

**Scope of Work 2015-2016
City of Sammamish Lake Monitoring Support Services
For Pine and Beaver Lakes**

The King County Water and Land Resources Division will provide services through the Lake Stewardship Program (KC-LSP) to the City of Sammamish ("City") for monitoring water quality and quantity on both an annual and seasonal basis in Pine Lake and the two major basins of Beaver Lake. Monitoring will include assuring the quality of the compiled data and providing pertinent information on analyses, reporting back to the City and citizen volunteers in a timely fashion and in a manner agreed upon by both parties, and providing technical assistance to the City and the public on questions concerning water quality problems, environmental best management practices, and ecosystem functions.

Annual monitoring program:

KC-LSP will train designated City staff and volunteers in the correct methods for measuring daily precipitation and lake water levels, weekly measurements of surface water temperature and Secchi transparency, and observations on particles in the water, goose abundance, and gathering pertinent information on lake use. The program will provide and maintain the proper equipment and will consult or supervise on proper installation and use. The citizen volunteer or City staff will provide a boat and safety equipment necessary for getting to the chosen sampling site on the lake.

KC-LSP will also provide the volunteers with blank field sheets or electronic files for data reporting on a quarterly basis and will accept either completed field sheets or electronic data files in return.

Seasonal monitoring program:

Water collection will occur biweekly from May through October for a total of 12 events per season. KC-LSP will train City staff and designated volunteers in the correct methods for water sample collection and storage, measurements of surface water temperature and Secchi transparency, and for observations on particles in the water, goose abundance, and gathering pertinent information on lake use. The program will provide proper sampling equipment and will be responsible for repair or replacement if necessary. The program will also provide all sample bottles, properly labeled, and will pick up filled bottles at a designated site to deliver to the KC Environmental Labs for analysis.

Ten of the sampling trips will collect water 1 m beneath the surface, and two will collect depth profiles, collecting water from 1 m, as well as at the middle and near the bottom of the water column. Routinely measured water quality parameters will include concentrations of total phosphorus, total nitrogen, and chlorophyll-a, with identification of the major species of algae present if chlorophyll is high. Additional parameters measured during profile sampling events will include soluble reactive phosphorus, ammonia, nitrate, alkalinity and UV254 (water color).

Database management, analysis, quality assurance, and reporting:

The program will enter all received data from monitors and the KC Environmental Labs into a database to be made available to the city at the end of each year, analyze all data for consistency and general water quality conditions, pursue explanations for anomalies, look for trends or indicators of change in the parameters over time, and if requested make management suggestions to the city or citizens based upon the information.

A compilation of the data as part of the program's annual reporting will be delivered to city staff and cooperating citizen volunteers within a reasonable time after the end of each year, as well as e-files of the data in excel format if requested. A presentation to the city council or appropriate staff may be made if requested, with time for discussion of pertinent issues.

Technical assistance and educational outreach:

Technical assistance and educational outreach on the nature and management of lake ecosystems will be provided to the city and citizens in the form of phone conversations and emails, specific literature research and reporting back, technical reports in addition to the annual report that contain information and recommendations, community presentations, or other methods and types of communication provided upon request. Citizen groups will need authorization from the city in order to qualify for substantial services from the KC-LSP. This work will be billable to the city by the hour for staff time and for major materials outlay, if necessary, up to the agreed upon amount per year stated in this contract. If additional effort is desired by the city in some circumstances, it can be provided through an amendment to this Scope of Work authorized by Sammamish.

Budget:

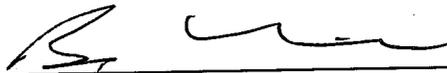
The charges set out below are for a two year period and are based upon staff salaries, indirect operating charges, lab costs, equipment, and mailing charges.

Sammamish-Pine and Beaver(2) Lakes	2015	2016
Seasonal WQ monitoring	\$ 24,600	\$ 25,584
Annual WQ monitoring	\$ 660	\$ 686
Flat fee subtotal	\$ 25,260	\$ 26,270
Total contract amount	\$ 25,260	\$ 26,270

The seasonal and annual monitoring elements will be covered by a flat fee on a per lake basis, to be paid annually by the participating city.

Further technical assistance not related directly to the monitoring effort will be billable by the hour and materials, to be paid annually by the City upon receipt of detailed accounting from KC Water and Land Resources, but shall not exceed \$1,000.00 in each year unless specifically agreed upon by King County and the City of Sammamish in signed and dated communications, either in writing or via email.

Authorized by City of Sammamish:



Name

City Manager

Title

Date: 6/3/2015