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VIA ELECTRONIC MAIL

Mr. Steve Wall, P.E. Public Works Director City of Camas 616 NE 4th Avenue Camas, WA 98607

Subject: Draft Phase 1 Scope of Work, Lake Management Planning

Dear Mr. Wall,

On behalf of Geosyntec Consultants, Inc. (Geosyntec), we are pleased to present you with our draft scope of work for Phase 1 of the Lake Management Planning support to the City of Camas (City). Geosyntec's team with MacKay Sposito and JLA have developed this draft scope of work and budget for Lake Management Planning for Lacamas, Round and Fallen Leaf Lakes.

PHASE 1 SCOPE OF SERVICES

Task 1.1 Data and Background Review Objective

The objective of this task is to gather existing data and background information on the watershed, Lacamas Creek and Lacamas, Round and Fallen Leaf Lakes, and use this information to supplement our current understanding of the Lakes, identify data and knowledge gaps, and identify potential next steps to fill these gaps. Existing data collection programs will be leveraged to the extent possible. For example, the Washington State Department of Ecology (Ecology) is collecting data for its watershed assessment; we will assess if preliminary data from this effort can be acquired. Existing City programs will also be leveraged to fill data gaps to the extent possible.

Goals

- Develop a preliminary Conceptual Site Model (CSM) of the lake to inform Phase 2
- Identify data gaps for filling in Phase 2 and beyond

- Hold a Kickoff Meeting with the City and Team on Lacamas Lake or at the nearby Park.
- Set up a file sharing system, using OneDrive, for internal use for the City and Consulting team.
- Acquire and review relevant datasets and previous studies, including:
 - o Stream flow and precipitation data from Clark County
 - o In-lake water surface elevation and water quality measurements from Clark County, Ecology, and other sources (as available)
 - Data on algal blooms, including times of visual observations of algae as well as laboratory results
 - o Water quality data from stormwater outfalls, treatment facilities, permitted discharges and, as available, agricultural runoff
 - Lake bathymetry
 - o Dam operations, including flows released downstream and drawdown timing
 - o GIS datasets such as lake and watershed boundaries, land use, and land elevation (e.g. LiDAR)
 - Meteorology data
- Participate in driving tour for field reconnaissance of the Lake, inflows, and both known and potential nutrient sources.
- Develop a preliminary Conceptual Site Model of the three lakes.
 - o Evaluate relationships between environmental variables, for example:
 - Timing of algal blooms compared with periods of high nutrient concentrations in inflows.
 - Relationships between in-lake temperature and dissolved oxygen, and algal blooms.
 - o Trophic status (degree of productivity).
 - Water Budget.
 - o Nutrient Loading Sources.
 - o Nutrient Budget.
 - o Identify data and knowledge gaps.
- Develop a PowerPoint slide deck summarizing the results of this task for the City team to review and provide feedback.
- Based on feedback, variations of this presentation may be created for different audiences such as City management, City Council, and the Lacamas Creek Watershed Council or other stakeholders.

Deliverables

• The deliverable for this task will be a slide deck with results from this task, and one or more presentations to the City and stakeholders.

Assumptions

- The City will provide relevant data to Geosyntec as available.
- The City will facilitate outreach for data requests to other agencies; the Geosyntec team including Marty Snell and Adrienne DeDona can support this process as well.
- City personnel will have an opportunity to provide one round of comments on draft presentation slides prior to the presentation to stakeholders.
- The results of this task will be documented in the Phase 2 Lake Management Plan report once data gaps are filled.

Task 1.2 Communication, Outreach and Stakeholder Consultation Objective

The objective of this task is to conduct early outreach which will guide later engagement efforts and gain an understanding of existing lake issues, which will generate ideas for resolving these issues through the Lake Management Plan. This includes soliciting input from key stakeholders to inform initial project stages and ensure that later communication with the general public includes consistent messaging, timely dissemination of information, and proactive mitigation of misinformation. Stakeholder discussions will include meetings with groups such as Camas Meadows Golf Club and Camas School District to share information about the project and learn about their landscaping practices, water use, and use of fertilizers.

This task will include general communication and information to the community to generate awareness of the Lake Management Plan project and begin early education efforts, which might include establishing a project webpage, social media content, posters and flyers.

Goals

- Meet with key stakeholders and have initial conversations to shape the Communications Plan in Phase 2
- Start initial public education on outreach about the project which will shape the Communications Plan in Phase 2

Activities

- Schedule a public involvement kickoff meeting to be held between the Geosyntec team and the City to gain a solid understanding of the public engagement opportunities, issues and goals for the process.
- Identify and reach out to key stakeholders, including partner agencies, as well as identify the best ways to engage these stakeholders.
- Schedule up to 6 two-hour meetings, including developing agendas, discussion questions and compiling meeting minutes. Key stakeholders should include at minimum:
 - 1. Lacamas Lake Advisory Committee
 - 2. City Council
 - 3. Parks Commission
 - 4. Partner Agencies (Clark County Heath and Public Works, WA Ecology, WA Agriculture, SWCD, and others)
 - 5. Key Property Owners
 - a. Golf Course
 - b. Johnston Dairy
 - c. Camas Schools
- Conduct an online community survey to gather input and feedback on watershed and lake issues.
- Coordinate with the City to establish a project webpage using the Engage Camas platform and post project information on the City's social media platforms. This webpage will be used for information sharing and gathering with the public.
- Develop initial public education and outreach materials to post on the City's website to announce the project.

Deliverables

- Agendas, discussion questions and summary report of meetings with up to 6 key stakeholder meetings
- Establishment of a flow process, and point person for data sharing, for data flow between the different stakeholders (Ecology, County, City) and where is that data going to be stored.

Assumptions

- Recognizing that the current pandemic is a constantly changing situation, JLA will work closely with the City and Geosyntec team to determine the best methods to engage people whether that's online or safely distanced in-person engagement.
- Each stakeholder meeting includes about seven hours of staff time to schedule, prepare, attend and document results. This includes 2 public involvement staff attending each two-hour meeting.

Task 1.3 Lake Management Workplan Development Objective

The objective of this task is to set the stage and provide a strong foundation for Phase 2. The outcome of this process will be a workplan for Phase 2 that is clear, includes specific activities and objectives, and is well received by stakeholders. The workplan will include activities that will fill necessary data gaps to develop a Lake Cyanobacteria Management Plan in the Washington State Department of Ecology format.

Goals

- Develop a work plan (schedule, scope and budget) for Phase 2 which includes:
 - o OAPP for field work
 - Field work activities
 - o Public Outreach Plan
 - Possible technical analyses
 - Lake Management Plan Development

- Based on the results of the data gap analysis, identify specific monitoring studies in the short term.
- Develop draft workplan (scope, schedule and budget) for Phase 2 elements:
 - o Public Involvement and Outreach Plan
 - o QAPP for field work
 - Field work studies
 - Possible technical analyses
 - Lake Management Plan Development

- Present the Phase 2 workplan at a workshop with the City and potentially other stakeholders.
- Develop Final Workplan

Deliverables

- Draft workplan for Phase 2 including scope, schedule, staffing, and costs.
- Presentation of the Phase 2 workplan at a review meeting with the City (and potentially key stakeholders) to solicit feedback.
- Final Phase 2 workplan.

Assumptions

- The City will provide one round of review comments on the draft workplan slides prior to a potential presentation to stakeholders.
- The written draft workplan (scope, schedule and cost) will undergo one round of review before presenting to stakeholders and one round of review to incorporate stakeholder feedback prior to being finalized.

Task 1.4 Identify Short-Term Wins for 2021 Summer Season Objective

The objective of this task is to evaluate potential immediate actions to improve lake water quality for the summer of 2021.

Goals

• Identify and prioritize short activities for the City, consultant team or volunteers to conduct in Phase 1 or early in Phase 2 to improve lake water quality.

- Discuss potential short-term project ideas for the 2021 summer season with the City, including:
 - o After confirming strategies through early stakeholder discussions, we will initiate a stewardship program and education campaign with City residents and others to reduce the use of fertilizers. This may include training for landscape

- contractors. This effort would leverage similar education campaigns JLA has conducted for other communities.
- Start a dialogue with Camas Meadows Golf Club and the Camas School District to better understand their practices for landscaping, water use, and use of fertilizers. This may result in an opportunity to reduce nutrient loading to the lake.
- o Begin a dialogue with other large landowners, such as the Johnston Dairy. We understand that the communications with the Dairy would need to be coordinated with the Washington State Department of Agriculture.
- Assist the City with optimization of stormwater BMP maintenance activities (e.g. removal of sediments from catch basins and inlets) and street sweeping to focus efforts on areas where sediments have a higher organic content, such as areas with high tree canopy coverage.
- Evaluate the costs and benefits associated with treating the Lakes with Alum or Phoslock to potentially improve water clarify and the occurrence of algal blooms this summer. This is a temporary measure but would raise awareness in the community. This task includes dialogue with vendors regarding the treatment process and the best time to apply them.
- Ocollaborate with soil and water conservation service to identify possible opportunities for working with agricultural producers to reduce sediment and nutrient loading to Lacamas Creek. For example, this could be simple fencing or hydroseeding to restore stream banks and prevent erosion.
- Lake Trail and Round Lake trail network: implement erosion control measures/ restoration for "hot spots."
- Check and change out catch-basin cartridge units along Dwyer creek and along NW Camas Meadows Drive.
- Evaluate the potential for stockpile management at the Golf Course to manage stormwater runoff.
- o Improve the visibility of status of lake water quality information to citizens.
- O Help educate the public about lake status. For example, the public doesn't know difference between "caution" and "advisory" regarding Harmful Algae Bloom (HAB) toxin levels. Collaborate with Clark County Health to ensure messaging is consistent and in-line with Lake Management Plan project messaging.
- Following initial discussions with the city, evaluate a subset of these ideas and recommend to the City which to pursue.

Deliverables

• Based on initial discussions with the City, a presentation will be developed outlining recommended short-term actions.

Assumptions

- Short-term actions to be pursued will be agreed upon between the Geosyntec team and City personnel.
- The cost of treating the lake with alum or Phoslock will not be included in the Phase 1 scope of work.

Task 1.5 Identify Funding and Volunteer Opportunities Objective

The objective of this task will be to review grants the City has obtained, understand what strategies these grants cover, and determine if there are additional funding opportunities the City could position for.

Goals

- Identify and organize past and current funding opportunities to help develop an ongoing funding strategy in Phase 2.
- Identify possible volunteer activities that will engage the community and potentially be a component of the funding strategy.

- Review current funding sources.
- Evaluate additional opportunities with Clark County, Washington Department of Ecology, the U.S. Department of Agriculture, non-profits and private foundations (examples may include PeaceHealth, Trout Unlimited, and Ducks Unlimited).
- Evaluate volunteer opportunities for Advisory Committee members, the Lacamas Watershed Council members as well as the general public.
- Conduct a funding strategy session with key City staff.
- Develop recommendations and outline a funding strategy for the next 12 to 24 months in a technical memorandum.

Deliverables

• A technical memorandum outlining a funding strategy for the next 12 to 24 months, including additional grant opportunities to pursue.

Assumptions

• This task does not include the Geosyntec team preparing grant applications.

Task 1.6 Project Management

Objective

The objective of this task is to effectively manage the project schedule and budget and provide timely updates on the progress.

Activities

- Provide regular updates on progress via phone, email and meetings.
- Manage the project, including scope, schedule and budget and subconsultant fees and expenses.

Deliverables

Monthly invoices.

Assumptions

• Regular updates will be provided as agreed upon between the Geosyntec team and the City.

BUDGET

Geosyntec is pleased to provide you this quotation for the Phase 1 Scope of Work, to be completed in the first 90 days, on a time and materials basis of \$93,500. This budget estimate includes a 3% communications fee on Geosyntec labor only and a 10% markup on subconsultant labor and any expenses. This is based on the Geosyntec standard rate schedule as provided.

In Table 1 below is a budget summary for the tasks outlined above Phase 1. A detailed budget breakdown is provided below.

Task	Description	Total Cost
1.1	Data and Background Review	\$19,000
1.2	Communication, Outreach and Stakeholder Consultation	\$26,500
1.3	Lake Management Workplan Development	\$25,000
1.4	Identify Short-Term Wins for 2021 Summer Season	\$7,300
1.5	Identify Funding Opportunities	\$5,000
1.6	Project Management	\$9,500
	Total	\$92,400
	Communications Fee, 3% (on Geosyntec labor only)	\$1,100
		\$93,500

CLOSURE

If you have any questions regarding our draft scope of work for Phase 1, please feel free to contact me at (971) 271-5906/(503) 936-0115, or by email at RAnnear@geosyntec.com.

Thank you for the opportunity to submit this draft scope of work for your consideration.

Respectfully,

Robert Annear, Ph.D., P.E. (OR, WA, ID, FL, NC)

Senior Principal Engineer

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Geosyntec Consultants