

Lake Sawyer
August 15th and August 28th 2012

Eurasian Milfoil Survey

Field Report

August 15th, 2012

10:30am, sunny and hot, 30 C

Beth leDoux and Sally Abella from King County Water and Land Resources, along with Aaron Nix of the City of Black Diamond, surveyed Lake Sawyer for Eurasian water milfoil (*Myriophyllum spicatum*). The lake was calm and visibility was good. The survey was done from the King County john boat to accommodate three people on the survey. The team broke the lake into sections to better organize the survey. Sections used were defined by the King County Weed Watchers Program to maintain consistency with their volunteer Weed Watcher surveys. They have been running this program on Lake Sawyer since 2008 and in order to maintain consistency with what the volunteers observe and what was found on this survey, the same lake sections were used.

The survey began at the boat launch on the northwest side of the lake. Fragrant water lily was found in patches along the shoreline but the first Eurasian milfoil plant was not found until the “boot” (the northern finger of the lake). Milfoil was present in the boot but often mixed in with native plants and in small patches. The infestation was not what would be considered dense when compared with other milfoil infested lakes in King County. The survey continued clockwise around the lake finding patches of fragrant waterlily and scattered milfoil. Due to time constraints, section 4 was completed (northern end) and the team went down to section 8 to survey the inlet and the City property. Again, milfoil was found in these sections, however, it was never very much and usually scattered sometimes only occasional plants.

The survey halted due to time constraints and extreme heat. Sections 1, 2, 3, 4, 8 and 9 were surveyed and Eurasian milfoil was positively found and identified in all of the section, although not in great abundance. It was determined that Sally and Beth would return at a later date to finish the survey.

Some interesting findings of the survey were that Japanese knotweed was found along a property on the point near dock 104 (Black Diamond has each dock along the lake numbered as part of a licensing program). The second Japanese knotweed plant was found at the western edge of the City Park overhanging the lake. It is advisable that these plants are dealt with early as once they begin to spread they become harder to control. The other interesting finding was some tape grass at the inlet channel. It was one very little plant and did not seem to be acting invasive, however, it is non-native and has acted invasive in other King County lakes. It is definitely a plant to watch to be able to act early in the case of it starting to become invasive.

August 28th, 2012

10:30am, cloudy, 20 C

Beth leDoux and Sally Abella came back on August 28th, 2012 to finish surveying the remaining sections of the lake. The survey was done from a canoe that allowed for better access between the docks and more maneuverability than the john boat.

The survey started at section 5 and continued to section 8, the majority of the eastern lake shoreline. Section 5 and 6 were the areas where the most Eurasian milfoil was found. There were bands of milfoil along several docks and in several places in these two sections. The milfoil plants were shallower than expected and it's curious to know if the healthy native pondweed populations were limiting where the milfoil could grow.

Milfoil was found scattered and sometimes only occasionally in section 7. Interestingly the island in section 7 had a very dense population of milfoil. It's possible that the island provides a buffer from wind and allows the milfoil to settle along it or the sediments are more conducive to the milfoil vs. the native plants.

Sally and Beth then headed over to the southwest edge of section 10 where the previous survey left off. While this was a quite area where milfoil could collect, and many fragments were found, but only occasional plants were found. As the survey headed along the west side into section 11 there were three islands that seemed to provide an ideal habitat for milfoil. Again, the islands had the more robust and greatest density of milfoil plants with much of the island shorelines having milfoil present. It seems that the quiet water of this area allows milfoil to settle and take root, buffering the wind from moving it along.

Section 12 had very few plants and was mostly milfoil free aside from a plant or two. The southern portion of section 1, 1 milfoil plant was found. Finishing section 1 completed the milfoil survey and allowed for a comprehensive assessment of the status of milfoil and other noxious weeds in Lake Sawyer.

Interesting findings

The native pondweeds were very healthy and robust. Specifically, often where *Potamogeton robbinsii* was found there was hardly any milfoil, an occasional plant at most. In areas where the native pondweeds were not as robust, Eurasian milfoil seemed to do well.

Fragrant water lily is found throughout the lake, sometimes in large patches. Only one patch of the native lily was found on the north side of the inner/larger island on the west side.

The density of milfoil is not much compared to other area lakes. While it is certainly present throughout the lake, it is definitely patchy at best – and usually an occasional plant or two every couple of feet. This

was interesting especially given that the earlier surveys done on this lake (2001, 1998 and the 1970s) suggest that the lake was heavily infested. It's hard to understand what may have caused the milfoil to decrease over the years but a few theories exist. One, that the milfoil weevil found in Lake Sawyer has managed to decrease the population; two, the last three years of colder and wetter springs/summers has stunted milfoil growth; three, that the plants were possibly misidentified in the earlier surveys; or four, there had been some type of control done that was not documented.

Next Steps

The next steps for understanding the milfoil issue at Lake Sawyer would be to bring in a milfoil weevil expert from the State Department of Ecology to do a survey for weevils and weevil damage. From that it may be better assessed what kind of impact the weevil is having, if at all.

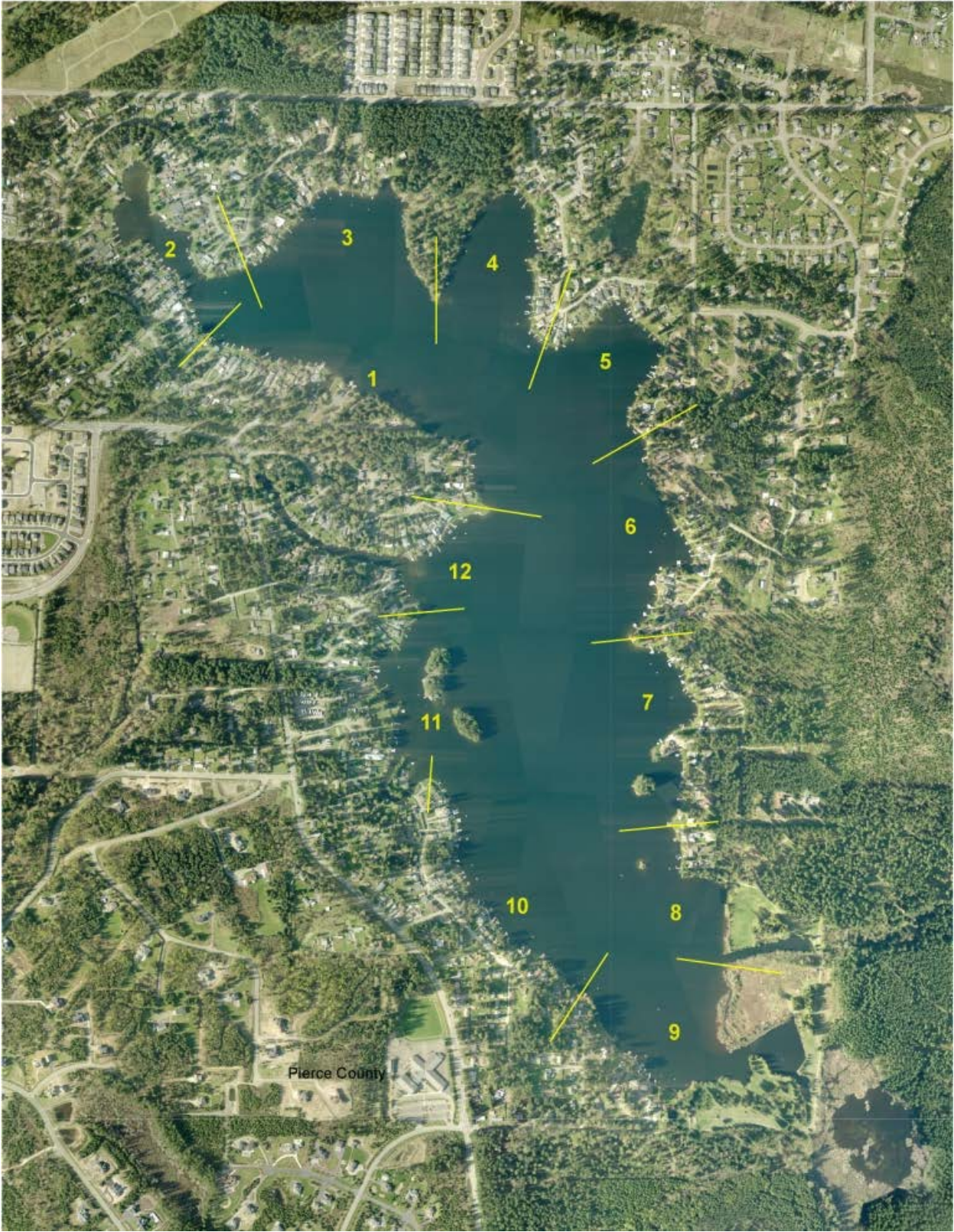
Convene a public meeting introducing the community around the lake and other stakeholders to the IAVMP process and all the different options that it entails.

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Black Diamond Surface

Water Utility Fund



Pierce County