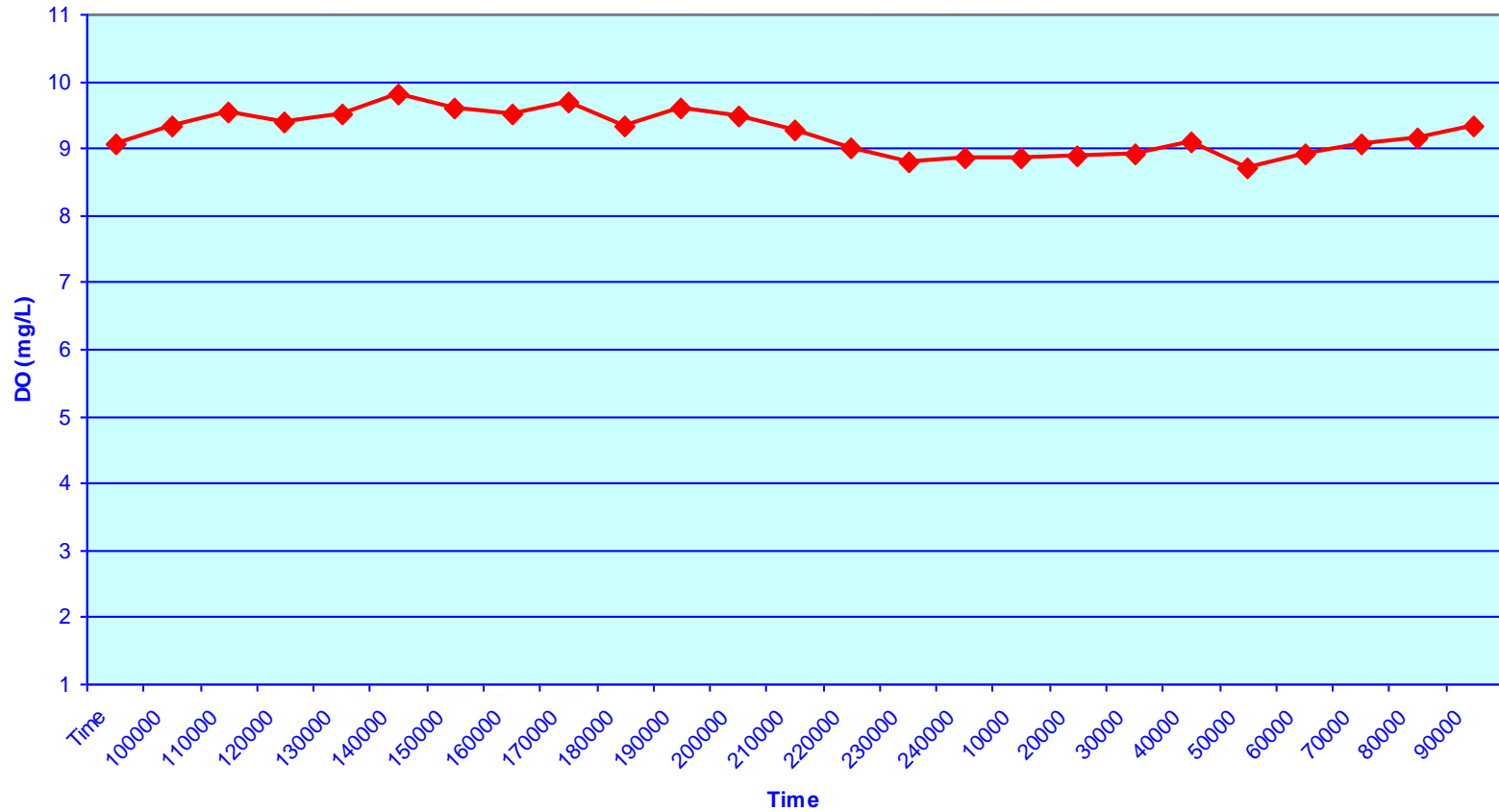
pH Fall Brook, Howland Rd
April 7-8, 2004



Dissolved Oxygen Fall Brook, Library
April 15-16, 2004

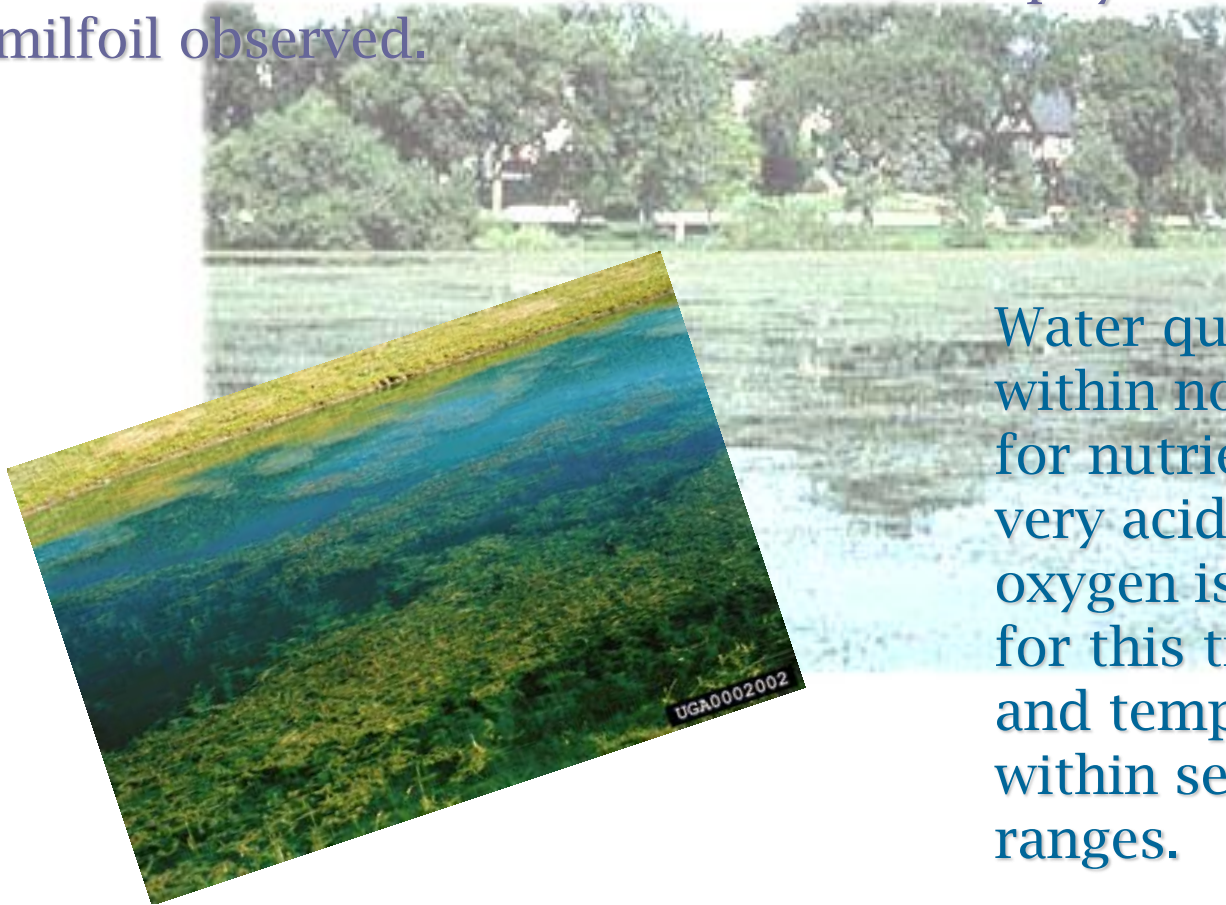


Dissolved Oxygen, Fall Brook, Howland Rd
April 7-8, 2004



Conclusion

Milfoil has not progressed further downstream from the pond at Stillwater on Washburn Road. No physical evidence of milfoil observed.



Water quality is within normal ranges for nutrients. pH is very acidic, dissolved oxygen is adequate for this time of year, and temperature is within seasonal ranges.

The End





Or IS it...?