

**MEMORANDUM OF UNDERSTANDING
IN SUPPORT OF IDENTIFYING POTENTIAL WETLAND REPLACEMENT PROJECTS
FOR PURPOSES OF WETLAND REPLACEMENT PROGRAM**

This Memorandum of Understanding is made effective the 1st of October, 2020.

BETWEEN:

HER MAJESTY THE QUEEN

in right of Alberta

as represented by the Minister of Environment and Parks
(the "Province")

-and-

Strathcona County

(the "Municipality")

(collectively referred to as "Participants")

WHEREAS the Province recognizes that wetlands are a vital part of Alberta's ecological landscape and necessary for a sustainable economy and healthy communities, and has accordingly established the WRP to meet the outcomes of the Alberta Wetland Policy.

WHEREAS through the WRP the Province utilizes Fees paid by persons under the Wetland Restoration and Replacement Fee Ministerial Order (35/2018) to fund Wetland Replacement Projects across the province.

WHEREAS a priority of the Alberta Wetland Policy and the WRP is to replace wetland area and function in watersheds where permanent wetland disturbances have been approved under the *Water Act*, and Fees have been paid to the Province.

WHEREAS the Municipality wishes to undertake Wetland Replacement Projects in order to achieve specific environmental outcomes, including but not limited to flood attenuation, drought resiliency, groundwater recharge, water quality improvement, habitat for wildlife and biodiversity, and for social, recreational and educational value to the public.

WHEREAS the Municipality is able to ensure that each Wetland Replacement Project component, including wetland assessment, design, construction, inspection and adaptive management, is supervised and authenticated by an Authenticating Wetland Professional.

THEREFORE this MOU establishes a cooperative process to identify appropriate Wetland Replacement Projects for the purpose of the Participants entering into related Service Contracts to undertake those Wetland Replacement Projects.

1. DEFINITIONS, PRINCIPLES, NATURE AND PURPOSE OF MOU

1.1 Definitions – In this MOU including the recitals:

- (a) “Authenticating Wetland Professional” means a professional member who meets the requirements set forth in *Professional Responsibilities in Completion and Assurance of Wetland Science, Design and Engineering Works in Alberta*, as amended or replaced from time to time.
- (b) “Effective Date” means the date first written above.
- (c) “Fees” means fees that have been paid by persons under the Wetland Restoration and Replacement Fee Ministerial Order (35/2018) to fulfill their wetland replacement obligations.
- (d) “MOU” means this Memorandum of Understanding.
- (e) “Proposal” means a proposal document prepared by the Municipality containing the specific details of a Wetland Replacement Project.
- (f) “Proposal Submission Requirements” means the Province’s submission requirements for a Proposal, attached as Schedule “A” to this MOU.
- (g) “Service Contract” means a contract entered into between the Province and the Municipality in respect of one or more approved Proposals, as further described in section 5.1.
- (h) “Wetland Replacement Project” means a project to restore or construct wetlands within Alberta.
- (i) “WRP” means the Province’s Wetland Replacement Program.

1.2 Principles of MOU – This MOU is based on the following principles shared by the Participants:

- (a) wetlands are a vital part of Alberta’s ecological landscape and necessary for a sustainable economy and healthy communities; and
- (b) through working together, the Participants will help to achieve shared outcomes for wetland replacement.

1.3 Purpose and Nature of MOU –

- (a) The purpose of this MOU is to establish a process for the Participants to identify appropriate Wetland Replacement Projects to restore and construct wetlands within the Municipality’s boundaries. Service Contracts entered into between the Participants, as outlined in section 5.1, will provide details of the services and deliverables for specific Wetland Replacement Projects.

- (b) This MOU represents a statement of general intention on the part of the Participants and is not intended to create any legally binding obligations between the Participants, or impose specific financial responsibilities on the Participants. However, each Participant will be responsible for any costs it incurs through its participation in this MOU.

2. TERM

- 2.1 **Term of MOU** – This MOU will take effect on the Effective Date and will be in effect for 3 years unless terminated earlier in accordance with the provisions of this MOU. The Participants may extend the term of this MOU by agreement of the Participants in writing.

3. RESPONSIBILITIES OF THE PROVINCE

- 3.1 **Proposal Submission Requirements** – The Province may update the Proposal Submission Requirements from time to time, in which case the Province shall provide a written copy of the updated Proposal Submission Requirements to the Municipality, and the updated Proposal Submission Requirements shall supersede and replace the previous version.

3.2 Approval of Proposals –

- (a) The Province will review and either approve or refuse Proposals submitted by the Municipality.
- (b) The Province may request additional information, clarification of, or amendments to Proposals submitted by the Municipality.
- (c) The Province will strive to review each Proposal within 30 days of its submission by the Municipality. The Province will advise the Municipality if a Proposal has been approved to proceed to a Service Contract.
- (d) In considering Proposals for approval, the Province will give priority to Wetland Replacement Projects that can be undertaken pursuant to the *Water Act* Code of Practice for Wetland Replacement Works.

4. RESPONSIBILITIES OF THE MUNICIPALITY

- 4.1 **Communication of Planned Activities** – the Municipality will provide a brief written summary document to the Province by February 1 of each year that includes projections for the Municipality's anticipated Wetland Replacement Projects for the upcoming fiscal year (April 1 to March 31) with the following information:
 - (a) the legal land location of each planned Wetland Replacement Project if available at time of summary submission;
 - (b) estimate of combined costs for anticipated Wetland Replacement Projects (eg. under \$100,000; \$100k – 500k; \$500k - \$1M; \$1-2M; or \$2-3 M);
 - (c) the type of each Wetland Replacement Project (restoration or construction);

- (d) the anticipated authorizations that will be required for each Wetland Replacement Project (*Water Act* Code of Practice versus *Water Act* approval; *Public Lands Act* approval) if known at the time of summary submission; and
- (e) the anticipated total gain in wetland area that will be delivered by the planned Wetland Replacement Projects.

It is understood and acknowledged that the Municipality may not have a finalized list of specific Wetland Replacement Projects confirmed for the upcoming fiscal year at the time of submission.

4.2 Proposals – the Municipality will:

- (a) submit a Proposal to the Province for each Wetland Replacement Project that the Municipality wishes to propose for the Province’s approval;
- (b) ensure that each Proposal meets the Proposal Submission Requirements (“Schedule A”); and
- (c) aim to submit at least one Proposal per year.

4.3 Wetland Replacement Project Components – the Municipality will be responsible for completing all components of an approved Wetland Replacement Project, in accordance with the related Service Contract.

4.4 Landowner Agreements – the Municipality will be responsible for:

- (a) obtaining the written consent of all affected landowners and third parties to complete the Wetland Replacement Projects;
- (b) securing Wetland Replacement Projects by negotiating and entering into formal written agreements with private landowners to secure lands for Wetland Replacement Projects as required;
- (c) ensuring that landowner agreements:
 - (i) provide unrestricted access to the Municipality and the Province (notwithstanding the Province not being party to the agreement) to the lands required for the purposes of the Wetland Replacement Project, for the entire duration of the landowner agreement;
 - (ii) address compensation to the landowner (including amount and payment structure) for the securement of the landowner’s lands;
 - (iii) address permissible activities within and immediately surrounding the wetland and timing of those activities;

- (iv) if the Municipality intends to enter into the landowner agreement prior to the Province and the Municipality entering into a Service Contract, the landowner agreement will be made subject to the condition precedent of the Municipality and the Province entering into a Service Contract for the Wetland Replacement Project;
- (v) permit early termination by the Municipality if the related Service Contract is terminated prior to its expiry date;
- (vi) have a minimum 10 year term, commencing on or about the commencement date of the Wetland Replacement Project;
- (vii) contain an acknowledgement by the landowner that:
 - a. any wetlands restored or constructed on the landowner's lands as part of the Wetland Replacement Project are protected by the restrictions in the *Alberta Water Act* and are subject to the *Water Act* and any other applicable acts, and
 - b. that any future activity that may impact the Wetland Replacement Project will require a wetland assessment and will be subject to the Alberta Wetland Policy; and
- (viii) are registered by the Municipality against the certificate of title to the landowner's land for the duration of the landowner agreement.
- (d) taking steps to address any landowner non-compliance with a landowner agreement; and
- (e) providing copies of landowner agreements to the Province upon request.

4.5 Legislative Requirements and Conservation Easements – The Municipality is responsible for ensuring:

- (a) that protection mechanisms such as conservation easements that add value to the long-term protection of the Wetland Replacement Project will be registered on titles as necessary to protect the wetland;
- (b) that all Wetland Replacement Projects approved by the Province meet or will meet applicable legislative requirements prior to project commencement, including but not limited to:
 - (i) the requirements of the Code of Practice for Wetland Replacement Works;
 - (ii) obtaining any required regulatory authorizations under the *Water Act*, as applicable; and
 - (ii) obtaining any required regulatory authorizations under the *Public Lands Act* or other legislation as applicable; and

- (c) that all Wetland Replacement Projects are in compliance with all applicable federal, provincial and municipal legislation.

5. SERVICE CONTRACTS

- 5.1 Service Contracts** – It is the intention of the Participants to enter into Service Contracts in respect of Proposals that are approved by the Province, subject to agreement of the Participants on the specific contractual terms of the Service Contracts. Service Contracts will provide details of the services, deliverables and funding for the specific approved Wetland Replacement Project to which the Service Contract relates.

6. AMENDMENT AND TERMINATION

- 6.1 Amendment of MOU** – This MOU may be amended at any time by agreement of the Participants in writing.
- 6.2 Termination** – Either Participant may terminate this MOU with 90 days written notice to the other Participant.

7. COMMUNICATION AND REVIEW OF MOU

- 7.1 Ongoing Communication** – The Province and the Municipality will communicate regularly by email, video conference or phone with regard to matters relevant to this MOU.
- 7.2 Annual Review** – To help ensure the effective implementation of this MOU, the Participants will have a meeting in person, by video conference or by phone to review this MOU once per year to examine the extent to which the objectives of this MOU are being met and make adjustments as required.

8. NOTICES

- 8.1 Notices** – Notices pertaining to this MOU will be provided in writing and delivered by emailed PDF. Each Participant respectively designates for the time being the individuals identified below as having authority to communicate to the other Participant any notice under this MOU. Either Participant may change the individual it has designated and other information below by giving notice to the other in the manner described in this clause.

the Province:	Matthew Wilson Team Lead, Wetlands Email: AEP.WetlandContracts@gov.ab.ca (with a copy to matthew.wilson@gov.ab.ca)
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the Municipality:	Jocelyn Thrasher-Haug Manager, Environmental Planning Email: Jocelyn.Thrasher-Haug@strathcona.ca (with a copy to Emily.Kabotoff@strathcona.ca)
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9. GENERAL

9.1 General – The Participants agree:

- (a) that any reference to legislation shall mean that legislation as amended from time to time;
- (b) that this MOU may be signed in counterpart, in which case the counterparts together constitute one agreement, and communication of execution by e-mailed PDF shall constitute good delivery;
- (c) in this MOU words in the singular include the plural and words in the plural include the singular;
- (d) that this MOU does not affect any other responsibility, right or obligation of any Participant and addresses only their roles with respect to the implementation of this MOU; and
- (e) that nothing in this MOU fetters either of the Participant’s discretion or regulatory authority in any way.

THE PARTICIPANTS HAVE SIGNED THIS MOU ON THE DATES SET OUT BELOW:

HER MAJESTY THE QUEEN in right of Alberta, as represented by
the Minister of Environment and Parks

Per:

Lisa Sadownik
Assistant Deputy Minister
Lands Division

Date:

STRATHCONA COUNTY by its authorized representatives

Per:

Stacy Fedechko
Director, Planning and Development Services

Date: _____

Per:

Mavis Nathoo
Director, Legislative and Legal Services

Date: _____

SCHEDULE A TO MOU

PROPOSAL SUBMISSION REQUIREMENTS

This schedule sets out the Proposal Submission Requirements for Proposals submitted by the Municipality (also referred to in this schedule as “Project Proponent”) under the MOU for the purpose of the Province identifying and selecting appropriate Wetland Replacement Projects, which includes projects for **wetland restoration** and **wetland construction** in priority watersheds in Alberta. **Wetland enhancement** projects are not eligible at this time.

Capitalized terms in this schedule shall have the same definition as in the MOU. The following additional definitions apply in these Proposal Submission Requirements.

DEFINITIONS

Wetland restoration is the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historical area and functions to a former or degraded wetland. Wetland restoration projects may involve one or both of the following:

- Re-establishment of the natural or historical hydrology and resulting wetland area of a drained or partially drained wetland by blocking drainage ditches, rendering tile drainage systems ineffective, or removing berms or infill; or
- Rehabilitation of a degraded or impaired wetland by re-contouring the topography and repairing soils and vegetation. Rehabilitation results in a gain in wetland function but not area, and will only be eligible under WRP in urban areas.

Wetland construction is the manipulation of the physical, chemical, or biological characteristics of a site for the purpose of creating a wetland at a location that was historically upland or a non-wetland area. The following activities are examples of wetland construction:

- Construction of a new wetland area on an upland site;
- Retro-fitting portions of an existing storm water facility to create new functioning wetland area;
- Re-contouring a dugout or other excavated, non-wetland feature to create new functioning wetlands area; or
- Re-contouring upland areas adjoining wetlands to expand existing wetland areas.

Wetland enhancement is the manipulation of the physical, chemical or biological characteristics of a current wetland site to heighten, intensify, or improve specific wetland function(s) beyond the natural or historical level. The result is a change in wetland function(s) that can lead to a decline in other wetland functions, but does not result in a gain of wetland area. The following activities are examples of wetland enhancement:

- Creation of deeper pools in a wetland to enhance or introduce amphibian habitat;
- Installation of bird boxes within or adjacent to a wetland; or
- Construction of a boardwalk within a wetland to increase human use.

General Background

The Province requires the Project Proponent to identify Wetland Replacement Projects it is proposing to carry out as a contractor for the Province for the purposes of the WRP, as set out in the MOU. For all Wetland Replacement Projects the Project Proponent wishes to be considered for approval, the Project

Proponent must prepare and submit a Proposal that includes the information set out in these Proposal Submission Requirements.

If approved by the Province, the Proposal, and these Proposal Submission Requirements, will form part of a Service Contract to be entered into between the Province and the Project Proponent, subject to agreement on the terms of the Service Contract. The Project Proponent will be responsible under the Service Contract for performing the services required to complete all components of the approved Wetland Replacement Project. Without limiting the scope of work to be performed, the Services under the Service Contract will include:

- (a) site selection and determining the location of the Wetland Replacement Project;
- (b) wetland Replacement Project design and planning;
- (c) responsibility for addressing ownership and land uses through negotiated landowner agreements, and obtaining written consent of third parties as necessary;
- (d) responsibility for obtaining all required regulatory authorizations;
- (e) addressing existing utilities at the location of the Wetland Replacement Project as applicable;
- (f) all services related to completion of wetland replacement works for the Wetland Replacement Project;
- (g) inspection after completion of the Wetland Replacement Project to confirm that it was executed according to the design plan;
- (h) vegetation planting as required;
- (i) any related activities required outside of the wetland boundary to complete the Wetland Replacement Project;
- (j) assessing the wetland after completion of the Wetland Replacement Project to confirm wetland delineated area, class, and any other necessary information;
- (k) adaptive management of the Wetland Replacement Project; and
- (l) periodic inspection and routine maintenance of the Wetland Replacement Project for the duration of the Service Contract.

Priority Area Designation

The WRP has assigned priority levels (high, medium and low) to watersheds based on the amount of recent and historical wetland loss that has occurred within its boundaries. The WRP uses the Hydrologic Unit Code (HUC) watersheds at two scales: HUC 4 and HUC 6, where HUC 4 watersheds are mostly larger than 500 square kilometers and HUC 6 watersheds are entirely nested within HUC 4 watersheds and mostly larger than 200 square kilometers. The WRP's designated priority areas will be posted on the Alberta Wetland Policy Implementation website.

Proponents should regularly review the most current priority areas as a guide to prioritize potential Wetland Replacement Projects that are within priority areas. Wetland Replacement Projects proposed in undesignated areas may not be approved due to limited available funds.

Each Proposal must include a map showing the location of the Wetland Replacement Project within the applicable priority area.

Regulatory Authorizations

If a regulatory authorization is required in order to undertake the proposed Wetland Replacement Project, the Project Proponent will be responsible to apply for and obtain all regulatory authorizations necessary for the Wetland Replacement Project, including but not limited to obtaining any authorizations and providing any notifications as required under the *Water Act* and the *Public Lands Act*. Project Proponents will need to independently determine and familiarize themselves with the regulatory requirements that will be applicable to the Wetland Replacement Project.

Project Proponents must be aware that the acceptance of a Proposal or the entering into a Service Contract with the Province does not guarantee that the Project Proponent will receive any or all of the required regulatory authorizations. All applications made by the Project Proponent for the regulatory authorizations necessary to perform the Services will be reviewed by the appropriate regulatory authority on their merits in the same manner as any other application received by that regulator. Special treatment or consideration will not be provided to the Project Proponent.

Obtaining Regulatory Authorizations

The Project Proponent will have six months from the date a Service Contract is entered into with the Province to apply for all necessary regulatory authorizations. If the Project Proponent does not apply for all necessary regulatory authorizations within that 6 month period, the Province may terminate the Service Contract in accordance with its terms.

1. Project Design and Location

Each Proposal must include information on the project design and location of the Wetland Replacement Project, including:

- (a) Project location information;
- (b) Wetland Replacement Project design(s); and
- (c) Ownership and any third party interests (eg. existing utilities).

(a) Project Location Information

Include the following project location information in the Proposal:

- a map with location of the Wetland Replacement Project;
- legal land location(s) of the Wetland Replacement Project;
- municipality that the Wetland Replacement Project is located within;

- Relative Wetland Value Assessment Unit of the Wetland Replacement Project;
- HUC 6 watershed¹ number and name; and
- HUC 4 watershed¹ number and name.

(b) Wetland Replacement Project Design

Include the following project design information in the Proposal:

- a general description of the Wetland Replacement Project, including type of project (whether it is restoration or construction);
- the restoration or construction conceptual design plan;
- all regulatory authorizations that will need to be obtained by the Project Proponent to complete the Wetland Replacement Project;
- a current, high resolution aerial or satellite image clearly showing land conditions overlain with polygons of each proposed replacement wetland;
- a figure and table clearly showing the total increase in wetland area, in hectares, that will result from the Wetland Replacement Project. For partially drained wetlands, calculate only the gain in wetland area, and exclude the current wetland area that still persists on the site;
- for restoration projects that will not result in a gain in wetland area, describe the current degraded condition and impaired functions of the wetland, how the project will restore those functions, and how the team will monitor and evaluate those functional improvements; and
- a general description of required construction activities to be undertaken to carry out the design of the Wetland Replacement Project.

(c) Ownership and Land Uses

Include the following ownership and land use information for any lands that may be impacted by the Wetland Replacement Project in the Proposal:

- land ownership, including identification of any public lands;
- identification and ownership of permanent and naturally occurring bodies of water;

¹ Government of Alberta. 2017. Hydrologic Unit Code Watersheds of Alberta. Alberta Environment and Parks. June 1, 2017 https://maps.alberta.ca/genesis/rest/services/Hydrologic_Unit_Code_Watersheds_of_Alberta/

- claims, interests or leases held by third parties, including existing utilities, public lands dispositions, encumbrances registered against title, conservation easements, or other;
- evidence of landowner and/or disposition holder consent and support for the Wetland Replacement Project, as applicable;
- list of anticipated landowner agreements required for the Wetland Replacement Project;
- proposed land transfers, or registrations against land titles (e.g., landowner agreement at a minimum, or conservation easements, environmental reserve designations), that will protect the wetland during and after completion of the Wetland Replacement Project; and
- the current and post-replacement land use category(ies) within each of the following areas, according to the categories listed in Table 1:
 - **Upland zone of influence** (for both restoration or construction projects) – 100 meters (m) from the boundary of the proposed replacement wetland. If multiple basins are being restored on the property, list all land uses on the property within 100 m of each proposed replacement wetland;
 - **Wetland edge** (if restoration) – within the historical edge of the wetland boundary, if applicable; and
 - **Within the wetland** (if restoration) – within the historical wetland boundary.

Table 1. Land Use Categories

Pavement / impermeable surface	Moderate grazing by livestock
Commercial Right of Way	Mowed or hayed, but uncultivated
Private Right of Way or unpaved driveway	Light grazing by livestock
Heavy grazing by livestock	Conservation easement
Annual crop production	Fallow, no cultivation or livestock for less than 10 years
Generalized soil disturbance	Undisturbed for 10 to 20 years
Residential or commercial lawn	Undisturbed for 20 years or more
Dry year crop production	Other – Requires description

2. Determining Ecological Suitability

The following categories address the ecological suitability of a Wetland Replacement Project. Include information pertaining to each of these areas in the Proposal in accordance with the requirements set out below.

- (a) Hydrology;
- (b) Soil Information;
- (c) Wetland Connectivity;
- (d) Wetland Diversity;
- (e) Project Constraints; and
- (f) Site Visit Observations.

(a) Hydrology

Hydrology is the primary driver of successful wetland restoration or construction. In wetland restoration, hydrology needs to be re-established, whereas in wetland construction a reliable water source is required to establish hydrology. Include the following information on hydrology in the Proposal:

- map(s) or figure(s) depicting the catchment area and drainage pathways of the replacement wetland;
- the water source and discharge point for the replacement wetland, including any proposed shallow groundwater and/or surface water connections to existing waterbodies; and
- classifications of the water regimes in the normative state (prior to anthropogenic disturbance), current state, and post-replacement state. The water regime refers to the surface water permanence in the deepest part of the wetland in most years, and can be classified as follows (adapted from Cowardin, et al²):
 - not flooded (less than 1 week flooded);
 - temporarily flooded (1 – 4 weeks flooded);
 - seasonally flooded (5 – 17 weeks flooded);

² Cowardin, L. M., V. Carter, F. C. Golet and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U. S. Department of the Interior, Fish and Wildlife Service, Washington, DC, Jamestown, ND: Northern Prairie Wildlife Research Center. Available at: <http://www.npwrc.usgs.gov/resource/wetlands/classwet/>

- semi-permanently flooded (18 – 40 weeks flooded);
- intermittently exposed (41 – 51 weeks flooded); or
- permanently flooded (52 weeks flooded).

(b) Soil Information

The existing topography and soil conditions will influence the potential to establish hydrology, as well as landscape factors such as the connectivity to other wetlands and adjacent upland habitat. Include, at a minimum, the following information on soils in the Proposal:

- AGRASID soil polygon identification and parent material information;
- Soil Landscapes of Canada polygon identification; and
- any relevant information from previous soil assessments in the Wetland Replacement Project area, if available.

(c) Wetland Connectivity

Include the following information on surface connectivity of wetlands in the Proposal:

- land uses and ownership classification (e.g. private, public, park, etc.) of the adjacent parcels of land surrounding the Wetland Replacement Project,
- a description of habitat quality and natural corridors connecting the Wetland Replacement Project to adjacent habitat and wetlands;
- a map depicting the approximate boundaries of any existing wetlands within 800 m of the proposed Wetland Replacement Project;
- the total area of wetlands within an 800 m radius; and
- any existing buffers with native perennial vegetation adjoining the Wetland Replacement Project, including both the percentage around each wetland and the average buffer width.

(d) Wetland Diversity

Variability in conditions within and between wetlands increases the available habitat and biodiversity. Include the following information related to wetland diversity in the Proposal:

- classification of each wetland as per the Alberta Wetland Classification System Guide (see Table 3 of Guide for reference). Include a description of the dominant normative, current and post-replacement wetland zones, including any historical wetland areas prior to anthropogenic disturbance (normative conditions); and

- identify the number of wetland zones that will exist within 100 m of the Wetland Replacement Project.

(e) Project Constraints

Include in the Proposal a description of any potential project constraints that may impact the ability to carry out the Wetland Replacement Project, and mitigation strategies to address those constraints.

Constraints may include, but are not limited to, the following:

- poor suitability of soils or limiting soil conditions;
- water quality issues;
- presence of historical resources;
- presence of Noxious or Prohibited Noxious weeds (as defined by the Alberta *Weed Control Act*);
- presence of sensitive species;
- third party interests, such as pipelines, transmission lines, dispositions, public interest, etc.;
- presence of wells, dugouts, existing *Water Act* authorizations or other water bodies that may impact downstream landowners;
- floodplains, floodways or other flooding considerations;
- federal lands, Native Reserve lands or Settlements;
- any additional authorizations or approvals required; or
- structures requiring operation or regular maintenance (e.g. control gates).

(f) Site Visit Observations

Include relevant information gathered from a site visit in the Proposal, such as the following:

- map(s) with spatially referenced locations of key information, including
 - ditches,
 - locations of headcuts,
 - soil and vegetation sampling locations,
 - proposed location of replacement works, and
 - elevation data, if collected.

- a brief description of available soils for the replacement works, including salvageable topsoil material and proposed location and estimated quantity of suitable material for construction of wetland restoration structures, (e.g., ditch plugs);
- a brief description of the existing vegetation, including the identification of Noxious and Prohibited Noxious weeds;
- confirmation of water sources and drainage pathways;
- several photographs of the site, including the overall wetland footprint, ditches, and headcut locations;
- a description of any opportunities or additional constraints observed during the site visit that may be important considerations for the Wetland Replacement Project design; and
- any other relevant observations.

3. Project Schedule

The Proposal must include a detailed work plan outlining the following:

- (a) the intended processes and workflows for the proposed Wetland Replacement Project;
- (b) time estimates for completion of **each** project component within each phase; and
- (c) a detailed schedule for the overall project.

In addition, include in the Proposal a copy of the **Services, Deliverables and Costs Pricing Form** attached as Appendix “1” to this schedule (the “Pricing Form”) setting out the anticipated completion date of each phase of the Wetland Replacement Project, based on the expected final completion date of all of the key services and deliverables to be provided under that phase. If a phase has already been completed prior to the date the Proposal is submitted, provide the actual date of completion of that phase.

4. Project Costs

Costs in respect of a proposed Wetland Replacement Project will only be paid through a Service Contract entered into between the Province and the Project Proponent for an approved Wetland Replacement Project. Wetland Replacement Project costs that the Project Proponent wishes to propose for inclusion in a related Service Contract must be included in the Proposal. **All costs proposed by the Project Proponent for inclusion in a Service Contract are subject to the Province’s review and approval.**

The Project Proponent must complete and include in the Proposal the Pricing Form, which includes a detailed breakdown of the services, deliverables, and costs for each of the following phases of the proposed Wetland Replacement Project:

- (a) Wetland Replacement Project Targeting and Communication Phase;
- (b) Preliminary Project Phase;
- (c) Design and Regulatory Authorization Phase;
- (d) Construction Phase;
- (e) Post-Construction Phase; and
- (f) Routine Maintenance Phase

A description of eligible costs under each of these phases is provided below.

(a) Initial Targeting Phase Costs

Wetland replacement project targeting and communication phase costs include reasonable costs directly related to initial identification of potential Wetland Replacement Projects including:

- staff time and consultant fees associated with initial targeting of potential Wetland Replacement Projects, such as:
 - office level mapping and identification of drained wetlands,
 - landowner engagement,
 - marketing and communication,
 - materials and equipment associated with office level targeting and initial landowner engagement (specify materials and equipment and charge out rates, e.g. trucks, survey equipment etc.),
 - marketing and communication materials and equipment (specify materials produced and equipment costs), and
- reasonable costs previously incurred by the Project Proponent for potential Wetland Replacement Projects **that did not proceed** (for reasons such as landowner withdrawal, third party permissions not attained, contaminated site issues, non-compliance issues, or not approved by the Province). For such costs to be considered by the Province for inclusion for reimbursement in a Service Contract for an approved Proposal:
 - the potential Wetland Replacement Project(s) that did not proceed should be located within the same priority area or watershed as the Wetland Replacement Project proposed in the Proposal,
 - the costs must have been incurred in the 24 months preceding the submission date of the Proposal, and
 - The Project Proponent must:
 - set out the costs in detail,
 - include a brief description of the Wetland Replacement Project(s) pursued to which the costs relate (including the specific geographical location), and
 - provide the reasons for not proceeding with such project(s).

(b) Final Site Selection and Securement Phase Costs

Final site selection and securement phase costs include reasonable costs incurred for selecting and securing the site of the Wetland Replacement Project that is the subject of the Proposal including:

- staff time and consultant fees associated with site selection and securement of Wetland Replacement Project, such as:
 - landowner engagement and agreements negotiated by the Project Proponent with the relevant landowners,
 - obtaining written consent from affected third parties, and
 - preparation and writing of the Proposal; and
- materials and equipment required for landowner engagement and preliminary site visits (specify materials and equipment and charge out rates, e.g. trucks, survey equipment etc.);
- all costs related to payments to landowners to secure lands, if required for the purposes of the Wetland Replacement Project.

(c) Design and Regulatory Authorization Phase Costs

Design and regulatory authorization phase costs include the Project Proponent's costs for all tasks, services and deliverables associated with the design and regulatory authorization phase of the Wetland Replacement Project, including but not limited to the following:

- Development of detailed construction or restoration design plans and drawings for the Wetland Replacement Project, including professional fees and other costs for:
 - site evaluation of existing conditions, including field assessments and elevation surveys of the adjacent land and existing and proposed wetland boundaries with a survey-grade laser level, at a minimum,
 - plan and cross-sectional view drawings of the Wetland Replacement Project with georeferenced locations of ditch plugs, weirs, vertical grade control structures, spillways, and any other structures or significant features, and
 - engineering drawings of structures, if required; and
- obtaining applicable regulatory authorizations, including but not limited to providing *Water Act* Code of Practice notification, and obtaining regulatory authorizations under the *Water Act* or *Public Lands Act*.

(d) Construction Phase Costs

Construction phase costs include a detailed breakdown of the Project Proponent's costs for all tasks, services and deliverables associated with the construction phase of the Wetland Replacement Project, including but not limited to the following:

- equipment required (e.g., backhoe, excavator, dozer, skid steer);
- equipment mobilization costs;
- costs to purchase and plant vegetation, including plugs and seed, as well as other materials (specify materials, e.g., woody debris, rock, liners)
- costs for seeding, planting, amending soils, placing woody debris or other activity;
- weed removal and management costs;
- equipment operator costs for installing replacement works, vertical grade control structures, rock spillways, berms, or any other structure, or for constructing a wetland via excavation and recontouring;
- costs for erosion and sediment control structures;
- construction supervision (number of hours and hourly rate);
- activities or infrastructure located outside of the wetland replacement or construction area but that will directly increase overall functions of the Wetland Replacement Project (e.g., vertical grade control structures downstream of outlet, or restoration of upland area adjoining the wetland, up to a distance of 10 m from the wetland boundary). If costs for restoration activities or infrastructure located within upland areas are included, describe how these assets will be protected with an easement or other mechanism. The Province will not pay for any costs associated with land protection, such as a conservation easements; and
- professional fees to confirm that works have been inspected and are completed in accordance with the design plans prepared under the Service Contract, including provision of a letter signed by an Authenticating Wetland Professional, and supporting documentation such as videos, photos, measurements and submission of as-built plans, if applicable.

(e) Post-construction Phase Costs

The post-construction phase timeframe will be determined by an Authenticating Wetland Professional based on each Wetland Replacement Project. The post-construction phase will require monitoring of the wetland and replacement structures to ensure they are in good condition and operating effectively, and the designed wetland area, class and function is establishing.

Post-construction phase costs are costs associated with services and deliverables to be performed at least one year after the wetland is constructed or restored, including the following:

- additional vegetation planting or weed management; and
- professional fees to confirm that the Wetland Replacement Project has established according to the wetland area, class and function anticipated in the design plans prepared under the Service Contract, including provision of a letter signed by an Authenticating Wetland Professional, and supporting documentation such as photos, videos, delineation field sheets, soil and vegetation plot information, and maps of plot locations.

(f) Routine Maintenance Phase Costs

The routine maintenance phase begins after the post-construction phase is completed (upon the wetland being deemed as functioning by an Authenticating Wetland Professional) and will continue until the end of the Service Contract. Routine maintenance costs are costs associated with services and deliverables to be performed by the Project Proponent, including the following:

- inspections and status reports every two years on the integrity of the wetland structures. Maintenance inspections and status reports are for the integrity of the structures only and do not need to be completed by an Authenticating Wetland Professional; and
- any routine maintenance on the wetland structures as may be required for their continuing functionality.

5. Value Considerations

The Proposal must identify any additional considerations that add value to the Wetland Replacement Project. This may include the following examples:

- Wetland Replacement Projects that include additional funding, in-kind resources or additional cost savings (e.g., land donations). If the added value is not a direct cash payment, determine the approximate cash value of all contributions. For example, provide the approximate value of the donated land or materials, or operator costs if time or equipment is being donated; or
- Protection mechanisms such as conservation easements (either pre-existing or to be added by the Project Proponent) that add value to the long-term protection of the Wetland Replacement Project.

6. Project Team

Wetland Replacement Projects are to be completed by a multi-disciplinary team of professionals, as set out below.

The key project team members must be identified in the Proposal and include at least one Authenticating Wetland Professional. Submit a summary of the individuals on the project team, including their qualifications and relevant experience. Team members with relevant and demonstrable experience in completing Wetland Replacement Projects are preferred.

In addition to Authenticating Wetland Professionals, Wetland Replacement Project teams may include:

- project manager;
- regulatory authorizations and permits expert;
- professional engineer;
- hydrologist and/or hydrogeologist;
- wetland restoration ecologist; and
- staff of the Project Proponent.

7. Sub-Contractors

Indicate in the Proposal what services, if any, will be provided through the use of sub-contractors. If known at the time of Proposal submission, include in the Proposal a list of any selected sub-contractors, or a short list of anticipated sub-contractors, and a brief description of their qualifications and relevant experience.

8. Freedom of Information and Protection of Privacy Act (Alberta) (“FOIP”)

The purpose of collecting Personal Information (as that term is defined in FOIP) for these Proposal Submission Requirements is to enable the Province to ensure the accuracy and reliability of the information, to assess the Proposal, and for other related program purposes of the Province. Authority for this collection is the *Government Organization Act* (Alberta), as amended from time to time and section 33 (c) of FOIP. The Project Proponent may contact the Province’s contact person identified in the MOU regarding any questions about collection of Personal Information pursuant to these Proposal Submission Requirements.

By submitting a Proposal the Project Proponent acknowledges that:

- (a) FOIP applies to all information and records relating to, or obtained, generated, created, collected or provided under, these Proposal Submission Requirements or which are in the custody or under the control of the Province. FOIP allows any person a right of access to records in the Province’s custody or control, subject to limited and specific exceptions as set out in FOIP; and

- (b) If it considers portions of its Proposal to be confidential, the Project Proponent should identify those parts of its Proposal to the Province considered to be confidential and what harm could reasonably be expected from disclosure. The Province does not warrant that this identification will preclude disclosure under FOIP.

The Project Proponent consents, and obtained the written consent from any individuals identified in the Proposal as applicable, to the use of Personal Information in the Proposal by the Province to enable the Province to evaluate the Proposal and for other program purposes of the Province, and will provide those written consents to the Province upon request.

9. Conflict of Interest

Proponents must fully disclose to the Province, in writing, the circumstances of any actual, possible or perceived conflict of interest in relation to the Project Proponent, any of its team members, employees, sub-contractors or agents, if the Proposal were to be approved with the intention that the Proponent become the Province's contractor pursuant to a related Service Contract.

The Province may reject any Proposal where, in the opinion of the Province, the Proponent, any Proponent team member, employee, sub-contractor or agent is, could be, or could be perceived to be in a conflict of interest if the Proponent were to become a contractor in respect of the proposed Wetland Replacement Project.

10. Submission of Proposals

Completed Proposals must be sent to aep.wetlandreplacement@gov.ab.ca for review and evaluation. The Province may request more information or clarification before approving or refusing the Proposal.

Appendix 1 to Proposal Submission Requirements

Services, Deliverables and Costs Pricing Form

Project Proponents must complete and include the below form in the Proposal.

- Insert the fixed prices (the definite and predetermined price charged inclusive of expenses) for each of the services, deliverables and other costs as indicated for each phase; the total fixed price for all phases; and the price per hectare breakdown.
- Insert the anticipated completion date for each phase of the Wetland Replacement Project.

The Project Proponent may remove or add additional key services or deliverables under each phase as necessary depending on the specifics of the Wetland Replacement Project.

Services, Deliverables, and Costs	Fixed Price	Phase Completion Date
(a) Initial Targeting Phase Costs		
<i>Staff time and consulting fees for initial targeting of potential Wetland Replacement Projects. Specify all costs, such as:</i> <ul style="list-style-type: none"> (a) Office level mapping and identification of drained wetlands; (b) Landowner engagement; (c) Marketing and communication; (d) materials and equipment associated with office level targeting and initial landowner engagement (specify materials and equipment and charge out rates, e.g. trucks, survey equipment etc.); and (e) marketing and communication materials and equipment (specify materials produced and equipment costs). 	\$	
<i>Reasonable costs previously incurred by the Project Proponent for potential Wetland Replacement Projects that did not proceed as referred to in section 4(a) of the Proposal Submission Requirements</i>	\$	
(b) Final Site Selection and Securement Phase Costs		

<p><i>Staff costs and consultant fees associated with site selection and securement of Wetland Replacement Project, such as:</i></p> <ul style="list-style-type: none"> <i>(a) landowner engagement and agreements negotiated by the Project Proponent with the relevant landowners;</i> <i>(b) obtaining written consent from affected third parties; and</i> <i>(c) preparation and writing of the Proposal.</i> 	<p><i>No of staff: _____</i> <i>Hourly rate: _____</i> <i>Est. hours: _____</i> <i>Total \$</i></p>	
<p><i>Costs for materials and equipment required for landowner engagement and preliminary site visits (specify materials and equipment and charge out rates, e.g. trucks, survey equipment etc.).</i></p>	<p><i>\$</i></p>	
<p><i>All costs related to payments to landowners to secure lands, if required for the purposes of the Wetland Replacement Project.</i></p>	<p><i>\$</i></p>	
<p>Sub-total for phase</p>	<p><i>\$</i></p>	
<p>(c) Design and Regulatory Authorization Phase</p>		
<p><i>Development of detailed construction or restoration design plans and drawings for Wetland Replacement Project, including professional fees and other costs for:</i></p> <ul style="list-style-type: none"> <i>(a) site evaluation of existing conditions, including field assessments and elevation surveys of the adjacent land and existing and proposed wetland location with a survey-grade laser level, at a minimum;</i> <i>(b) plan and cross-sectional view drawings of Wetland Replacement Project with georeferenced locations of ditch plugs, weirs, vertical grade control structures, spillways, and any other significant features; and</i> <i>(c) engineering drawings of structures, if required.</i> 	<p><i>\$</i></p>	
<p><i>Obtaining applicable regulatory authorizations, including but not limited to providing Code of Practice notification, and obtaining regulatory authorizations under the Water Act or Public Lands Act.</i></p>	<p><i>\$</i></p>	
<p>Sub-total for phase:</p>	<p><i>\$</i></p>	
<p>(d) Construction Phase</p>		
<p><i>Costs for equipment required (e.g., backhoe, excavator, dozer, skid steer, specify equipment)</i></p>	<p><i>Hourly rate: _____</i> <i>Est. hours: _____</i> <i>Total \$: _____</i></p>	

<i>Equipment mobilization costs</i>	\$	
<i>Costs to purchase plant materials, including plugs and seed, as well as other materials (specify materials, e.g., woody debris, rock, liners)</i>	\$	
<i>Costs for seeding, planting, amending soils, placing woody debris or other activity</i>	\$	
<i>Weed removal and management costs</i>	\$	
<i>Equipment operator costs for installing replacement works, vertical grade control structures, rock spillways, berms, or any other structure, or for constructing a wetland via excavation and recontouring</i>	No of operators: ____ Hourly rate: ____ Est. hours: ____ Total \$: ____	
<i>Costs, for erosion and sediment control structures</i>	\$	
<i>Construction supervision</i>	No of supervisors: ____ Hourly rate: ____ Est. hours: ____ Total \$: ____	
<i>Costs for activities or infrastructure located outside of the wetland replacement area but that will directly increase overall functions of the Wetland Replacement Project (specify activities and infrastructure)</i>	\$	
<i>Professional fees to confirm that works have been inspected and are completed in accordance with the design plans prepared under the Service Contract, including provision of a letter signed by an Authenticating Wetland Professional, and supporting documentation such as videos, photos, measurements and submission of as-built plans, if applicable.</i>	\$	
Sub-total for phase	\$	
(e) Post-construction Phase		
<i>Costs for additional vegetation planting or weed management</i>	\$	
<i>Professional fees to confirm that the Wetland Replacement Project has established according to the wetland area, class and function anticipated in the design plans prepared under the Service Contract, including provision of a letter signed by an Authenticating Wetland Professional, and supporting documentation such as photos, videos, delineation field sheets, soil and vegetation plot information, maps of plot locations</i>	\$	
Sub-total for phase	\$	
(f) Routine Maintenance Phase		

<i>Inspections and status reports every two years on the integrity of wetland structures (maintenance inspections and status reports do not need to be completed by an Authenticating Wetland Professional)</i>	\$	
<i>Any routine maintenance on the wetland structures as may be required for their continuing functionality.</i>	\$	
<i>Sub-total for phase</i>	\$	
Totals		
Total fixed price for all costs	\$	
Dollars per hectare breakdown	\$	<i>per hectare</i>