

2.0 Problem Statement

Eurasian watermilfoil (*Myriophyllum spicatum*), a non-native invasive species listed on the state noxious weed list, was first discovered at Newman Lake in Sept. 2002. It became an immediate and major concern of the Newman Lake community and therefore the concern of the NLFCZD. Eurasian watermilfoil (Milfoil) is a submersed aquatic plant that has become a problem in many of Washington's lakes and rivers. This highly invasive non-native species is fast growing and spreads rapidly by plant fragments and root systems. Because it is not native it has only limited natural enemies to control its growth. It quickly can form thick mats along shoreline areas. Potential negative impacts include:

1. **Recreational Use:** Milfoil can eventually produce dense mats that interfere with navigation and recreational activities such as boating, swimming, fishing, and water-skiing. These mats pose a safety hazard to swimmers and boaters by entanglement and foul fishing gear, motors, and oars. Although so far in Newman Lake we have only seen the milfoil growing in about 3 - 10 feet of water, it can grow at depths of up to 45 feet and reach the surface when growing in depths of up to 15 feet. For a shallow lake like Newman Lake (avg. depth 19 feet) this could be significant portion of the lake, though visibility may limit its spread here. The Lake is a well-utilized recreational lake used for year-round fishing, swimming, boating, water skiing, and more passive activities such as wildlife viewing for lake property owners and visitors. The lake also provides aesthetic values for residents and visitors. Newman Lake is stocked with trout by the Washington State Department of Fish and Wildlife (WDFW) as well as hosting a number of warm water fish stocks. It is a popular fishing and recreation destination for boaters using the public WDFW boat launch. Dense beds of milfoil would restrict most recreational activities within Newman Lake.
2. **Aquatic Habitat:** Milfoil also adversely impacts aquatic ecosystems by forming dense fast growing canopies that often shade out native vegetation. Its mono-specific stands provide poor habitat and food for waterfowl, fish, and other wildlife. Newman Lake and its watershed provide critical fish and wildlife habitat areas and host a wide variety of waterfowl fish and wildlife. Milfoil could cause a reduction in the number of waterfowl and fish that can utilize the lake. The fishery will feel impacts from a variety of milfoil effects. Milfoil does not support the same population or diversity of organisms that serve as a food source for fish, it changes the water chemistry due to milfoil decomposition, and can throw off predator/prey balances due to eliminating predator fish forage area and providing excessive refuge areas for prey. All of these will reduce the fishery over time and in turn reduce the opportunity for recreational fishing.
3. **Water Quality:** With its fast thick growth Milfoil can also significantly increase the decomposing biomass at the end of the growing season and therefore increase the internal loading of nutrients to the water and decreasing water quality. Since Newman Lake already has an excess nutrient problem, it could be especially sensitive to these impacts and this could be special concern.
4. **Water Supply:** Many property owners around Newman Lake use the lake as a water source, either for irrigation or in home uses. The proliferation of milfoil could have a negative impact for those that withdraw water from the lake, by clogging intakes and affecting water quality.
5. **Other Waterbodies:** Another concern of the district and the community is the potential for the spread of Eurasian watermilfoil to other lakes in the surrounding area. The Newman Lake outlet channel

drains to the Spokane Valley-Rathdrum Prairie aquifer and so does not drain to surface water; however, this noxious weed is easily transported to other locations on boat motors, trailers, and fishing gear and is known to establish new infestations from single plant fragments. There are other waterbodies in the area that currently are not infested with Eurasian watermilfoil; control of milfoil at Newman Lake will reduce the chances of infestation, or further the spread of milfoil to other lakes or waterbodies.

Control efforts of the last two years since discovery have limited the majority of the Eurasian watermilfoil plant growth to about 10 acres total at the north and south ends of the lake. These are non-residential areas of highly organic sediments next to wetland areas. Outside of these areas plants have been scattered. Impact to date has therefore been limited. However, without the current control efforts of surveying frequently, diver hand pulling, and herbicide treatments, spread would have been much more extensive and impacts more significant. Community concern over the spread of watermilfoil growth is a valid one.