

Proposed Weed Abatement and Lake Management  
by Solitude Lake Management

The Board is proposing 4 options for your consideration. The company we are contracted with for the mechanical harvesting is Solitude Lake Management, website: SOLITUDELAKEMANAGEMENT.COM. They are a nationwide company with over 42,000 employees and have proposed the following options for lake management and weed abatement.

**OPTION #1 - Maintenance Agreement**

Contract Cost.....\$11,916.00 *\*will increase 3% annually \**

State Water Resources Board (Herbicide Permit).....\$2700.00 *\*annual cost\**

Department of Fish & Wildlife (1600 series permit).....\$609.22 *\*valid for 5 years\**

Estimated Total Cost.....\$15,270.22

Duration of contract:.....*6 months, April through September*

**Monitoring and Visual Inspection:**.....Solitude will begin with a visual inspection of the entire lake. Their biologist will inspect our lake once a month looking at: water levels, water clarity, turbidity, beneficial aquatic vegetation, algae, physical components-inlets outlets, spillways, and dams, erosion, nuisance animal activity, fish habitat, mosquito breeding conditions and habitat and trash and debris issues. Solitude will report any of the above issues and mitigate said. Water quality testing is included.

**Aquatic Weed Control:**.....There will be a once a month inspection of the entire lake, shoreline included, for the duration of the 6 month contract. Any undesirable aquatic weeds and vegetation found in the lake with each inspection will be treated and controlled through herbicides and aquatic surfactants. This includes cattails and phragmites, or any unwanted shoreline vegetation. Invasive and unwanted submersed and floating vegetation will be treated and controlled preventatively and curatively each spring and early summer using enough systemic herbicide to control the target species, leaving desirable vegetation to prosper.

**OPTION #2- Application of Sonar 1**

Contract Cost.....\$16,365.00

State Water Resources Board (Herbicide Permit).....\$2700.00 *\*annual cost\**

Department of Fish & Wildlife (1600 series permit).....\$609.22 *\*valid for 5 years\**

Estimated Total Cost.....\$19,674.22

**Aquatic Weed Control:**.....This option will consist of using Sonar 1 to control the lake weeds. Sonar 1 will be applied at the rate appropriate to control the unwanted submersed and floating aquatic weeds. Application of this product must be done in Spring and early Summer. Treatment of the lake with regular inflow/outflow will be split into a series of two applications in which 2/3 the total Sonar 1 will be applied during the first application, and the remaining Sonar 1 to be applied during subsequent applications as required to maintain an acceptable concentration, (PPB/parts per billion) of Sonar 1 in the lake for a period of 30-60 days. This will directly affect our abutter, the Miller Ranch, and their ability to irrigate.

In 7-14 days after applying Sonar 1, a Sonar FasTEST will be done on a water sample to determine the PPB concentration of Sonar 1, ensuring the proper concentration for weed control.

\*\* Season long control of the weeds is guaranteed by SePro (manufacturer) as long as the application of Sonar 1 was done by a SePro Preferred Applicator, and the FasTEST results show the appropriate amount of Sonar 1 present in the water for 30 days following the initial application. Control of the weeds can last for many years, but no guarantee can be made against future infestation of weeds from an outside source, i.e. wildlife, storm water runoff, people, boats, etc.

#### Water Quality Testing:

Water samples will be taken and tested for the following parameters: Temperature, pH, Hardness, Phosphates, Turbidity, Dissolved Oxygen, Alkalinity, Conductivity and total Phosphorus.

### **OPTION #3 – Mechanical Weed Abatement Only**

Cost for mechanical weed cutting.....	\$7,390.00 (2020 pricing, possible increase)
Bio Enzyme & Dye Packets.....	\$2,800.00
<b>Total estimated cost.....</b>	<b>\$10,190.00</b>

Solitude Lake Management was here last November to do the second planned harvest for 2020. Unfortunately the weather did not allow this planned harvest. There was no charge for this visit. We have contracted with them to return this spring at the 2020 pricing. Their harvester is scheduled to start a 3 day harvest this spring. This will consist of another 3 days of cutting and depositing the cutting on the face of the dam. Of course, weather permitting. It will be important that the terrain by the boat dock be stable enough to launch the harvester. Also, the top of the dam will need to be stable enough to deposit the cuttings on the downstream face of the dam, using Solitude's conveyor belt trailer. This was approved by our DSOD Dam Safety inspector. Note: There could be an addition cost if we need an additional day of harvesting.

This is the only option that does not use chemicals so there is no need to apply for the two permits as described in the other options. Should the POA vote for this option they will once again be voting against the use of chemicals. Note: We do have a Department of Fish and Wildlife permit for mechanical harvesting that is good for 5 years, with 4 years remaining.

### **OPTION # 4 – COMBINATION OF MAINTANCE AGREEMENT AND MECHANICAL HARVESTING**

Cost for mechanical weed cutting.....	\$7,390.00 (2020 pricing)
4 months of maintenance.....	\$7,944.00
State Water Resources Board (Herbicide Permit).....	\$2,700.00 <i>*annual cost* may not be required</i>
Department of Fish & Wildlife (1600 series permit).....	\$609.22 <i>*valid for 5 years* may not be required</i>
<b>Total estimated cost.....</b>	<b>\$18,643.22</b>

The permit for adding a herbicide to the lake runs with the fiscal year – from July to June. We currently do not have a permit for adding herbicide. Please see exhibit 3A entitled "Bullet Points regarding Woodridge Lake Aquatic Weeds".

Should the POA vote to once again use herbicide we will need to apply for two permits. Solitude Lake Management will provide documentation for that process to be started.

What we are proposing with option 4 is to do the mechanical harvesting that is scheduled for this spring at the cost of \$7390, again with Solitude honoring our contracted price from 2020. After the harvesting we move to the maintenance agreement as stated in option 1. Solitude has agreed to shorten the contract from June to September at \$1986 per month. We are also working with Solitude's Biologist on non herbicide options for weed control that would not require a permit but does have the potential of adding additional costs.

Then we continue with the maintenance agreement for the following year as stated in option 1 with no mechanical harvesting. This can only be done with the approval vote from the POA.