

Survey and suggested approach to 2021

The City of Lakewood helped form a Lake Management District for American Lake. The LMD covers the residential portion of the lake. The western end of the lake is owned by various state and federal government agencies including the Washington National Guard, the US Army and the Veterans Administration. These agencies cooperate with the City in the administration of the Integrated Aquatic Vegetation Management Plan that was developed for the lake.

By 2018, the invasive aquatic weed Eurasian Milfoil had colonized the entire littoral area of the lake. Approximately 166 acres along the majority of the shoreline were monocultures of this noxious weed out to the 15 foot contour. In the summer of 2019 166 acres of the lake were treated with ProcellaCOR herbicide. That application was extremely successful. Populations in the lake were reduced to close to zero.

During the summer of 2020, two surveys were conducted. Individual plants were located scattered through the littoral area of the lake. Diver teams spent approximately 20 hours survey and hand-picking Eurasian Milfoil plants. One area totaling 1.7 acres near the Washington Department of Fish and Wildlife Ramp was treated with ProcellaCOR.

The fall 2020 survey found additional Milfoil plants starting to appear throughout the littoral area of the lake. These were not observed to be present at a level that would justify treatment, much less than 1 percent of the littoral area acres were covered, and plants scattered too far from each other to justify treatment.

A trip was made in June with City Staff to review conditions, overall, the impact of Eurasian Milfoil on the lake is extremely low. It is an aggressive weed however and given time can expand.

A complete survey of the littoral areas of the lake was performed on July 19th. The littoral areas of the lake were observed and mapped.

While most of the lake littoral area remains clear of noxious aquatic weeds, there are extensive areas that are supporting growth of native aquatic plant species, especially on the south shoreline of the lake. We observed several Potamogeton species present. There were also colonies of Naiad scattered through the zone. Some of these areas are developing to the point where there may be an impact on beneficial uses such as swimming and boating even though these plants are not on the noxious weed list. Some examples are presented here.



Potamogeton or Pondweed species present on South Shore of LMD zone

Naiad with Filamentous algae present on South Shore of LMD zone





Coontail present adjacent to Fire Boat Boathouse and WDFW Access site

American Lake 2021 Summer Survey Results

The majority of the lake remains clear of Eurasian Milfoil. Some pre and post treatment examples are shown here.



WDFW boat ramp pre treatment and 2 years post treatment July 2021, Lake bottom exposed gravel no milfoil present



Portion of Ft. Lewis zone pre treatment 2019 and two years post treatment, lake bottom exposed no milfoil present

American Lake 2021 Summery Survey Results

Eurasian Milfoil is however starting to creep back into the picture. There are a few zones in deep water where with lower water levels plants have appeared. There are also areas where individual plants are starting to fill back in. Eurasian Milfoil is an aggressive weed and some additional treatment options should be considered.

A map is attached depicting the conditions observed in the lake. We are recommending that treatments be considered for 14 sites in the lake. The majority of these are in the Government zone. These are numbered clockwise around the lake starting from the City of Lakewood Park and boat ramp on the north shore.

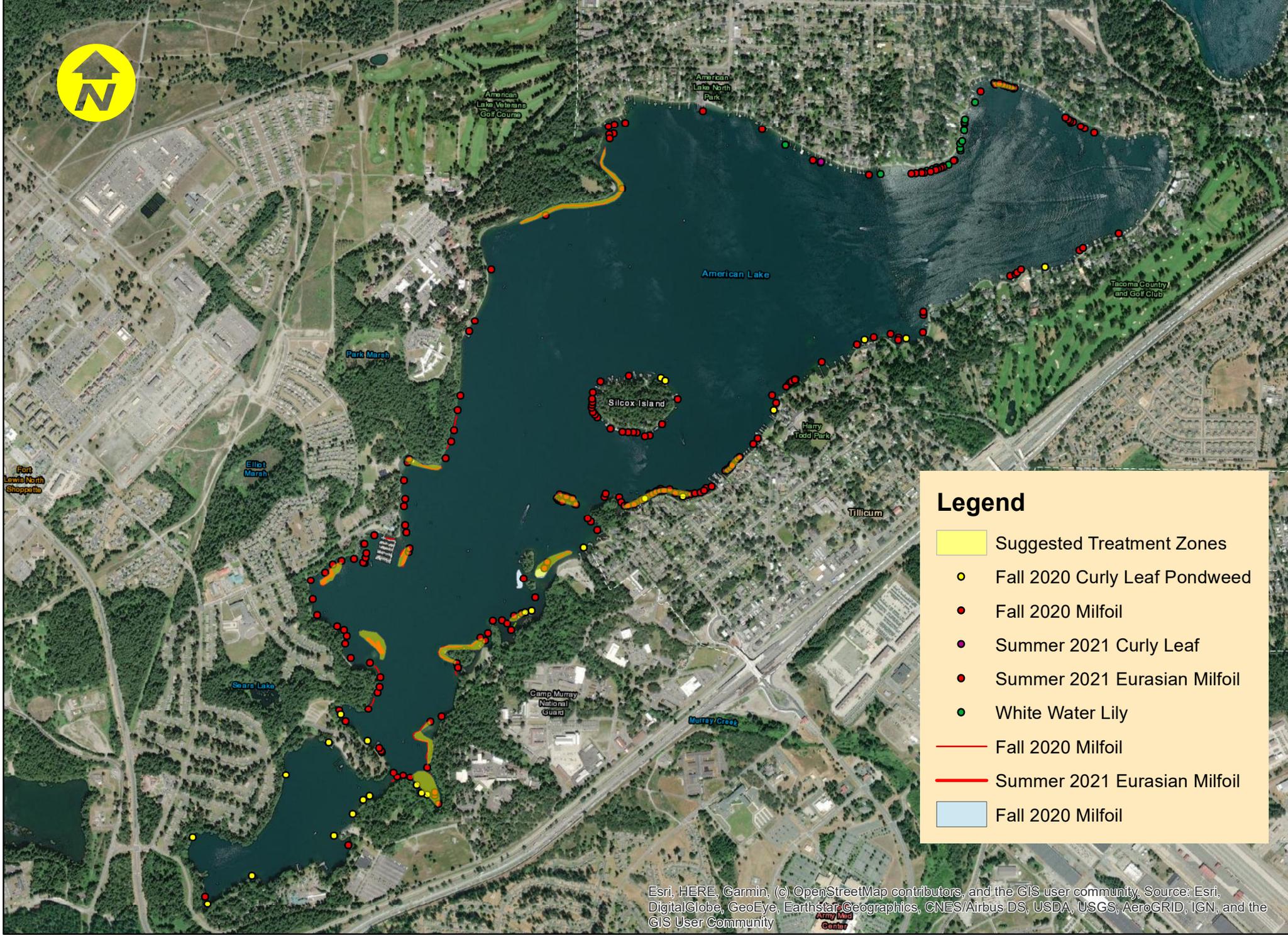
Zone	Acres	Herbicide recommended	LMD or Gov't
1	1	Procellacor	LMD
2	1	Procellacor	LMD
3	2	Procellacor	LMD
4	1	Renovate OTF	LMD
5	1.75	Procellacor	LMD/Gov't
6	1	Procellacor	Gov't
7	1.75	Procellacor	Gov't
8	1.5	Procellacor	Gov't
9	2.5	Procellacor	Gov't
10	2	Procellacor	Gov't
11	1	Procellacor	Gov't
12	1	Procellacor	Gov't
13	1	Procellacor	Gov't
14	4.25	Procellacor	Gov't

There are 6.75 acres present in the LMD zone of the lake, 5.75 of which should be targeted with Procellacor and 1.75 acres that should be targeted with Renovate OTF granular because of higher water exchange.

There are 16 acres present in the Gov't zone of the lake that should be targeted with Procellacor.

The remainder of the shoreline has very scattered plants. Diver operations again could be focused on high use areas. The City Boat ramp has a few plants scattered there. The City Park on the south shore could be second priority. After that focus on the north shore would be recommended east of the City Boat ramp.

Please review and we can set up conference to discuss implementation.



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Summer 2021 Survey and Suggested Treatment Zones