



City of Colwood

Request for Proposals: Environmental Impact Studies for Treated Wastewater Use and Disposal

RFP #: 2014-04

Closing Date and Time: Tuesday August 26, 2014 3:00 p.m.

Closing Location:

City of Colwood
3300 Wishart Road
Colwood, BC V9C 1R1

Contact person for questions related to this RFP during the response period July 31- August 19:

Nora Creamer at ncreamer@colwood.ca

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1. TERMS OF REFERENCE

1.1. Intent

The City of Colwood is planning to construct a wastewater treatment plant incorporating innovative tertiary treatment technology and resource recovery. The City invites proposals for one or more consultants or consulting teams to undertake all or part of an Environmental Impact Study (EIS) of the planned use and/or discharge of treated effluent as required under the Municipal Wastewater Regulation (MWR).

There are three components to the Environmental Impact Study, with each component to be conducted in two phases (Stage I: review of existing information; Stage II: field investigations determined during Stage I). This RFP covers only Stage I of each component.

- 1) Reclaimed water use (streamflow augmentation; irrigation; toilet flushing; landscape features)
- 2) Ground disposal
- 3) Marine discharge

Proponents may bid on one or more of the components, but must provide separate pricing for each. Proponents who bid on more than one component should also indicate whether there would be cost savings if the proponent were to be awarded more than one component of the EIS.

Proponents may bid as individual companies, as individual companies working as a coordinated team, or as a prime consultant with sub-contractors. If a team arrangement is proposed (as opposed to a prime contract arrangement) the team must provide co-ordinated updates to the City and ensure that project management costs are comparable to or less than a traditional prime consulting contract. It is not necessary for a proponent to bid on all three components of the EIS. The City of Colwood is open to entering into flexible working arrangements in order to procure innovative and creative solutions to wastewater effluent disposal that maximize community and ecological benefit.

It is the City of Colwood's intent to award a contract(s) to conduct the initial phases of each component of the study, prior to committing to the entire program. For example, the ground discharge study will have a Stage I desktop component in which existing information is reviewed and assessed, prior to further field investigation in Stage II. If this initial work shows that ground discharge is not feasible or that capacity is too limited, then the City will not pursue field investigations. If, on the other hand, the desktop review shows positive results, then the City will pursue Stage II. If the proponent determines that there are field investigations that must be undertaken immediately to avoid future delay (*e.g.* due to seasonality of sampling requirements) this work should be clearly identified and included as part of the Stage I scope.

Each component of the EIS should not only be designed to identify impacts, as required under the MWR, but should identify (and where possible quantify) the environmental benefit or impact of reclaimed water use, ground or ocean discharge.

2. Definitions and Administrative Requirements

2.1. Definitions

Henceforth within this document, the following definitions shall be used:

“City” refers to the City of Colwood.

“Contract” means the written agreement resulting from this request for Proposal executed by the City of Colwood and the Consultant.

“Consultant(s)” means the successful Proponent(s) to this request for proposal who enters into a written Contract with the City.

“must”, “shall” or “mandatory” means a requirement that must be met in order for the proposal to receive consideration.

“Proponent” means an individual or a company that submits, or intends to submit, a proposal in response to this request for proposal.

“Proposal” means a submission in response to this request for proposal.

“request for proposal” or “RFP” means this request for proposal.

“should” or “desirable” means a requirement having a significant degree of importance to the objective of the request for proposal.

2.2. Terms and Conditions

The following terms and conditions will apply to this RFP. Submission of a Proposal in response to this RFP indicates acceptance of all the terms that follow and that are included in any addenda issued by the City.

2.3. Alternative Solutions

If alternative solutions are offered, the information should be submitted in the same format, but as a separate Proposal and clearly marked as an alternative solution.

2.4. Changes to Proposals

By submission of a written notice, a Proponent may amend or withdraw its proposal prior to the closing date and time.

Upon closing, all proposals become irrevocable. The Proponent will not change the wording of its proposal after closing and no words or comments will be added to the proposal unless requested by the City for clarification.

2.5. Proponents' Expenses

Proponents are solely responsible for their own expenses in preparing a Proposal. If the City elects to reject all proposals, the City will not be liable to any Proponent for any claims for costs or damages incurred by the Proponent in preparing the proposal, loss of anticipated profit in connection with a final Contract, costs for returning unopened proposals, or any matter whatsoever.

2.6. Proposal Validity

Proposals will be open for acceptance for at least 60 days after the closing date.

2.7. Firm Pricing

Prices will be firm for the entire Contract period unless this RFP states otherwise. Proponents, for all or any part, shall base their proposal on furnishing everything including all labour, materials, tools, equipment and all necessary supplies and incidentals required to fulfil the scope of work. The proponent in their proposal must state any deviation from these requirements.

2.8. Currency and Taxes

Prices quoted are to be in Canadian dollars and inclusive of disbursements where applicable, and exclusive of GST which shall be shown separately on the attached proposal form.

2.9. Sub-Contracting and Team Arrangements

Proponents may bid as individual companies, as individual companies working as a coordinated team, or as a prime consultant with sub-contractors. In all circumstances, all the individuals and companies included in the Proposal must be clearly identified and an organization chart must be included to illustrate how the project will be co-ordinated.

2.10. Basis of Fees

Fees for the project will be charged on an hourly rate basis. Include all taxes applicable to this project. A schedule of rates for individual project personnel will be included with the proposal.

Expenses that will be charged will be described. The rate for expenses, such as mileage, copying, faxing, *per diem* and other, will be described. Mark up on invoiced supported expenses, including sub consultants, will be described.

The hourly rates and upset amounts requested below for various aspects of the project will be considered in the evaluation. The lowest proposed fee rates or amounts will not necessarily be the principal factor in the award of the project. The quality of the proposals will be considered and judged first before the prices are examined.

2.11. Upset and Estimated Fees

An estimate of the time required for each task, the fee for the labour component and the expenses for each task of the Scope of Work, and others if suggested by the Proponent, shall be included in the proposal.

The estimated fee shall be regarded as an upset amount and shall not be exceeded without prior written approval of the City. Such approval will only be considered for changes in the scope of the work required due to factors that could not have been anticipated with the information available at the time of submitting the proposal.

2.12. Acceptance of Proposals

This RFP should not be construed as an agreement to purchase goods or services. The City is not bound to accept the lowest priced or any Proposal of those submitted. Proposals will be assessed in light of the evaluation criteria and the City is under no obligation to receive further information, whether written or oral, from any Proponent.

Neither acceptance of a Proposal nor execution of a Contract will constitute approval of any activity or development contemplated in any proposal that requires any approval, permit or license pursuant to any federal, provincial, regional district or municipal statute, regulation or by-law.

The City reserves the right to reject any and all Proposals for any reason or to accept any Proposal in whole or in part on the basis of the Proposals received which the City, in its sole unrestricted discretion, deems to be the best value for the City. The lowest or any proposal may not necessarily be accepted.

Proponents acknowledge the City's rights under this clause and absolutely waive any right of action against the City for the City failure to accept their Proposals whether such right of action arises in contract, negligence, bad faith or any other cause of action.

The City reserves the right to cancel this RFP at any time and for any reason, and will not be responsible for any loss, damage, cost or expense incurred or suffered by any Proponent as a result of such cancellation.

The City reserves the right to enter into negotiations with one or more Proponents concerning the terms and conditions of the services to be provided, and expressly reserves the right through such negotiations to request changes, alterations, additions or deletions from the terms of any Proposals received.

The acceptance of any Proposal is subject to funding and may require approval of the Colwood City Council. After acceptance by the City, the successful Proponent(s) will be issued a written notice(s) of award.

2.13. Contractual Obligations or Claims for Compensation

By issuing this Request for Proposals, the City is not seeking binding offers and no contractual obligations whatsoever shall arise between the City and any Proponent, including as a result of the issuance of this RFP or the submission of a proposal, unless the City and a Proponent execute and deliver a written contract for the provision of the services contemplated under this RFP. Without in any way limiting the foregoing, no Proponent shall have any claim for any compensation of any kind whatsoever, as a result of participating in the Request for Proposal, and by submitting a proposal, each proponent shall be deemed to have agreed that it has no claim.

2.14. Definition of Contract

Notice in writing to a Proponent of the acceptance of its Proposal by the City and the subsequent full execution of a written contract will constitute a Contract for the services, and no Proponent will acquire any legal or equitable rights or privileges relative to the goods or services until the occurrence of both such events.

2.15. Liability for Errors

While the City has used considerable efforts to ensure an accurate representation of information in this RFP, the information contained in this RFP is supplied solely as a guideline for Proponents. The information is not guaranteed or warranted to be accurate by the City, nor is it necessarily comprehensive or exhaustive. Nothing in this RFP is intended to relieve Proponents from forming their own opinions and conclusions with respect to the matters addressed in this RFP.

2.16. Modification of Terms

The City reserves the right to modify the terms of the RFP at any time at its sole discretion. Such modifications will be communicated to all Proponents through formal addenda.

2.17. Ownership of Proposals and Freedom of Information

Each proposal and all information, materials and products included in a proposal submitted for this project shall be the sole property of the City of Colwood. Proponents should be aware that the City is subject to the provisions of the Freedom of Information and Protection of Privacy Act (FOIPPA). A Proponent may stipulate in their proposal that portions of the proposal contain confidential information and are supplied to the City in confidence. The City will keep confidential, if possible, any information that is specifically marked with a reason for confidentiality that is valid under the legislation. However, under FOIPPA the City may be obligated to disclose all or part of a proposal in response to a request made under that Act, even if the Proponent has stipulated that part of the Proposal is supplied in confidence. Proponents should review section 21 and other provisions of FOIPPA in order to gain a better understanding of the City's disclosure responsibilities under FOIPPA.

2.18. Confidentiality of Information

Information pertaining to the City obtained by the Proponent as a result of participation in this project is confidential and must not be disclosed without written authorization from the City.

2.19. Conflict of Interest

Proposals will not be evaluated if the Proponent's current or past corporate or other interests are, in the reasonable opinion of the City, deemed to be a conflict of interest in connection with this RFP or the activities or mandate of the City. The City reserves the right to disqualify or reject a Proposal in whole or in part where the Proponent or its directors, officers, shareholders or any person associated with the Proponent has a claim or has initiated a claim or legal proceeding against the City with respect to any previous contracts, tenders or business transactions and where this is seen in the reasonable opinion of the City as creating a conflict of interest between the Proponent and the City.

2.20. Confirmation of Insurance

The Proponent will provide with the proposal confirmation a description of the coverage of the professional liability insurance carried by each team member.

Upon acceptance of their proposal, the Consultant shall submit to the City a Certificate of Insurance containing the following:

- a) Provision naming the City as an additional insured to the Comprehensive General Liability Policy;
- b) Confirmation that the Comprehensive General Liability Policy contains a cross liability clause;
- c) Comprehensive General Liability Policy in an amount not less than \$2,000,000; and
- d) Liability insurance in an amount not less than \$2,000,000 with the Insurance Corporation of British Columbia on any licensed motor vehicles of any kind.

A minimum of 30 days written notice of cancellation of the mandatory Comprehensive General Liability Policy is required.

3. Proposal Submission Requirements

3.1. Proposal Submission

Proposal submissions shall include one signed paper copy and one digital (PDF) copy of the Proposal. The proposals shall be submitted in two envelopes. **Envelope 1** shall contain the technical proposal and include, at a minimum, the following components:

- 1) A description of tasks and methodologies to be undertaken for Stage I which comply with BC Ministry of Environment (MOE) requirements and requirements of the Municipal Wastewater Regulation (MWR).
- 2) A schedule for completion of Stage I of the project.
- 3) Education and professional qualifications of each individual assigned to the project, including sub-consultants/ team members, their function on the project, and a summary of their work experience with related projects.
- 4) A list of references in chronological order of three (3) similar projects successfully completed by the Proponent's firm in the last five (5) years. Provide the name and telephone number of a contact person from previous projects.
- 5) An organization chart showing how the project team will coordinate its work.
- 6) Confirmation of professional liability insurance (errors and omissions) coverage for a minimum of \$1,000,000 for the project.

Envelope 2 shall contain the fee proposal:

- 7) Project costs showing:
 - a. Proponent maximum fee;
 - b. A breakdown of project costs by task in a manner that allows for easy cross-referencing of task, personnel, timing, and cost;
 - c. Total hours and fees for each individual, including sub-consultants, and all charge-out rates;
 - d. The cost to the City should meetings in addition to those noted in the Proponents proposal be required; and
 - e. Disbursement estimate.

3.2. Questions and Clarification

Questions or requests for clarification regarding this Request for Proposals during the response period of July 31- August 19 shall be directed in writing to:

Nora Creamer, Administrative Support Coordinator, City of Colwood
e-mail: ncreamers@colwood.ca

Questions will not be entertained after end of business August 19.

3.3. Addenda

Addenda may be issued during the Proposal period in response to queries received. Addenda will be in written form and posted on the City's website. All addenda become part of the Contract document and must be considered when responding to this RFP.

Verbal answers are binding only when confirmed by written addenda.

3.4. Disclaimer

Each Proponent is responsible for reviewing and understanding the terms and conditions of this RFP, and the scope of work being requested. The City makes no representation or warranty as to the accuracy or completeness of the information contained in this RFP and the Proponent is solely responsible for ensuring that it has obtained and considered all information necessary to understand the requirements of the RFP, and to prepare and submit its Proposal. The City will not be responsible for any loss, damage or expense incurred by a Proponent as a result of any inaccuracy or incompleteness in this RFP, or as a result of any misunderstanding or misinterpretation of the terms of this RFP on the part of any Proponent.

3.5. Evaluation of Proposals

General

Proposals received will be evaluated by a committee of members of City staff and specialist advisors subject to final approval by the Council of the City of Colwood.

Technical Evaluation Criteria

The technical merits of proposals will be evaluated in accordance with the following criteria:

- a) The Firm(s) including:
 - i. Experience with innovative projects and reviews of the outcomes;
 - ii. General related experience; and
 - iii. Local office resources, experience and operations.

- b) Personnel, Project Manager and Team Members including:
 - i. Successful Experience on similar projects;
 - ii. Successful Experience on related projects;
 - iii. Qualifications; and
 - iv. Local knowledge.

- c) Methodology including:
 - i. General approach;
 - ii. Team organization;
 - iii. Proposed activities;
 - iv. Project control and reporting;
 - v. Understanding of project objectives;
 - vi. Quality and presentation of the proposal;
 - vii. Proposed level of effort; and

viii. Attention to sustainability and climate change.

d) Perceived overall value of services proposed.

Any sub-consultants will be evaluated using the same criteria. References will be checked and these will be used in the selection.

4. Scope of Work

4.1. Background

The City of Colwood is one of the seven municipalities included in the Capital Regional District Core Area Liquid Waste Management Plan (CALWMP). This plan currently envisions a large centralized secondary wastewater treatment plant to serve the core area of the CRD with a satellite plant to be built on the Westshore sometime in the future (est. 2030) as capacity at the core area plant is reached. Initial calculations suggest that this option may be cost prohibitive for Colwood's residents, since only approximately 30% of Colwood's population is currently on sewer. The City believes that the costs to the City will be insufficiently flexible and result in higher initial costs than necessary which may inhibit the expansion that the community would need to bring these costs in balance. Colwood has been granted permission from the CRD to investigate the option of bringing a Westshore plant on-line in the immediate future, built and financed by the City of Colwood specifically for its situation. If feasibility can be demonstrated within a fixed time frame, the CRD may eventually approve the project. The City is therefore pursuing an aggressive schedule to complete the pre-design requirements of the Municipal Wastewater Regulation (MWR), including required Environmental Impact Studies (EIS). The City intends to request a pre-registration meeting with the Ministry of Environment by December 2014/January 2015.

The City does not support secondary level wastewater treatment in the 21st century. Therefore, the City intends to treat its wastewater to a much higher standard. The City favours reclaimed water use with ground disposal for surplus and to serve as the alternate method of disposal, but recognizes that ocean discharge may be required if ground disposal capacity is inadequate. In addition, on opening day of the plant (assumed at this stage to be early 2017), the City may be able to discharge in the CRD's Northwest Trunk which is used by others to carry untreated sewage to the ocean outfall at Macaulay Point. The other six municipalities will need to treat their sewage by 2020 at the latest, and several of them may or may not then discharge the treated effluent into the Northwest Trunk. In order to avoid delay, the City wishes to engage a consulting team(s) to undertake a preliminary desktop review of options (Stage I EIS) followed by recommendations on which to pursue. Based on the outcomes of the Stage I desktop studies, the City may then engage consultant(s) to conduct the necessary field work to complete the Stage II EIS as soon as possible.

Principles

The City has committed to several principles to guide the feasibility, design and construction of a wastewater treatment plant in Colwood:

- the plant will provide tertiary level treatment (+ UV disinfection), with nutrient removal if removal is demonstrated to be required and/or advantageous;
- The treatment system will include the recovery of resources including water, heat, biosolids (and potentially nutrients) for beneficial reuse;
- The site of the treatment plant, currently proposed for the City-owned Park and Ride at the SE corner of Sooke Road and Ocean Boulevard, will be a multi-use integrated facility;
- The site will be designed to accommodate research and development and will serve as a test platform for new, innovative technologies alongside established, proven systems that will serve the City's treatment needs on a day-to-day basis;
- The treatment plant will be designed to be modular with "just in time" expansion to meet Colwood's needs as the City grows;
- The plant will be energy and resource efficient. In keeping with the City's declared intent to be "Carbon Neutral, Energy Positive and Water Smart" alternative energy sources will be incorporated wherever practical;
- Environmental impacts, including carbon emissions, will be minimized and environmental benefits will be maximized;
- The facility will be designed for LEED Gold equivalent or better but not for certification unless this is required for sourcing grants;
- Wastewater treatment will begin as soon as possible, with a target date for construction of 2016/2017.
- The City will need a maximum of 4 ML/day of disposal for its own purposes, but may need to expand that to 12 ML/day to be able to take sewage from Langford as well.

Colwood currently has a population of 16,093 (2011).

The Environmental Impact Studies requested in this RFP are designed to inform the City's overall wastewater treatment principles, timeline and objectives.

As required by the MWR, the objectives of an EIS for discharges to the physical, chemical and biological environment and for use of reclaimed water are to:

- establish pre-discharge conditions in the receiving environment using existing data and/or by conducting adequate sampling of water, sediment and biota;
- establish, before and after discharge commences, receiving environment monitoring locations, and sampling parameters and frequencies;
- assess existing and potential uses of the receiving surface water or groundwater, by humans, plants and animals, including reference to blue and red species lists;
- determine whether applicable receiving water quality guidelines are and will be met and under what conditions;
- carry out analysis, as appropriate to the nature of the discharge and the receiving environment including consideration of potential cumulative effects, to determine if the proposed treatment, reuse or disposal system will adversely affect human health or the environment;

- provide recommendations for additional effluent quality requirements necessary to ensure that the proposed treatment, reuse or disposal system will protect human health and the receiving environment; and
- include provisions for controlling environmental impacts during construction and operation of the treatment facility or site.

Proponents are expected to be familiar with the requirements of the MWR, and the companion guidance document: Environmental Impact Study Guideline – A Companion Document to the Municipal Sewage Regulation (Issued December 2000)¹ and to be experienced in preparing such Environmental Impact Studies. Additional work caused by a lack of understanding of the MWR and the EIS Guideline will not be paid by the City.

Reclaimed Water Use

The City wishes to pursue a broad suite of reclaimed water uses, including toilet flushing, irrigation, industrial water supplies and landscape features, but understands that these may take time to establish. Seasonal streamflow augmentation, however, can be pursued immediately thus requiring evaluation in the EIS.

Colwood is home to several creeks, lakes and wetlands that may benefit from streamflow augmentation, particularly during the summer months. Colwood Creek, which flows into Esquimalt Lagoon, and Millstream Creek, which flows into Esquimalt Harbour both experience low flows in the summer months and both empty into sensitive coastal estuaries. Presently, the Royal Colwood Golf Club impounds Colwood Creek upstream of Sooke Road and uses it for irrigation. Latoria Creek, which flows into Albert Head Lagoon, may also be a candidate for augmentation if a future satellite plant were to be located in the rapidly-growing Royal Bay area.

While the City recognizes that none of the creeks are large enough to provide the dilution required for surface water discharge under Part 6 of the MWR, they may be candidates for streamflow augmentation under Part 7 Reclaimed Water Use. There may also be opportunities to create new or expand existing wetland habitat within the community. The City is committed to examining all options, not just those on City-owned land. These options may include Federal property within Belmont Estates or Royal Roads University, vacant private land that could be acquired, highway rights-of-way, or other innovative options.

The City has limited historical water quality information on its watercourses. Water quality sampling was undertaken once in April 2014 to ensure that baseline information was captured on Colwood, Millstream and Latoria Creeks for the season. The CRD also holds water quality information on these systems, particularly Colwood Creek, and has installed continuous monitoring devices in Colwood Creek at Royal Roads University for temperature, pH and water level. Limited water quality information is available from the Ministry of Environment through their EMS data storage system.

¹ Note: while the Municipal Sewage Regulation has been replaced by the Municipal Wastewater Regulation, the guidance document has not yet been updated.

Discharge to Colwood Creek should consider potential impacts, benefits and regulatory implications of the ultimate fate of the water within Esquimalt Lagoon, an embayed area with limited water exchange that is a Federally-designated Migratory Bird Sanctuary.

Ground Disposal

Colwood is underlain by extensive Quaternary sand and gravel deposits indicating a potential for ground disposal of significant quantities of Class A effluent. Ground disposal would also provide the alternate disposal option for non-compliant reclaimed water required by the MWR. Based on existing geotechnical information, to the extent possible, the EIS should identify potential locations (whether on City-owned land or private) for ground disposal of the treated effluent. Should the results prove promising, the City would then proceed with Stage II fieldwork, including hydrogeological investigations, to address the requirements of the MWR.

Marine Discharge

While the City recognizes the potential need for ocean discharge, simply due to the volume of treated effluent potentially available, ocean discharge is their least preferred option, due to concern over coastal zone eutrophication and accumulation of pharmaceutical and personal care products. If ocean discharge is required, the City wishes to minimize impact and maximize benefit through creative strategies such as using the effluent to encourage near-shore kelp production and habitat creation. Some of these options may currently be limited due to the MWR requirements, but inclusion of such strategies, and identification of associated regulatory barriers, is encouraged, though not mandatory. The primary focus of the ocean discharge EIS will be to determine its location and feasibility under existing regulations.

4.2. Advanced Work

The EIS components, to the greatest extent possible, will utilize work completed as part of the CRD's LWMP process as well as other completed engineering and environmental studies in order to meet the City's project timelines and maintain program efficiencies.

Reports and information sources are available for review in preparing this proposal and for executing the commission. They are listed in *Section 5 Information Sources* of this document. The proponent is expected to be familiar with government databases and to perform a complete search for all available background information.

4.3. Project Area

The project area is considered to be the boundaries of the City of Colwood; however, Proponents who are aware of discharge options outside the City boundary, should review such options with the City. The City may wish to include such options within the scope of the project.

4.4. Project Reporting Structure

The Consultant will be required to liaise with City staff and the Project Advisory Team (PAT) throughout the project. Staff will be available on an ongoing basis to discuss issues as they arise. Contact with the City should be through the City Engineer and contact information for the PAT will be provided by email from the City Engineer.

4.5. Project Plan

The project will generally include the following phases and key events:

Project Initiation:

Project start-up meeting with PAT and City Engineer.

Review existing reports and data.

Develop terms of reference for a Stage I EIS for a new discharge.

EIS Study:

Initiate EIS Stage I work.

Prepare draft Stage I report.

Plan Approval:

Present final EIS report to the City for review.

Make revisions as appropriate and present final report.

4.6. Communications

All public communications must be approved by the Communications Manager, City of Colwood.

4.7. Tasks

The scope includes three distinct, but interrelated components:

- 1) Reclaimed Water/ Streamflow Augmentation
- 2) Ground Disposal
- 3) Marine Discharge

Proponents may propose to undertake one or more of the components, but should provide separate workplans and costs for each component.

It will be the responsibility of the selected Consultant(s) to develop a terms of reference and identify a detailed list of tasks which meet all regulatory requirements for each component of the EIS. Tasks completed as part of previous study work, by the CRD or others, should be updated and carried forward for inclusion in the Stage I reports. More detailed information on the scope of the components is described below.

1) Reclaimed Water/ Streamflow Augmentation

The scope of work will include completion of a Stage I EIS for irrigation and streamflow augmentation that meets the requirements of the MWR.

1. Determine the periods of the year when streamflow augmentation could be done.
2. Determine whether seasonal streamflow augmentation will adversely affect the surface water receiving environment.
3. Develop a list of potential irrigation use sites and provide recommendations for an irrigation plan for each (watering rates, effluent quality requirements, restricted or non-restricted public access, notification requirements).

4. For each irrigation site or use determine the potential for adverse environmental or public health impacts (including impacts on groundwater).
5. Develop a scope of work and cost estimate for the Stage II EIS, if warranted.

2) Ground Disposal

The scope of work will include completion of a Stage I EIS for a ground discharge that meets the requirements of the MWR for discharge of Class A effluent. Tasks may include, but may not be limited to:

1. Collect and review available background information including, but not limited to, those documents listed in *Section 5 Information Sources*.
2. Identify land parcels with potential for large-scale soil-based treatment, based primarily on property size, mapped soil conditions, proximity to the sewage collection area, and property access.
3. For properties meeting these criteria, evaluate specific site conditions with respect to requirements of the *BC Municipal Wastewater Regulation, e.g.* subsurface travel time and surfacing requirements.
4. For properties meeting requirements of the *Regulation*, estimate the hydraulic and treatment capacity of the property.
5. For those sites with a suitable hydraulic capacity, evaluate environmental impacts, identify site constraints, and recommend design and construction solutions to those constraints.
6. Conduct a review of discharge options based on the results of this study and make recommendations.
7. Provide a written summary of the findings and recommendations.
8. Develop a scope of work and cost estimate for the Stage II EIS, if warranted.

3) Marine Discharge

The scope of work will include completion of an EIS for a new marine discharge that meets the requirements of the MWR and an EIS for the existing Macaulay Point outfall, if the outfall carried only tertiary treated effluent. Recommendations on the timing of a pre-discharge monitoring program are required in order to ensure adequate time for data collection while meeting project timelines. The City also wishes the consultant to confirm that an EIS would not be required to temporarily discharge treated effluent into the NorthWest trunk sewer (Macaulay Point) while it is still in use to convey untreated effluent from other CRD municipalities. Tasks may include, but may not be limited to:

1. Conduct a literature review and summarize existing information;
2. Identify normal wind direction, tidal influences, and marine currents;
3. Conduct a desktop review of existing local current (drogue) studies to determine current patterns and velocities in the area of the proposed outfall(s);
4. Describe, compare and contrast the potential outfall siting options all of which comply with the requirements of the MWR;
5. Review historical water sampling programs and recommend water sampling and water column profiling as necessary for Stage II;
6. Conduct a desktop fisheries and shellfish inventory;

7. Inventory receiving water uses such as fisheries resources, commercial shellfish leases, recreational uses, or other uses;
8. Identify any existing or proposed nearby discharges, including their quantity and quality, and the potential cumulative effects of the proposed discharge, per the MWR requirements;
9. Conduct a desktop review of existing treatment facilities/discharges and effluent characteristics, including identification of a maximum daily flow and average annual effluent flow, and influent and effluent quality;
10. Estimate dilution performance and integration of the effluent into the receiving environment through dilution and dispersion modelling of the effluent plume. Conduct preliminary dilution modelling of the effluent plume to estimate initial dilution and subsequent dilution, diffusion, and dispersion that will occur from the outfall diffuser, using worst-case values for seawater temperature, pH, salinity and currents and effluent temperature and salinity;
11. Develop a preliminary estimate of the receiving water quality at the edge of the initial dilution zone (IDZ) and at any area of concern for the two-times average dry weather effluent flow, and compare these results with current, applicable BC water quality guidelines;
12. Conduct a review of discharge options based on the results of this study and make recommendations;
13. Make recommendations for an environmental monitoring program and new data acquisition;
14. Provide a written summary of the findings and recommendations; and
15. Develop a scope of work and cost estimate for the Stage II EIS, if warranted.

4.8. Deliverables

The following deliverables are expected as a minimum for each of the three EIS Project Components (Reclaimed Water, Ground Disposal, Marine Discharge) and may be combined if a contract is awarded to a single proponent:

1. Project start-up meeting minutes
2. Weekly update summaries and meeting minutes
3. EIS terms of reference by Project Component
4. Proposed timeline
5. Stage I EIS report for each Project Component (Reclaimed Water, Ground Disposal, Marine Discharge)
6. Progress Report at the halfway point
7. Recommendations and rationale as to whether to proceed with Stage II EIS
8. Scope of work and cost estimate for the Stage II EIS, if warranted

4.9. Proposed Timeline

Following are proposed milestone dates for the EIS project:

- | | |
|---|-----------------------------|
| a) Request for Proposals issued | Thursday, July 31, 2014 |
| a) Submission of Proposals | Tuesday, August 26, 2014 |
| b) Colwood – Consultant Agreement | Tuesday, September 23, 2014 |
| c) Progress Report at Halfway Point | Tuesday, October 28, 2014 |
| d) Submission of Project Summary Report | Tuesday, December 02, 2014 |

4.10. Additional Services

Should the City decide to proceed with additional services relating to the work, a separate contract for additional services (the “Additional Services”) will be awarded. The City reserves to itself the right to award the contract for Additional Services to the successful Proponent(s) of this RFP process. However, the City also reserves the right to procure a contract for Additional Services through a competitive process.

5. Project Management

The Consultant(s) will provide the overall project management for the EIS under direction of the City Engineer of the City of Colwood.

6. Project Team and Experience

Provide resumes and experience of team members, co-consultants, and any specialists required to perform the necessary tasks to complete the Project Objectives and Deliverables. Substitutions for team members will not be permitted unless a request is submitted in writing and is approved by the City.

7. Methods

Provide a task list that shows a clear understanding of the Project Objectives and an estimated schedule.

8. Information Sources

The following reports and information sources are available for review in preparing this proposal and for executing the commission:

- 1) City of Colwood records
- 2) ICIS Mapping
- 3) Capital Regional District Mapping
- 4) Capital Regional District water quality data from stormwater quality program
- 5) Capital Regional District water quality and quantity data for Colwood Creek
- 6) Provincial policies and plans
- 7) CRD Core Area Wastewater Treatment Pre-Discharge Monitoring Program. Year 1 Progress Report. Worley Parsons, November 2010. [Available at: https://www.crd.bc.ca/docs/default-source/seattera-pdf/reports-studies/report_marineoutfallspre-dischargeyear1updateeis_nov2010.pdf?sfvrsn=2](https://www.crd.bc.ca/docs/default-source/seattera-pdf/reports-studies/report_marineoutfallspre-dischargeyear1updateeis_nov2010.pdf?sfvrsn=2)
- 8) Stage 2 Environmental Impact Study of McLoughlin Point and Marine Impacts - WorleyParsons
Appendix 1 - Stage 1 Environmental Impact Study
Appendix 2 - Current Profile Measurements
Appendix 3 - Current Roses
Appendix 4 - Pre-discharge Water Quality
Appendix 5 - Pre-discharge Sediment and Benthics
Appendix 6 - Outfall Siting
Appendix 7 - Storm Discharges
Appendix 8 - Dilution and Dispersion modelling
Appendix 9 - WMEP Monitoring Program
- 9) Archipelago Marine Research Ltd., 2000, SUBTIDAL SURVEY OF THE PHYSICAL AND BIOLOGICAL FEATURES OF ESQUIMALT LAGOON <https://www.crd.bc.ca/docs/default-source/harbours-pdf/esquimalt-lagoon/subtidal-survey-physical-biological-features-esquimaltagoon.pdf?sfvrsn=4>

9. Colwood – Consultant Agreement

The successful Proponent(s) will be invited to enter into a Consultant agreement(s) with the City of Colwood for the provision of consulting services. The agreement(s) will be based on this RFP, the proposal submitted, including the tasks to be carried out, the personnel committed and the fees to be charged and any negotiated changes to any of the foregoing.

10. Contract Conditions

By submission of a Proposal, the Proponent agrees that should its Proposal be successful, the Proponent will enter into a Contract with the City that subject to negotiation, may include the following selected contract clauses:

10.1. Compliance With Laws

The Consultant will give all the notices and obtain all the licenses and permits required to perform the work. The Consultant will comply with all laws applicable to the work or performance of the contract.

10.2. Laws of British Columbia

Any Contract resulting from this RFP will be governed by and will be construed and interpreted in accordance with all laws in effect for the province of British Columbia.

11. Authorization

The proposal will be signed by a representative of the Proponent.

12. Submission Date, Time and Place

One signed hard-copy original, and one digital copy in PDF format of the proposal will be submitted to the City of Colwood at the address given below:

City of Colwood
3300 Wishart Road
Colwood, BC V9C 1R1
Phone 250-478-5999
Fax 250-478-7516
e-mail: ncreamer@colwood.ca

Proposals shall be enclosed in two sealed envelopes (one for the technical proposal and one for the fee proposal) within a single larger envelope. Each of the three envelopes must be clearly marked "RFP 2014-04 Environmental Impact Studies for Treated Wastewater Use and Disposal" and include the Proponent's name and address. The envelopes containing the technical proposal and the fee proposal must be clearly marked as such. Proposals must include a signed copy of the Proposal Form. A digital copy of the proposal in PDF format must be provided on a labelled flash drive or by email. It is the responsibility of the proponent to confirm that all files sent by email are received without error prior to the closing date and time.

Proposals will be received at Colwood City Hall before **3:00 PM local time on Tuesday, August 26, 2014**. It is the exclusive responsibility of the bidders to ensure that their proposal is received by the City of Colwood before this date and time.

13. Proposal Form

Request for Proposal

RFP 2014-04 Environmental Impact Studies for Treated Wastewater Use and Disposal

Closing Date and Time: **August 26, 2014 3:00 pm local time**

This form must be completed, signed and included with the Proposal. One form for each Proponent who intends to enter into a contractual agreement directly with the City, whether individually or as part of a team (not as a sub-contractor), must sign and return this proposal form.

The undersigned confirms that their Proposal is in response to the request for proposal for Environmental Impact Studies for Tertiary Wastewater Treatment with Resource Recovery. The Proponent acknowledges receipt of addenda # _____ through addenda # _____

Name of Firm:	
Address:	
Contact Name:	
Phone:	
Email:	
Signature:	
EIS Component #1 Reclaimed Water (Stage I)	
Fees	\$
Disbursements (to be detailed in the Proposal)	\$
GST as applicable	\$
Total Proposed Price Component #1 Stage I	\$
EIS Component #2 Ground Disposal (Stage I)	
Fees	\$
Disbursements (to be detailed in the Proposal)	\$
GST as applicable	\$
Total Proposed Price Component #2 Stage I	\$
EIS Component #3 Marine Discharge (Stage I)	
Fees	\$
Disbursements (to be detailed in the Proposal)	\$
GST as applicable	\$
Total Proposed Price Component #3 Stage I	\$
Total Proposed Project Price (all Components)	\$