

Lyle Erickson from McCloud Aquatic Services comments, after a recent visit on Sept. 14, 2009 to inspect Highland Lake.

Vegetation:

The dominant species noted in the lake was Spiny Naiad (*Najas marina*). Spiny Naiad is relatively uncommon and does not provide much in the way of cover for fish as it tends to hug the bottom.

The other species noted were: slight Sago Pondweed, slight Curlyleaf Pondweed, very slight Small Pondweed, slight Spatterdock, very slight White Water Lily and slight American Pondweed. All of these species, with the exception of Curlyleaf Pondweed, are native and desirable species to have as they provide canopy type cover for fish and food for waterfowl. The Curlyleaf Pondweed is an exotic and should be controlled to prevent its dominance in aquatic system. No Eurasian watermilfoil was noted.

I did note that many of the shallow areas in the lake were devoid of, or sparsely populated with vegetation. These areas appeared cloudy due to wind and wave action on the bare bottom. Most of the significant vegetation growth noted was located in the 4 foot or deeper range, with most of it being the low growing Spiny Naiad.

Recommendations:

My recommendation is to continue the control of the Curlyleaf Pondweed and Eurasian watermilfoil, both exotics, and encourage the growth of the native/desirable vegetation. The native species present are more canopy forming and provide better structure for fish.

This can be accomplished through the use of Sonar AS, on a whole lake treatment basis, at strictly controlled rates. FasTest sampling is a must to ensure that the target rate is being met and maintained and that it is not being affected by thermoclines, rainfall, flow, plant density, and other factors. Sonar AS at the proper target rate will control the Curlyleaf Pondweed and Eurasian watermilfoil and allow the native/desirables to re-establish themselves. The other advantage to Sonar AS is that it has very limited water use restrictions.

During my visit I was asked about "spot treating" the problem plants. Spot treating with other herbicides requires fairly high rates to slow down dilution out of the target plant area. These high rates generally effect non target desirable vegetation, usually require re-treatment due to re-growth, and water use restrictions are generally required after

each application depending on the herbicide used.

Fish Stocking:

Until you can determine the actual fish population and densities it is quite difficult to make recommendations on stocking. Based on my limited observations it appears the lake would be ideal for a Largemouth Bass fisheries. At this time the only recommendation I would make would be to stock Fathead minnows as food for the existing fish.

In most cases fish are stocked to increase the fishing success in a body of water. This can work in smaller bodies of water but in bigger bodies of water it is more difficult as the fish move to feed. The way to improve fishing in larger bodies of water is to stop the constant movement and have the fish hang around structure, such as canopy weed beds, brush and rock piles, artificial reefs, etc., where bait fish and other food will be. A well planned and controlled treatment program can provide the canopy weed beds.

This concludes my observations and recommendations.

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