

Appendix B
TM #1 – Permitting Requirements, Status,
and Compliance Plan

Permitting Requirements, Status, and Compliance Plan

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1. Introduction

This Technical Memorandum (TM 1) was jointly prepared by Kerr Wood Leidal (KWL), Golder, and CH2M HILL. TM1 forms part of the technical deliverables for the design of the water supply intake for the proposed Englishman River Water Service (ERWS) Water Intake and Treatment Plant Project (the Project). The purpose is to outline the permitting requirements for the Project including:

- Permitting agencies and contacts
- Submission requirements
- Design stage for submission
- Expected timelines for review/approval
- Other relevant information

Coordination with other utility agencies (e.g., BC Hydro, Telus, etc.) is not covered by this TM, but will be addressed during the course of preliminary design activities.

2. Permitting Requirements

Department of Fisheries and Oceans

Fisheries Authorization

The construction of the raw water intake could result in Serious Harm to Fish in the Englishman River; therefore, authorization under Section 35 (2) of the *Fisheries Act* may be necessary. An application for Project Review should be submitted to the Pacific Regional DFO offices in order for DFO to access, if the Project could result in Serious Harm to Fish and thus require authorization to proceed. The Department of Fisheries and Oceans (DFO) application requires that the following information be provided for review:

1. Aquatic Effects Assessment
2. Compensation Plan
3. Monitoring Plan

The purpose of the aquatic effects assessment is to describe the Project and outline the potential impacts that the Project may have on fish and fish habitat. The assessment will describe both the immediate and unavoidable impacts to habitat resulting from construction of the intake structure and the weir as well as potential downstream impacts resulting from the withdrawal of water. An aquatic and riparian habitat assessment has been carried out for the two intake site locations which describes and quantifies the potential habitat that will be impacted directly by the intake structure and pump house. Downstream impacts will be quantified and assessed based on the results of a low flow assessment currently being carried out and planned for completion by end of October 2013. The aquatic effects assessment was submitted to ERWS for inclusion in the DFO application along with preliminary design drawings for review to determine the potential compensation measures and obtain authorization.

Based on the outcome of the DFO review, a compensation and monitoring plan may need to be prepared which outlines proposed compensation and monitoring measures required such that the Project can be deemed to have a no net loss to fish habitat. The DFO authorization will provide information on instream work windows. We understand that the ERWS is currently discussing potential off-channel habitat rehabilitation downstream of the existing water intake site that could be used for compensation for potential impacts resulting from the intake structure. The compensation and monitoring plan will provide further details on this compensation and how the effectiveness of the compensation is to be monitored.

Transport Canada

Navigation/Navigable Waters Protection Act

Transport Canada is responsible for protecting navigation on waterways in Canada. In December 2012, changes to the *Navigable Waters Protection Act* (now the *Navigation Protection Act*) received Royal assent. The changes to the act include a schedule of protected rivers on which works that could impact navigation require regulatory approval. The Englishman River is not on the schedule of protected rivers; therefore, no approval under the *Navigation Protection Act* is necessary. However, navigation remains a right under common law and as such, the intake design and ERWS will need to take appropriate steps to avoid negative impacts on navigation on the river and to protect the safety of recreational users of the river. Transport Canada is in the process of developing guidelines that will help define appropriate standards to use for protection of navigation. It is expected that these guidelines will be issued in-time for input to the detailed design of the intake.

Ministry of Forest, Lands and Natural Resource Operations

Water Licence and Provisional Operating Rule

The Ministry of Forest, Lands and Natural Resource Operations (MFLNO) is responsible for issuing water licences which authorize withdrawal and use of water under the provincial *Water Act*. The proposed water withdrawal and point of diversion from the Englishman River has already been approved through the conditional water licence (C129170) that was issued to the Regional District of Nanaimo, the City of Parksville, and the Town of Qualicum Beach on January 17, 2013. Construction of the proposed intake is approved under the water licence so no other approvals from MFLNRO are required.

However, conditions of the licence include development of an updated operation protocol for the Arrowsmith Lake dam as well as provision to record flows downstream of the intake. The operation protocol for Arrowsmith Lake was updated in TM2B Arrowsmith Lake Water Supply which was submitted to ERWS for review. The protocol will need to be reviewed and approved by MFLNRO staff prior as part of final approval for commissioning of the intake.

Ministry of Environment

Water Licence and Provisional Operating Rule

Although the Ministry of Environment (MoE) does not have regulatory authority for approval of the intake structure, it is likely that staff from the Ecosystems Branch will be involved in review and approval of instream flow requirements used to establish the updated provisional operating rules for the Arrowsmith Lake dam.

Fish and Wildlife Salvage Permits

Fish and wildlife salvage permits will be required by the Environmental Monitor at the time of construction. Although not required at this time for design approval, it should be noted that these permits will be required at the time of construction. A minimum of 30 calendar days prior to construction is needed for these permits.

Vancouver Island Health Authority

Construction and Operating Permits

The Vancouver Island Health Authority (VIHA) issues construction permits and operating permits under the *Drinking Water Protection Act*. A **construction permit** will be required for the construction, installation, alteration, and extension of the water supply system. An **operating permit** will be required for the new water source. Construction permits are issued by the Public Health Engineer (Mr. Murray Sexton, P.Eng.) and operating permits are issued by the local Environmental Officer.

Applications for permits should be made at least 60 working days before construction starts; however, KWL has held discussions with VIHA who have indicated that due to the size of the Project, they would like to be consulted at all stages of design. For example, for the City of Nanaimo water treatment plant (a comparable project), VIHA was provided with pilot testing data for the water treatment process and design drawings at the conceptual through detailed design stages.

VIHA does not specify data collection requirements for evaluation of new water sources.

Ministry of Transportation and Infrastructure

Highway Permit

A Highway Permit will be required for the access road and utilities which cross the Highway 19 Right-Of-Way (ROW) and pass underneath the Englishman River Highway Bridge. The Ministry of Transportation (MoTI) contact for this project is Ms. Debbie O'Brien, Senior Development Technician and the Regional Bridge Engineer will also be involved given the proximity of the works to the Englishman River Bridge.

KWL has held discussions with MoTI who have indicated that they would like to be consulted as design proceeds. The MoTI also stated in these discussions that an open trench "cut and cover" crossing of the highway ROW will not be approved; therefore, trenchless installation or installing the pipe under the bridge will be required. Typically, the work construction activities must be completed within 3 or 4 months of issuance of a permit. The permit will expire 6 months after issuance if the project is delayed, and the permit must be reissued.

KWL submitted pre-design drawings of the raw water transmission main and access road and received approval in principle from MoTI in January 2014. The final permit will be issued based on a review of the 100% complete detailed design drawings.

Island Corridor Foundation

Railway Crossing Permit

The Island Corridor Foundation (ICF) is a federally registered charity established for the purposes of owning and managing the former E&N Rail Corridor. The foundation represents First Nations and Local Governments adjacent to the corridor. Membership is limited to local governments and First Nation governments whose territories are wholly or partly within the geographic area of the Corridor. A 12-person Board of Directors governs ICF. Five Directors represent the Regional Districts and five directors represent First Nations. Approval from the Board of Directors is required to cross the ROW.

The contact for the railway crossing permit is Ms. Janice Roberts. The ICF requires drawings of the proposed crossing for approval and a presentation to the Board of Directors may be required. KWL will confirm the frequency with which the Board of Directors meets for coordination purposes.

Ministry of Forests, Lands and Natural Resource Operations

Archaeological Permits

All archaeological sites on Provincial Crown or private land that predate AD 1846 are automatically protected under 1996 amendments to the *Heritage Conservation Act (HCA)*. Certain sites, including burials and rock art sites, that have historical or archaeological value, are protected regardless of age. The Archaeology Branch at the MFLNRO is the provincial government agency responsible for administering the *HCA*, including issuing permits and approvals per the requirements of the *HCA*.

Completion of an Archaeological Overview Assessment (AOA) and a Preliminary Field Reconnaissance (PFR) does not require any type of HCA permitting, but does require permission from First Nations. As the AOA identified the need for a more detailed archaeological impact assessment (AIA) (i.e., because the Project area is deemed as having high potential to contain undocumented archaeological sites), then a permit under Section 14 of the HCA is required prior to the initiation of activities that may impact an archaeological site. The Section 14 permit is required to conduct testing with the intent of locating buried archaeological deposits and for the collection of cultural materials such as artifacts. In addition to the permit requirement for activities related to the AIA, other intrusive activities (i.e., geotechnical investigations) may require archaeological monitoring under the HCA permit.

Protection for archaeological sites under the *HCA* does not necessarily negate impact; in most cases, development proceeds following an impact assessment or other mitigative actions. With the exception of impacts occurring under a Section 14 permit, any alteration (e.g., construction) to a known archaeological site must be permitted under Section 12 of the *HCA*. As such, if archaeological sites are identified during the AOA or AIA, a Section 12 permit will be required prior to any proposed impact to these sites. This permit is held by the individual responsible for the site alteration and may include data recovery or mitigative requirements such as monitoring or data sampling.

All applications for Section 12 or Section 14 *HCA* permits are forwarded by the Archaeology Branch to appropriate First Nations for review. A 30 calendar day review period is required for First Nations to provide comments regarding the proposed methodology. Including this 30 day First Nation review process, it typically takes 8 to 10 weeks for the Archaeology Branch to process an *HCA* permit application.

City of Parksville

Riparian Areas Regulation

The Riparian Areas Regulation (RAR), enacted under Section 12 of the Fish Protection Act in July 2004, calls on local governments to protect riparian areas during development by ensuring that riparian protection is covered under local zoning bylaws. The Environmentally Sensitive Lands Development Permit Areas Map (Schedule D) of the City of Parksville Official Community Plan Bylaw indicates that the proposed intake location (Site #3) is located within a watercourse protection development permit area. The development permit area requirements in the OCP state that public utilities are exempt from the requirements (OCP Clause 9.13.4 (j)); therefore, a permit under RAR is not required for the Project. It should be noted; however, that riparian impacts are also considered as part of the fisheries authorization process.

As the intake, access road, and pipeline will be located within a City park, agreement from the City of Parksville council will be required and should be obtained as part of the overall project approval process. The water treatment plant site is zoned industrial and will not require re-zoning.

Building Permit

City of Parksville Building Bylaw No. 1387 outlines the requirements and regulations for the construction of buildings and structures within the City. The construction of any building requires a building permit, except accessory buildings less than 10 m² in area. The water treatment plant and possibly the intake pump station (depending on its configuration) are buildings and will require building permits.

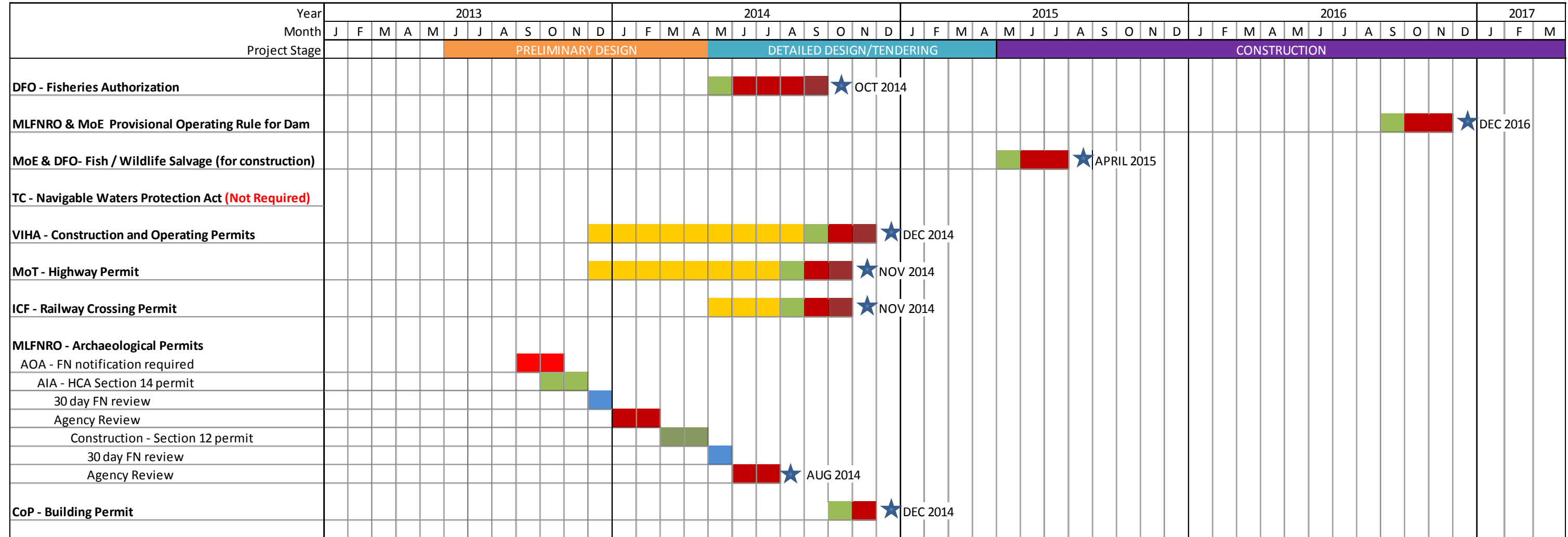
3. Summary

Table 1 summarizes the permitting requirements for the Project and Figure 1 shows the estimated permitting timeline.

TABLE 1
Permitting Requirement Summary

Permit	Authority/Contact	Timeline	Submission Requirements	Notes
Fisheries Authorization	Department of Fisheries and Oceans Ms. Michelle Bigg South Island Sub-Region Habitat Biologist 250-756-7270	No official timeline provided	Project Review Application Form Project Description and Drawings Aquatic Effects Assessment Report Compensation and Monitoring Plan (if required after review)	Application including low flow assessment was submitted to DFO in April 2014. Note that Michelle Bigg was originally assigned to the file but a new approving officer is likely to be assigned once the application for project review is submitted.
Water Licence/Provisional Operating Rule	Ministry of Forest, Lands and Natural Resource Operations Mr. Paul Marquis Assistant Regional Water Manager 250-751-7224	No official timeline provided	Water licence has already been issued. Updated provisional operating rule and instream flow monitoring are conditions of the licence that must be reviewed and approved.	MFLNRO and MoE Fish Habitat Staff will require input to the minimum instream flow requirements downstream for fish habitat conservation purposes.
Fish/Wildlife Salvage Permits (for Construction)	Ministry of Environment and DFO	Must be obtained a minimum of 60 days prior to construction	Permit to be obtained by environmental monitor for the project (possibly the contractor).	This is a place holder for these permits that will be required at the time of construction
Navigable Waters Protection Act	Transport Canada Pacific Region 604-775-8867	90 calendar days	Application Form Project Description Design Drawings	The <i>Navigable Waters Protection Act (NWPA)</i> is applicable to the project until April 2014. In addition, opting-in to NWPA approval provides legal certainty for the project with regard to protection of navigation requirements for the Englishman River. It is likely that signage will be required.
Construction and Operating Permits	Vancouver Island Health Authority Mr. Murray Sexton, P.Eng. 250-755-6299 murray.sexton@viha.ca	At least 60 working days for approval is required.	One complete set of plans for watermains, three sets of plans for new sources Key plan/map Application form	VIHA issues construction permits and operating permits under the <i>Drinking Water Protection Act</i> . A construction permit is required for construction, installation, alteration, or extension of a water supply system (e.g., watermains, pump stations). An operating permit is required for new sources of water. VIHA would like to be consulted at all stages of design for this project.
Highway Permit	Ministry of Transportation Ms. Debbie O'Brien Senior District Development Technician 250-751-3278	No official timeline	Provincial Public Highway Permit Application An authorization letter from the owner if someone else, such as an agent, is applying on the owner's behalf Original sketch plan to scale of the proposal, plus three copies if over 11" x 17" Area Map showing location of the proposal (e.g., 1:5000 scale) A municipal development permit and plan where applicable	Open cut crossing of the highway ROW will not be approved. Work must be completed within 3 or 4 months of issuance of permit. MoT would like to be consulted as design proceeds. The Regional Bridge Engineer will be involved in the consultation process.
Railway Crossing Permit	Island Corridor Foundation Ms. Janice Roberts 250-754-7254 info@islandrail.ca	No official timeline	Complete plans	Permission is required to cross ROW and access ROW for survey. Approval will be by the Board of Directors which is composed of regional governments and First Nations.
Archaeological Permits	Ministry of Forests, Lands and Natural Resource Operations Mr. Doug Glaum Manager, Archaeology Branch 250-953-3357	8-10 weeks to secure each HCA Permit	Archaeological Overview Assessment Final Report Section 14 <i>Heritage Conservation Act</i> Permit to conduct archaeological impact assessment Archaeological Impact Assessment Final Report Section 12 <i>Heritage Conservation Act</i> Permit for any proposed alterations to an archaeological site Site Alteration Permit Final Report	Archaeological overview assessment will include a preliminary field reconnaissance to determine the need for, and scope of, any recommended archaeological impact assessment. First Nations are provided up to 30 days to review any HCA permit application. If a significant archaeological site is in unavoidable conflict with the proposed development, archaeological mitigation, including hand excavation, may be required under a separate Section 14 <i>Heritage Conservation Act</i> Permit.
Development Permit(s)	City of Parksville	Dependent on Variances and Public Consultation	N/A	Intake site is located within development permit area for watercourse protection. However, no development permit required as the work is a public utility that will be approved by MFLNRO and DFO. Agreement from City Council is likely necessary for construction within the City park and may require public consultation.
Building Permit	City of Parksville	Permit Issued 2-4 weeks from submission	Application Form Statement of Title Drawings Letters of Assurance Engineering Pre-Design (unless exempt)	Intake pump station may not be classified as a building depending on its configuration.

FIGURE 1
Estimated Permitting Timeline



- Legend**
- ERWS Input
 - Ongoing Consultation
 - Application Preparation
 - Additional Application Preparation (if required)
 - Agency Review
 - Agency Review Extension (if required)
 - First Nation Review
 - Required Approval Date



Submission

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Revision History

Revision #	Date	Status	Revision	Author
1	October 11, 2013	Draft	Draft TM1 for Review	KWL/Golder/CH2M HILL
		Final		



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Triage & Planning Unit
Fisheries Protection Program
Ecosystem Management Branch
Fisheries and Oceans Canada
200 - 401 Burrard Street
Vancouver, British Columbia V6C 3S4

Dear Sir/Madam:

**RE: ENGLISHMAN RIVER WATER SERVICE – ENGLISHMAN RIVER INTAKE
Department of Fisheries and Oceans – Request for Project Review
Our File**

Please find enclosed the following documents in support of Project Review for approval under section 35(2)(b) of the Fisheries Act for the proposed Englishman River Intake on behalf of Englishman River Water Service.

1. Completed Project Review Application Form
2. Aquatic Effects Assessment Report prepared by LGL Ltd dated April 22, 2014
3. Preliminary Design Drawings of Proposed Municipal Water Supply Intake prepared by CH2MHill dated 2013/12/10

Should you have any questions regarding the application, please contact the undersigned at 250-595-4223 or Marc Gaboury at

Yours truly,

KERR WOOD LEIDAL ASSOCIATES LTD.

Craig Sutherland, P.Eng.
Water Resources Engineer

CS
Encl.

Cc: Mike Squire, Englishman River Water Service/City of Parksville
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