

<b>Title:</b>	<b>Roadway Watercourse Crossings Remediation Directive</b>
<b>Number:</b>	<b>ESRD, Compliance, 2015, No. 1</b>
<b>Program Name:</b>	<b>Fish and Wildlife - Compliance</b>
<b>Effective Date:</b>	<b>March 4, 2015</b>
<b>This document was updated on:</b>	

## Purpose

The intent of the Directive is:

- To uphold Alberta Environment and Sustainable Resource Development (ESRD) and the Alberta Energy Regulator’s (AER) regulatory mandate
- To protect or restore fisheries habitat through effective stream crossing practices
- To promote and support a watershed-based approach to effective, collaborative watercourse crossing inspection, monitoring, management and remediation.

This Directive outlines a new regulatory strategy to identify and commence remedial watercourse crossing work to provide fish passage and regulatory compliance in priority order and with clear consideration of watershed conservation and management goals. Remedial efforts will be undertaken on a scheduled basis dependent on risk assessment.

## Background

Alberta’s roadways have many watercourse crossing structures that do not meet regulatory requirements and which impede fish passage and fragment fish habitat. Declines in fish populations are a result. This limits Alberta’s ability to meet its overall fisheries management goal as stated in the *Fish Conservation and Management Strategy for Alberta*: “to ensure the conservation of healthy, productive fish habitats and sustainable fish populations.”

- [Fish Conservation and Management Strategy for Alberta](#)

Crossing owners, who for the purpose of this Directive are defined as holders of formal dispositions, approvals, or authorizations (hereafter referred to generically as authorizations) for a watercourse crossing under, but not limited to the *Public Lands Act*, *Forests Act*, and/or *Water Act*, must conduct regular inspections of crossings for which they are responsible, and report crossings that do not comply with the legislation and/or authorizations to ESRD and AER. Crossing owners must take the necessary steps to comply with all applicable legislation and operating terms and conditions of authorizations. Other crossing owners include municipalities, sand and gravel operations, railroads, and others, and are equally responsible for compliance with regulatory standards for stream crossings they own.

Sedimentation of fish-bearing watercourses is also an important aspect of roadway watercourse crossing management. As erosion and sedimentation issues are identified, they must be immediately addressed by crossing owners. Separate and apart from this Directive, mandatory reporting and remediation requirements for sedimentation must be undertaken in accordance with the general provisions of the *Water Act*, the *Environmental Protection and Enhancement Act*, and the *Public Lands Act*, their regulations, and authorizations issued pursuant to the named legislation.

Crossing owners have not historically established a watershed-based approach to inspections and remediation of non-compliant crossings. Because of the lack of a planned approach where crossing owners undertake these actions solely to comply with the existing regulatory scheme, any benefit accrued largely occurs at the site level with little consideration of priorities within the larger watershed. This Directive advocates a pro-active watershed-based approach in assessing priority, as opposed to the historically reactive approach in which non-compliant crossings identified by ESRD or the AER must immediately be remediated in the interest of regulatory compliance.

It is evident to both regulators and crossing owners that the historical regulatory approach is not highly supportive of the needs of either regulators or crossing owners in effective remediation for stream crossings, and a new strategy based on engagement through a third-party service provider is being implemented.

Participation in this new regulatory strategy creates a cooperative approach to planning remediation priorities between crossing owners and regulators. The new strategy is expected to optimize compliance performance, fiscal management, and enhance environmental stewardship by prioritizing the order and rate at which watercourse crossings are inspected and restored within a watershed.

## **Responsibilities**

### **Service Providers**

At present, there is only one service provider capable of delivering the necessary elements outlined in this Directive – the Foothills Stream Crossing Partnership (FSCP). The FSCP is a self-funded and voluntary cooperative composed of watercourse crossing owners for whom the FSCP acts regarding the responsibilities outlined below. The FSCP has been actively engaged in proactive inspections, data acquisition, planning and crossing remediation for nearly a decade.

Any reference to the FSCP does not imply exclusivity in delivery of the objectives outlined in the Directive. Other organizations that are professionally capable of delivering on the inspection, data management, reporting and remediation requirements outlined in the Directive are eligible to participate as a service provider in this new regulatory strategy. ESRD is presently engaged with other external non-governmental organizations such as the Alberta Conservation Association and Ducks Unlimited to advance initiatives that are being led or supported by ESRD, and the relationship with the FSCP is consistent with those other undertakings.

For the purpose of this Directive, the FSCP will:

- Inspect member crossings, as per the *Roadway Watercourse Crossing Inspection Manual*, to ensure compliance and to monitor deficiencies and improvements within the proposed area of implementation. As the area of implementation grows, the members will inspect

crossings and add to the existing inventory. Inspection data will be stored by the FSCP within a developed database;

- [Roadway Watercourse Crossing Inspection Manual](#)
- Sequence of all watersheds in a defined area for remediation planning.
- Prioritize candidate sites for remediation. Areas selected for remediation planning will be based on watershed units provided by the regulators. The FSCP will collaborate with ESRD and AER to establish remediation priorities. The function performed by the partner companies, as represented by the FSCP and as described within this Directive, will satisfy the regulatory requirements of both ESRD and AER per inspection and remediation of non-compliant stream crossings where fish passage has been impaired. This presumes that FSCP members carry out their respective remediation obligations as identified in remediation plans submitted to, and approved by, the regulators.
- Report to the member crossing owners non-compliance related to stream crossings at a level of frequency and detail that allows the crossing owners to fulfill their statutory obligations for immediate reporting where a crossing inspection for fish passage has identified restrictions to passage and non-compliance with the legislation.
- Create watershed remediation plans. The plans will include outputs from the inspection process, such as fish passage ratings and other concerns by crossing, watershed-level priority, details of planned remedial work, and a projected timeline for remediation the crossing.
- Report annually to ESRD and AER on crossings mitigated, timelines met, and any changes to the watershed remediation plans. Any deviation from an approved watershed remediation plan must be approved by the regulators.

### **The regulatory bodies (ESRD & AER)**

For the purpose of this Directive, ESRD and AER will:

- Maintain their existing statutory authority and oversight on all surface water features throughout Alberta
- Collaborate with and provide direction to the FSCP or other service providers to set watershed-based remediation priorities for fish passage and review and approve submitted remediation plans in conjunction with the other regulatory body.
- Receive and review the annual report of the FSCP to verify that the progress of remedial activity for identified non-compliant crossings is proceeding in accordance with approved remediation plans and perform audit inspections on crossings where remedial actions have been taken.
- Use the criteria as outlined in the *Roadway Watercourse Crossing Inspection Manual* when performing audit inspections to ensure consistency for the parameters against which compliance will be measured.
  - [Roadway Watercourse Crossing Inspection Manual](#)

### **Procedure**

The Directive will be implemented in phases in three broad geographic regions of the province, including the Foothills, Boreal, and White Area regions. The first phase of implementation for the Directive will be in the Foothills geo-region of Alberta. (Figure. 1)

Each implementation phase will require engagement with a variety of stakeholders including but not limited to forest products companies, energy resource companies, owners and operators of railroads, and municipal and provincial roadways and highways.

The FSCP will be the central point of delivery for developing annual plans of inspection, site assessments, remediation plan development, execution of remediation plans, and annual reporting to the regulators. Remediation schedules will be established to span multiple years, based on assessment of priority for restorative efforts as endorsed by the regulators. Remediation plans will be reviewed annually by the regulators in conjunction with the inspections service providers. The regulators will undertake annual audit programs that evaluate efficacy of remediation programs in the field for mutually agreed upon audit inspection targets between both ESRD and AER.

A steering committee, including at minimum the regulators and FSCP, will be established to provide governance in overseeing implementation. A data sub-committee to be formed to work through details and this will also involve FSCP.

Crossing owners not participating in this new regulatory strategy will continue to be subject to the existing regulatory compliance regime in which crossing owners will be required to take immediate restorative action for non-compliant crossings. However, if non-participatory crossing owners undertake proactive measures that align with assessment, remediation and reporting for stream crossing remediation efforts consistent with this Directive, the new watershed-based priority-setting strategy will be available to non-participatory crossing owners.

The new strategy will only be available to crossing owners who are willing and committed to participate in a program of proactive inspection, watershed assessment, annual reporting and risk-based scheduled remediation activities in connection with their respective non-compliant crossings where impediment to fish passage is evident.

## **Reporting and Data Management**

Data will be held by FSCP and they will spend the monies and effort to collect, maintain and share data through their IT system at no cost to regulators. Data collected by industry often exceeds the needs for the compliance requirements of the regulators and the regulators may only be interested in certain attributes of that data. Crossing owners are statutorily obligated to comply with all reporting requirements imposed by legislation.

For the purpose of this Directive, reporting and data management will take place as follows:

- The FSCP or other service providers will report non-compliant crossings with a specified level of detail to participating crossing owners, sufficient for the crossing owners to fulfill their statutory obligations and report on their own behalf to the regulators.
- Information reported to the regulators by crossing owners about non-compliant stream crossings will be sufficiently detailed so as to fulfill the statutory requirements for mandatory reporting for non-compliant stream crossings, and the information will be reported according to the legislation.
- Data acquired by the regulators via the annual reporting function performed by the FSCP or other agents for crossing owners will be used to:
  - Support the evaluation, review, and approval of watershed remediation plans.
  - Perform regulatory audits to ensure inspection performance meets the standards set out in the *Roadway Watercourse Crossing Inspection Manual*.

- Identify participating crossing owners that are not meeting their obligations as outlined in this Directive or otherwise failing to meet their statutory obligations so that corrective action can be undertaken by the regulators.

The FSCP is currently maintaining and augmenting a database that will meet the information management needs of the new regulatory strategy.

## **Compliance and Enforcement**

Compliance responses under the applicable legislation will be undertaken directly with the crossing owner.

Crossing owners, who choose to manage stream crossings as they have historically, are subject to the provisions of the applicable legislation and any authorization issued pursuant to the legislation to remediate non-compliant crossings. Any enforcement action undertaken by either ESRD or AER may be subject to proactive disclosure by way of quarterly or annual reports and media releases. Additionally, the content of any investigation file, once concluded, is subject to the provisions of the *Freedom of Information and Protection of Privacy Act* and may be released to a requesting party.

Any crossing owner who does not meet their obligations will be subject to the provisions of the applicable legislation and any authorization issued pursuant to the legislation as administered by either ESRD or AER. Participation in this strategy is not a shield against all possible enforcement activity which may be undertaken by ESRD or the AER for matters arising from non-compliant watercourse crossings.

## **Review and Revision**

The Directive should be viewed as a living document which may be modified after subsequent review and revision cycles to reflect emerging priorities, technological advancements or refinement for elements such as data management, changes to the contingent of service providers actively engaged in inspection, reporting and remediation activities, and other changes that reflect the evolution of the Directive over time. The Directive will be opened for review and revision one year from the date of ratification by the Policy Committee and amended as appropriate, and at minimum annually thereafter.

## Contact Information

### Alberta Environment and Sustainable Resource Development

Main Floor, Great West Life Building

9920 – 108 Street

Edmonton, AB T5K 2M4

Phone: 1-877-944-0313

Email: [ESRD.Info-Centre@gov.ab.ca](mailto:ESRD.Info-Centre@gov.ab.ca)

### Alberta Energy Regulator

Fourth Floor, Twin Atria Building

4999 – 98 Avenue

Edmonton, AB T6B 2X3

Phone: 1-855-297-8311

Email: [inquiries@aer.ca](mailto:inquiries@aer.ca)

### Foothills Stream Crossing Partnership

Website: <https://fscp.foothillsri.ca/>

Email: [fscpcontact@gmail.com](mailto:fscpcontact@gmail.com)

## Authorities

*Environmental Protection and Enhancement Act (EPEA)*

*Public Lands Act*

*Public Lands Administration Regulation*

*Public Lands Administration Regulation*

*Responsible Energy Development Act, and Specified Enactments  
(Jurisdiction) Regulation*

*Water Act*

*Code of Practice for Watercourse Crossings*

*Alberta Timber Harvest Planning and Operating Ground Rules*

*EAP Integrated Standards and Guidelines, Approval Standards*

## Approved

Original Signed by \_\_\_\_\_

Heather von Hauff, Executive Director, Policy Integration Branch  
Alberta Environment and Sustainable Resource Development

Figure 1

