

**Professional Aquatic Consulting Services Contract  
For Paradise Lake, Emmet County, Michigan  
2013 (Annually Renewable)**

The Paradise Lake Improvement Board, hereinafter called the Board, and Restorative Lake Sciences, LLC, hereinafter called RLS or the “Consultant” agree to this contract made on this 16<sup>th</sup> day of January, 2013.

The following items will be included in the professional aquatic consulting services:

1. Attendance at up to six (6) Paradise Lake Improvement Board meetings that are conducted for purposes of improvements to Paradise Lake or upon request to present critical information to the Board. Cost \$3,000
2. Preparation of any biological control or other contractor bid documents, award letters, analysis of bid documents, and recommendations for all lake improvements to the Board over the 2013 season. Cost \$1,000
3. Preparation of a professional aquatic management newsletter to be distributed to riparians around Paradise Lake by June 1, 2013. This is to allow for initial presentation of 2013 treatment info and 2012 results to Paradise Lake riparians. Cost \$1,000
4. RLS will conduct follow-up surveys of the aquatic vegetation communities to measure the success of the lake improvement program. At the end of the 2013 season RLS will assess the LFA project for success of Eurasian Water Milfoil (EWM) control and assess the bio control of those areas treated with Midfoil weevils. This independent assessment will include EWM biomass and stem densities, indices of weevil damage on individual milfoil stems, changes in stem diameters or other variables from weevil predation and estimates of weevil population size. RLS will also make comparisons of biovolume data using the biobase database and include this information in the annual report. Cost \$3,000
5. RLS will instruct weevil stocking people to stocking areas and oversee the weevil stocking treatments. This may also include independent assessment of the weevil efficacy where data will be presented in the annual report. Cost \$2,000
6. RLS will conduct a septic tank vulnerability assessment of properties along Paradise Lake that will assess vulnerability of soils to leaching and also the biological integrity of shoreline buffers. Cost \$3,000
7. Water Quality Monitoring: The four (4) deep basins will be evaluated at 3 depths for the following parameters: temperature, dissolved oxygen, pH, conductivity, transparency, total dissolved solids turbidity, total phosphorus, and total nitrogen. Six (6) shoreline sites around Paradise Lake will be selected to sample for shoreline algae. Data will consist of total phosphorus and algae species composition. Cost \$3,000
8. Tax Tribunal Representation: If a tax tribunal case is brought against the PLIB, a scientist from RLS will attend the hearing and testify on behalf of the PLIB for the betterment of Paradise Lake. Cost \$0

**Part II – Payments to Consultant**

1. The total cost of consulting services for Paradise Lake will be a lump sum of \$16,000 for this contract period. Payments are due on a quarterly basis for a total of \$4,000 per quarter. The Consultant agrees that quarterly billings will be billed to the Board on a quarterly basis at the beginning of each quarter.
2. For additional evaluation items requested by the Board, the Consultant will be paid at a billing rate of \$65 per hour.

IN WITNESS WHEREOF, the Paradise Lake Improvement Board and Restorative Lake Sciences, LLC execute this agreement.

**Consultant**

By \_\_\_\_\_  
Jennifer L. Jermalowicz-Jones, Water Resources Director  
Restorative Lake Sciences, LLC



By \_\_\_\_\_  
Paradise Lake Improvement Board