



Wildlife Management Plan



WILDLIFE MANAGEMENT PLAN

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Plan Maintenance

Responsibility

The accountability for the Wildlife Management Plan (WLMP) development and maintenance is a combined effort by the Trans Mountain Manager, Emergency Management and the Manager, Environment. This accountability is such:

- The document is owned by the Emergency Management Program as a supplemental plan to the Emergency Response Plan (ERP), however it is developed and maintained in cooperation with the Environment Protection Program who is responsible for the implementation of the WLMP during an emergency.
- The administrative management for the WLMP will be administered by the Emergency Management Program.

Plan Revisions

All requests for change must be made through the Manager, Emergency Management using the Revision Request Form located in this section of the manual.

Revisions after Release or Exercise

In the event that Trans Mountain experiences a release (worst case or otherwise), or conducts an exercise or training session, the effectiveness of the ERP and its supplemental plans will be evaluated and updated as necessary.

Changes in Operating Conditions

If a new or different operating condition develops, or if new information which would substantially affect the implementation of the ERP and its supplemental plans is identified, then Trans Mountain will modify impacted Plans to address such changes.

Revision Request Form

Requested by:	Date:
Dept/ Agency:	Phone No.:
Revision Type: ___ Addition ___ Deletion ___ Correction	
Manual Section:	Page:
Revision (attach separate sheet if necessary):	
Signature of Requestor:	
Send to: Manager, Emergency Management Trans Mountain 2700-300 - 5 th Avenue S.W. Calgary, AB T2P 5J2 Canada Fax: (403) 514-6401	

To be completed by Manager, Emergency Management	
Date Received:	Comments:
Date Reviewed:	
Issued as Revision: Y/ N	
If No, reason for Rejection:	
Signature Manager, Emergency Management	

Control Sheet

Revision Number	Date of Revision	Change(s)	Name
1	January 2018	New Plan Issued	J. Kereliuk
2	April 2018	Minor wording changes to Sections 1.0, 1.1, 2.0 and 3.0	J. Kereliuk
3	October 2018	Rebranding from Kinder Morgan to Trans Mountain	K. Malinoski
4	February 2020	Addition of Fish (including Salmon) to the scope of the plan (Section 1.1 Scope) Dividing Section 4.0 into two sections- Initial Response and Incident Specific Wildlife Management Plan Addition of Deterrence for Fish (Section 5.2.1) Addition of Winter Condition considerations (Section 5.4.1) Updated references to ERL to TAS	K. McLernon
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1.0 INTRODUCTION

The protection of wildlife, including wildlife habitat, and the management of wildlife impacts as the result of a pipeline release is a major priority for Trans Mountain. Wildlife management involves timely assessment and monitoring of wildlife impacts and subsequent implementation of mitigation and deterrence strategies. It also includes the timely recovery and rehabilitation of impacted wildlife.

The Wildlife Management Plan is initiated upon declaration of an emergency through the Trans Mountain Alert System (TAS) process and is maintained until development of the incident specific wildlife management plan. The incident specific wildlife management plan evolves from the WLMP and will be scaled according to the magnitude of the release.

The Wildlife Management Plan will function as a “living document” in which information collected through wildlife monitoring and assessment will be used to continuously update the response strategies and monitor their effectiveness to achieve the objectives as laid out in the Incident Action Plan (IAP).

1.1 Scope

In the event of an emergency that impacts, or potentially could impact, wildlife, the Wildlife Management Plan will be activated in conjunction with the appropriate ERP.

Within this plan, the term “wildlife” refers to:

- Terrestrial wildlife
- Birds
- Aquatic mammals
- Reptiles
- Amphibians
- Fish (including Salmon)

The Wildlife Management Plan is considered a subset of Trans Mountain’s ERPs and has been developed to align with the Incident Command System (ICS).

1.2 Objectives

The objectives of the Wildlife Management Plan are to:

- Identify impacts to wildlife and wildlife habitats from a release
- Minimize additional impacts to wildlife and wildlife habitats from the incident response
- Implement both appropriate and humane recovery (capturing) and rehabilitation actions to care for impacted wildlife
- Ensure appropriate recovery of deceased wildlife

1.3 Implementation of the Wildlife Management Plan

Activation of the Trans Mountain ERP will occur when an emergency is declared. Once an emergency is declared, and a need is identified for wildlife management, the Wildlife Management Plan and Wildlife Recovery and Monitoring teams will be activated. In addition, Trans Mountain owned wildlife response trailers will be mobilized as supporting incident resources.

The Wildlife Management Plan will be used in conjunction with other appropriate plans for the response phase of the incident until the incident specific wildlife management plan is developed. These plans will

be used during the transition from a response phase to the remediation phase as determined by Unified Command.

Implementation of the Wildlife Management Plan is a function of the Planning Section's Environment Unit (EU) and the Operation Section's Wildlife Branch.

2.0 ROLES AND RESPONSIBILITIES

Responsibility for developing and implementing the Wildlife Management Plan rests with the Environment Unit Lead (EUL) within the Planning Section of the Incident Management Team (IMT) and the Wildlife Branch Director within the Operations Section of the IMT.

2.1 Environment Unit Lead

The EUL is responsible for environmental matters associated with the response including wildlife management. The EUL is responsible for the development of the Wildlife Management Plan and oversight of the implementation of the Wildlife Management Plan. Duties for this role can be found in the Trans Mountain ICS Guide.

2.2 Wildlife Technical Specialist

The Wildlife Technical Specialist is part of the EU and works with the Wildlife Branch Director and other Wildlife Branch Supervisors in developing the incident specific wildlife management plan. The Wildlife Technical Specialist provides technical support to the Wildlife Branch Director and Supervisors. The Wildlife Technical Specialist specifically deals with the identification of species at risk from the incident, monitoring, and mitigation of response activities to minimize wildlife impacts.

2.3 Wildlife Branch Director

The Wildlife Branch Director, within the Operations Section of the ICP, is responsible for the Wildlife Branch and its associated groups including the Wildlife Recovery Group and Wildlife Hazing Group. The Wildlife Branch is responsible for recovery and rehabilitation of impacted wildlife and minimization of wildlife impacts through hazing and deterrence.

The Wildlife Branch Director and other Wildlife Branch Group Supervisors work with the Wildlife Technical Specialist, in the Environment Unit, to develop and implement an incident specific wildlife management plan. The Wildlife Branch is also responsible for communication with the Situation Unit within the Planning Section with regard to wildlife impact information. Specific duties for this role can be found in the Trans Mountain ICS Guide.

2.4 Wildlife Recovery Team

The Wildlife Recovery Team is a function of the Wildlife Branch and will be deployed as soon as possible once the Wildlife Management Plan is initiated. The Wildlife Recovery Team is responsible for collection and care of impacted wildlife as well as collection and processing of deceased wildlife.

Wildlife recovery and rehabilitation is a regulated activity therefore only permitted wildlife rehabilitation professionals are authorized to carry out wildlife recovery and rehabilitation activities as guided by established and accepted protocols. Trans Mountain has pre-identified third-party contractors who maintain the required permits, training and experience to implement the recovery and rehabilitation components of the Wildlife Management Plan and comprise the Wildlife Recovery Team. Third-party contractors are listed in the Confidential Appendix of the ERP.

2.5 Wildlife Monitoring Team

The Wildlife Monitoring Team is a function of the EU and will be deployed as soon as possible once the Wildlife Management Plan is initiated. The Wildlife Monitoring Team is responsible for completing the wildlife impact assessment, including identification of species present in the vicinity of the incident. Wildlife Monitoring Teams will identify any areas in need of wildlife mitigation and implement appropriate response strategies.

The Wildlife Monitoring Team is comprised of third-party contractor biologists and other wildlife specialists from regulatory agencies with local wildlife knowledge. Third-party contractors are listed in the Confidential Appendix of the ERP.

3.0 REGULATORY REQUIREMENTS

The management of wildlife during response activities is guided by a number of regulatory jurisdictions including federal, provincial and state authorities. The appropriate regulatory agencies will receive notification of the release and may provide onsite technical specialists who will assist with the development of the incident specific wildlife management plan.

In order to implement the Wildlife Management Plan, regulatory authorizations or permits may be required for certain wildlife management activities associated with the response including capture, transportation, possession, rehabilitation, release and hazing as well as handling of deceased wildlife. Regulatory authorizations and/or permit requirements are discussed with regulatory agencies at the time of the incident to determine the most appropriate permitting based on the specifics of the incident. These regulatory authorizations and/or permits are issued to qualified and trained professional biologists, and are required under the following legislations:

- Canada National Parks Act; Government of Canada, Parks Canada
- Fisheries Act; Fisheries and Oceans Canada;
- Marine Mammal Protection Act; US National Oceanic and Atmospheric Administration, National Marine Fisheries Services;
- Migratory Birds Act; Environment Canada and Climate Change, Canadian Wildlife Service;
- Migratory Bird Treaty Act; US Fish and Wildlife Service;
- Washington Administrative Code, Chapter 232, Washington Department of Fish and Wildlife.
- Wildlife Act; Alberta Environment and Parks;
- Wildlife Act; BC Ministry of Forests, Lands and Natural Resources;

Trans Mountain works with third party specialists who are authorized by regulatory agencies to collect and rehabilitate impacted wildlife in Canada and Washington State, and will obtain incident specific permits as necessary.

4.0 INITIAL RESPONSE

Wildlife deterrents will be implemented as part of initial response efforts to discourage wildlife from entering areas impacted by a release (areas where oil is present). Pre-determined deterrence techniques will be employed as soon as response crews and equipment become available. These deterrence techniques include:

- Exclusion fencing
- Visual Deterrence
 - Animal effigies
 - Pennant flagging

Trans Mountain wildlife response trailers are geographically spaced throughout operating districts to ensure for optimal response coverage. More specifically, wildlife trailers are located at Sumas, Kamloops and Jasper Stations. Trailers contain equipment and supplies needed for a variety of deterrence techniques and procedures for the implementing deterrents are available within wildlife trailers for use by response staff.

An initial assessment will be completed by the Wildlife Monitoring Team to determine the current and potential impact to wildlife from the release and the preliminary response activities. Information collected through the initial wildlife impact assessment will be used to determine the appropriate size and scale of the wildlife response effort and the generation of the incident specific wildlife management plan, including appropriate wildlife deterrents and hazing strategies.

Once the initial wildlife impact assessment has been completed, specialists within the Wildlife Branch will develop more detailed incident specific deterrence strategies for implementation in the field.

5.0 INCIDENT SPECIFIC WILDLIFE MANAGEMENT PLAN

The incident specific wildlife management plan is comprised of three (3) core components:

1. Monitoring;
2. Deterrence and Hazing; and
3. Recovery and Rehabilitation

The incident specific wildlife management plan will be updated frequently throughout the response to ensure that changes required are incorporated as soon as possible.

5.1 Monitoring

Wildlife monitoring is conducted to assess current and potential impacts to wildlife within the area of the release. Wildlife monitoring consists of surveys and/or sweeps conducted throughout the area of the incident response to gather information regarding:

- Species or habitat present
- Estimated populations
- Locations of particular species or habitat
- Condition of observed species or habitat
- Behavior (signs of stress) of any wildlife observed

Techniques used during surveys and/or sweeps include:

- Visual observation of wildlife
- Auditory observations or recordings
- Observations of wildlife or wildlife presence including tracks, scat, beds/dens/nests, egg masses, etc.

Information gathered through wildlife monitoring will be used to:

- Identify and validate deterrent and hazing strategies
- Determine appropriate wildlife impact mitigation measures for planned response activities
- Ensure the timely identification of impacted wildlife for recovery

Mitigation measures may include strategies such as:

- Completing wildlife sweeps ahead of response activities and equipment
- Hazing of wildlife observed or potentially present
- Amphibian salvage ahead of response equipment and subsequent disturbance
- Erecting fish barriers and/or other isolation/exclusionary strategies within watercourses to protect fish species
- Identification and protection of fish bearing areas; fish relocation operations
- Implementation of buffer zones (fencing) around sensitive wildlife or habitat

Wildlife monitoring will be ongoing throughout the response activities as conditions may change over time. Examples of changing conditions include: area impacted by the release, weather conditions, and newly impacted or observed wildlife. The placement and type of mitigation measures will be altered, as required, in accordance with new information gathered through wildlife monitoring.

5.1.1 Identification of at Risk Wildlife/Habitats

The identification of wildlife species and/or habitats at risk enables the mitigation techniques to be targeted to the species that are, or have the potential to be, present in the area of the release.

Species will be identified, and their overall risk of mortality ranked, according to their probability of:

- Coming into contact with the released product (i.e., vulnerability)
- Their risk of mortality once in contact with released product (i.e., sensitivity)

This identification and ranking of species will be refined based on information gathered during wildlife monitoring such as sightings, habitat availability, and local knowledge from regulatory agencies, stakeholders, and Indigenous communities.

5.2 Deterrence and Hazing

Implementing pre-emptive actions including deterrence and hazing techniques to prevent impacts to wildlife (including capture) and wildlife habitats are critical to minimizing impacts to wildlife.

Pre-determined deterrence techniques will be implemented as soon as response crews and equipment are available at the site of the release. Once the initial wildlife impact assessment has been completed by technical specialists the Wildlife Branch will develop more detailed incident specific deterrence strategies for implementation in the field.

Hazing strategies will also be implemented, as necessary, following the initial wildlife impact assessment. However, hazing strategies require further consideration as regulatory permits and trained/experienced personnel may be required to effectively implement these strategies.

In order for deterrents and hazing strategies to remain effective, they will be altered/changed as required. The Wildlife Branch will be responsible for adjusting the deterrence and hazing strategies regularly throughout the response activities to reduce wildlife habituation.

5.3 Recovery and Rehabilitation

Wildlife recovery and rehabilitation involves the capture of oiled wildlife and their subsequent cleaning and care for the purpose of their release back into the environment. Only permitted wildlife rehabilitation professionals are authorized to carry out wildlife rehabilitation activities as guided by established and accepted protocols.

In order to be successful in the minimization of impacts to wildlife, wildlife care (i.e. collection, stabilization, cleaning and conditioning) must begin as soon as possible after a release. The success of rehabilitation efforts is dependent upon:

- The number of wildlife impacted
- The immediacy of the response effort
- Species involved
- Care and husbandry requirements
- Time of year
- Type of contaminant affecting wildlife
- The extent and duration of contamination

There are many stages in the process of wildlife recovery and rehabilitation:

- Capture
- Transportation
- Stabilization
- Cleaning
- Conditioning
- Release

Wildlife capture will begin with wildlife surveys completed by permitted professionals from a third-party contractor who will search and collect wildlife in the impacted area of the release (Wildlife Recovery Team). The collected wildlife will be temporarily housed individually in crates or cages for initial care and transportation to a Wildlife Care Centre.

5.3.1 Wildlife Care Centres

In situations where wildlife has been impacted by a release, a Wildlife Care Centre should be established/identified for the appropriate care and rehabilitation of all impacted wildlife species.

Wildlife Care Centres can consist of established animal care centre, third party contract wildlife response trailers or temporary rehabilitation facilities set up in warehouses or other available buildings near the location of the incident. Trans Mountain requires that the Wildlife Care Centre meet or exceed established and current minimum standards for wildlife care and facility requirements including:

- National Wildlife Rehabilitators Association (NWRA)/International Wildlife Rehabilitation Council (IWRC): Minimum Standards for Wildlife Rehabilitation
- Canadian Council on Animal Care (CCAC): Wildlife Guidelines

These standards will apply when evaluating existing wildlife care facilities for use or construction of temporary wildlife care facilities. Currently, established facilities meeting the above requirements include the Alberta Institute for Wildlife Conservation in Calgary, AB and the Progressive Animal Welfare Society Wildlife Center in Lynnwood, WA. There are currently no established wildlife care facilities that meet the above requirements within the province of BC.

The selection of an incident specific appropriate Wildlife Care Centre will be dependent on the number of individuals and the species affected by the release and will be determined in consultation with regulatory agencies, stakeholders and Indigenous communities. Wildlife Care will be re-assessed and adjusted as necessary throughout the incident response. Larger incidents may require the use of multiple Wildlife Care.

5.3.2 Management of Deceased Wildlife

The collection of deceased wildlife will be carried out by the Wildlife Recovery Team. Regulatory authorization is required for the collection of deceased wildlife and will be obtained by the third-party contractor, as required, as early in the response as possible. Disposal of deceased wildlife will adhere to the conditions outlined in the regulatory authorization for collection of deceased wildlife.

5.4 Other Considerations

5.4.1 Winter Conditions

Winter conditions pose unique challenges when dealing potentially affected or affected wildlife. Care must be taken to ensure the proper considerations are made to lessen the impact upon wildlife during and after an incident occurring in the winter.

The primary concern for wildlife that have become oiled during the winter months is hypothermia. Even after cleaning, the natural waterproofing and heat retention abilities of the impacted animal may be compromised. Consideration should be made to establish warming facilities for the captured wildlife at the scene of the incident and to provide them heated transport to the Wildlife Care Centre.

Unique winter circumstances to be considered to mitigate affects to wildlife, from released product and the response activities include:

- Torpor - The involuntary state that an animal, usually amphibians, enters into to survive the winter months triggered by the lowering of the ambient temperature in the surrounding environment.
- Hibernation – The voluntary state that an animal enters to conserve energy, survive under scarce food availability, and to minimize it's need during cold winter months. Generally, triggered by the length of day and hormone changes within the animal.
- Migration – The long-distance movement of individual animals, usually on a seasonal basis. Migration is generally triggered by local climate changes, local availability of food, the season of the year, and for mating purposes. This can affect all species of wildlife.

As a result of the above, wildlife may be encountered in areas/regions that they may not normally be found in during other times of the year. In addition, any tree clearing during winter months should be only done after a wildlife sweep for hibernating animals has been conducted.

5.4.2 Convergent Volunteers

When a release occurs, local communities and community members often express their desire to support wildlife management efforts. The Trans Mountain Liaison Officer will hold the primary relationship working with these external partners.

The decision to activate the *Convergent Volunteer Plan* will be made by Unified Command and an Incident Volunteer Coordinator will be assigned to activate the Trans Mountain Volunteer Coordination Centre (VCC).

6.0 COMMUNICATION

6.1 Response Personnel and Wildlife Branch

Response personnel who observe or encounter impacted wildlife are instructed to report the sighting to the Wildlife Branch within Operations and are advised to avoid the impacted wildlife to minimize stress to the wildlife. Under no circumstances are response personnel to engage with or attempt to capture impacted wildlife, such efforts could endanger the safety of both themselves and the wildlife.

6.2 Impacted Wildlife Reporting Hotline and Observations

In Canada, a toll-free reporting hotline will be activated and communicated to the public as soon as possible to ensure timely reporting of impacted wildlife. This hotline will be set up with the assistance of the Information Officer and/or Joint Information Centre.

In Washington, the Washington Department of Fish and Wildlife is responsible for activation of their oiled wildlife reporting hotline: 1-800-22BIRDS (1-800-222-4737).

The public will be advised that impacted wildlife can be dangerous and attempts to engage with or capture impacted wildlife are not advised/recommended.

7.0 WILDLIFE MANAGEMENT PLAN DEACTIVATION

Wildlife management activities will continue until it has been determined by Unified Command that the risk to wildlife from the incident or the response activities is low. In cases where wildlife or wildlife habitats have been impacted, it is likely that wildlife management activities will continue beyond the response phase and into the subsequent remediation phase.

8.0 RECORDS AND RECORD MAINTENANCE

All related documentation and the incident specific wildlife management plan will be maintained in the incident file as outlined in the ERP.