

Chapter

14



Uilta Reindeer Herding

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Construction and operations of the Sakhalin II Project will affect areas of spring and summer pastures used by Uilta reindeer herders north of Val.¹⁴ This section deals only with impacts on herding. General impacts on indigenous populations living in Nogliki District are discussed in Chapter 12.

Today, five to seven Uilta families representing the herding co-operative Valetta and enterprise *Bayausa* use this area for grazing domestic reindeer. About 20-25 men are involved depending upon the year, herding about 110-120 reindeer. Seven of the men have more than 15 years herding experience. The herders migrate with their herds all year round. Their families live permanently in Val, south of the spring/summer pastures. In summer, the women and children spend about two months in the herders' camps near Piltun and Chaivo bays.

The land used for spring and summer grazing extends north from Northing 581000 and is bounded by the narrow gauge railroad to the west, access road OA-1/NA-1 to the north, and the Okhotsk Sea to the east (Figure 14-1).

In 1989 and 1998 fires severely damaged many of these spring and summer pastures. Although the total area available for grazing was significantly reduced – only boggy areas did not burn – consultation with herders suggests that up to 500 reindeer could be supported on the remaining areas, which total about 40,000 ha.

Lands directly north of access road OA-1 are suitable for grazing because they were not burned in 1989 and 1998. However, due to the large number of old geological access roads that cross this area, and the use of these roads by recreational users from Okha District, the herders do not use this area, fearing that their domestic reindeer would be more vulnerable to poaching. They do use the portion north of access road NA-1.

Because the domestic reindeer are considered to be the private property of the herding enterprises, they cannot legally be hunted. Illegal poaching is considered a greater problem today due to the small numbers of domestic reindeer alive today compared to the population of some 4,000 including *Olenevod* just 12 years ago.

Key issues discussed during the 2002 consultation effort included:

- Access roads, especially OA-1/NA-1, and induced access issues,
- Potential impacts and mitigation measures associated with construction of Sakhalin II's Piltun Landfall and pipeline,
- Compensation matters,
- Post-construction restoration of grazing areas,
- Ways of resolving the conflict with *Olenevod* over reindeer pastures in Nogliki District,
- Possible construction of a temporary camp at the abandoned airfield in Val, and
- Long-term issues related to community needs and ongoing consultation efforts.

14.1 KEY ISSUES – CONSTRUCTION AND OPERATIONS

14.1.1 Behaviour of Reindeer in Response to Construction and Operations Activities

Herders have expressed concerns about how domestic reindeer may react to increases in construction traffic, noise and dust near their spring and summer pastures. At present, herders generally wait until nightfall when traffic is minimal to move reindeer across the main Yuzhno-Sakhalinsk - Ohka road. In the event of increased construction traffic at night, they may require assistance in moving their herds.

¹⁴ If Sakhalin I is constructed, there will be a net increase in direct and indirect impacts.

In the summer of 2002 herders were able to observe the behaviour of their herds in response to the construction traffic on access road OA-1/NA-1, which was upgraded by the Sakhalin I Project for access to Chaivo Spit. In general, domestic reindeer grazed no closer than about 1-2km from the access road, where there is frequent movement of haulage trucks. The reasons for this were probably a combination of traffic, noise and dust.¹⁵ Behaviourally, reindeer follow an established migratory pattern and, given the lack of previous exposure to construction activities, there is concern that grazing and calving patterns may have to change during the construction period. Concerns expressed during consultations with herders included:

- Reindeer graze freely at night on an area of several square kilometres and are collected by the herders in the morning. If deer are frightened they may stray further than usual, thereby increasing the effort required by herders to collect them in the morning,
- The further reindeer stray from the herding camp, the greater the risk of accidents and/or poaching,
- The reindeer's response to construction activities such as changes in traffic, construction equipment, night-lights, noise and dust is unpredictable, and
- There will be temporary or permanent changes in the habitat of the domestic and semi-wild reindeer. The herders sometimes catch semi-wild reindeer to domesticate them and to increase the size of their herds. These semi-wild herds are located south and north of Val, near Chaivo and Piltun bays, in the upper reaches of the rivers and in the mountains.

14.1.2 Changes In Use/Access to Areas of Spring and Summer Reindeer Pastures, Including Calving Grounds

One of the major consultation topics has been the question of how construction activities and permanent facilities might affect access and use of areas used by the herders since the economic decline of the 1990s and the major fires of 1989 and 1998.

Every year the reindeer migration period and route is adjusted depending on the season, weather, reindeer behaviour and other needs. If spring is early, they migrate to the spring pastures earlier, and so on. The fact that herders have previously experienced the need for considerable flexibility in migration timings and routes permits some flexibility in finding mutually acceptable and workable solutions to the present issues raised by Project construction in this area.

Herders may need to bypass the Sakhalin II pipeline ROW by a few kilometres if construction were to take place during the time that the herd is moved through this area.

Further impacts may occur if the Sakhalin I Project is built. This Project includes construction of the pipeline, an OPF, an access road bridge across Chaivo Spit, and an onshore well pad areas of burned and unburned spring and summer pastures.

14.1.3 Blockages in Access due to the pipeline and Fixed Facility Site Construction

Herders have expressed concern over the possibility that seasonal migration routes and grazing areas may be blocked, hindered or otherwise rendered inaccessible due to Sakhalin II construction activities (e.g., pipeline ROW construction, construction of access roads, fenced construction sites). Herders specifically mentioned access to Panitu Lakes and nearby streams for fishing, hunting and watering reindeer, and migration to summer pastures on the north part of Chaivo Spit (Note: Chaivo Spit is primarily an issue associated with Sakhalin I construction).

14.1.4 Impacts on Calving Areas

Three groups now use three different calving areas north of Val. The oldest herder with about 70 reindeer has regularly used an area between Chaivo Bay and Panitu Lakes since 1999. Part of this area will be bisected by the pipeline ROW. The other two herding groups with about 40 reindeer use areas near the proposed Sakhalin I facilities. One uses the area within 1km south of the proposed Sakhalin I OPF, the other uses areas about 0.5km North.

¹⁵ Sakhalin I has a 'no harassment of animals' policy.

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SEIC has consulted regularly with these herders. They have expressed great concern about the planned pipeline construction in the calving area near Panitu Lakes. The Lakes area becomes more important to the herders in 2003-2004 in view of the planned construction of the Sakhalin I OPF due to the proximity of the proposed plan to the calving areas they now use.

Partially as a result of the SEIC consultations efforts, one herder experimented with keeping his herd in their late winter/early spring pasture for calving. He stayed in the upper reaches of the Val River for an extra 4-5 weeks. After the new-born deer were about 3-4 weeks he resumed his regular migration, bringing them directly to the Piltun-Astokh area to summer pastures.

The calving area near Panitu Lakes may be affected by the Sakhalin II pipeline construction (short-term impacts). Since this area is used for only one month/year, proper scheduling of the construction activities could minimise the potential impacts.

Level of impacts on the calving area near Chaivo Spit caused by the Sakhalin I Project construction activities will also be determined by the actual timing of construction.

14.1.5 Access Roads and Induced Access Issues, Especially Access Road OA-1/NA-1

Construction of the Sakhalin II Project will include use of existing access road OA-1/NA-1 upgraded in 2002 by the Sakhalin I Project for access to their Chaivo Spit drill pad. Sakhalin II may use this road to access the proposed site of Piltun Landfall. In total, the access road OA-1/NA-1 is about 22km long and passes through about 10km of summer pastures to the Piltun Landfall area.

As part of the upgrade, Sakhalin I established a manned security gate that has been moved out of the grazing zone, closer to the Astokh Bay along the access road and has granted the herders use of this road. In addition, four shorter access roads will be upgraded for use during Sakhalin II construction (OA-2, OA-3, OA-4 and OA-5). Access roads proposed by Sakhalin I are unknown.

In consultations, herders expressed concern about induced access and use of access roads. Issues included the following:

- Construction of new access roads during pipeline construction can result in increased poaching of domestic deer,
- Upgrading of roads will increase the danger of poaching of domestic deer and other wild animals and birds during construction and operations, and
- There will be increased access to berry and mushroom gathering fields by local users from Nogliki and Okha Districts.

Historically, the herders have used access road OA-1/NA-1 during their seasonal migration from summer to autumn pastures and to bring herders' families to their summer camps. Other non-herding families also use it for access to the beach and Piltun lighthouse. Piltun Landing and many of these areas can be accessed by boat and by car along the beach from nearby Piltun Bay. Herders felt that the extremely poor condition of part of the access road prior to 2002 limited the potential for poachers to access summer grazing areas near Piltun Landing.

Access road OA-1/NA-1 has been discussed with herders since late 2001. During the most recent consultations, herders were still divided as to the most appropriate use of this road after construction. The road will be maintained for access to Sakhalin IIs pig trap station at Piltun Landfall. Therefore consultation has focused on whether the access road should have a permanent/seasonal security gate, the extent to which the road should be used for access to the beach, and so on. Opinions as to the best solution still vary.

Over the next two years, consultation will continue with herders and existing users of the road, so as to arrive at a mutually acceptable and feasible solution.

14.1.6 Increased Hazard to Animals, Risk of Damage to Summer/Spring Pasture as a Result of Accidents and Pollution

Other concerns expressed by herders include the potential increase in hazards to animals and the threat of accidents, pollution and fires. These concerns are based on historical observations about ongoing oil field operations in the area north of Nogliki over previous decades. Issues include:

- Risk of injury/death if an animal is inadvertently frightened and falls into an open pipeline trench,
- Danger that reindeer may otherwise get into dangerous situations during the construction period,
- Increased risks due to construction traffic on roads historically used and/or crossed,
- Increased risk of pastures/water bodies being accidentally contaminated as a result of spills, vehicle accidents, etc.,
- Potential for increased siltation of Piltun, Astokh and Chaivo bays and local streams and ponds due to inadequate siltation control measures during construction and road repair,¹⁶
- Leaks/explosions of oil and/or gas pipelines due to natural catastrophe or technical accident, and
- Potential for increased risk of fires related to increases in road use.

14.1.7 Restoration/Return of Piltun Landing and the Sakhalin II pipeline ROW

Herders have expressed concern about restoration of lands damaged by construction, particularly the fact that restoration of wetlands and boggy areas is difficult. The areas used by the herders at present are ones that either did not burn in the fires or are regenerating the fastest.

Prior to actual approval of the project and the release of lands for construction, a soils restoration plan must be prepared and approved by the Russian Federation Authorities. Preliminary plans call for planting of a variety of seasonal grasses in the pipeline ROW as well as a soils restoration/monitoring programme.

In summer 2002 SEIC began consultations with the herders to determine if the soils restoration plan could be modified to enhance the actual grazing fodder available on the spring/summer pastures. During this period reindeer graze on a variety of grasses, larch, willow, mushrooms and yagel (lichen, known as reindeer moss). Discussions were also held about possible methods to accelerate the regeneration of burned pastures.

14.1.8 Compensation for Construction Damages

In 1998 the Sakhalin II Project applied for and was granted a Preliminary Land Allocation for pipeline construction and landfall sites. This allocation was made by the Nogliki and Okha Districts.

According to PLA materials of 1998 the firm *Aborigen Sakhalina (Sakhalin Aboriginal)* is to be compensated for the loss of about 98ha of reindeer pastures in Okha and Nogliki Districts.

Since 1998 *Aborigen Sakhalina* has gone bankrupt. In addition, the land in question is also officially registered to the former state farm *Olenevod*. However, as discussed above, the land is actually used by the Native enterprise *Bayausa* and co-operative *Valetta*. SEIC has made several inquiries to the Nogliki District Administration requesting clarification of the current status of *Aborigen Sakhalina*. To date, a complete answer has not yet been received.

The *Bayausa* and *Valetta* herders are aware of these compensation monies and SEIC has discussed their concerns with them. Herders envision that these monies could be used to develop the herding business in Val. SEIC will continue to consult with these herders and the Nogliki District Administration until a practicable solution is found.

The pastures belong to the Russian Federation Forest Fund. All other users have no rights of ownership and so are not entitled to compensation according to Russian Federation law. The compensation will go to the Federal budget.

14.1.9 Losses of Spring/Summer Reindeer Pastures

One major issue of concern to herders is the potential long-term damage and cumulative losses of spring and summer reindeer pastures. As discussed above, the area currently used by herders is about 40,000ha. Herders have stated that even this limited area could support up to 500 reindeer, allowing a five-fold increase in the size of herds, even without access to new areas.

¹⁶ This concern is related to local observations of the increased siltation of Chaivo Bay over the past decade. In northern Sakhalin, the main Yuzhno-Sakhalinsk-Okha road is a dirt track constructed of largely unconsolidated coarse sand, which readily erodes, clogging drainage ditches on either side of the road and nearby streams and rivers.

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Actual physical damage to these pastures may occur as a result of:

- Evacuation of the trench and temporary construction sites, such as Piltun Landfall,
- Physical clearing of the pipeline ROW during pipeline trench excavation,
- Upgrading of existing access roads, and
- Potential inadvertent damage outside the designated work area from earthwork and all-terrain-vehicles.

The following table summarises lands needed for the Sakhalin II Project in areas illustrated in Figure 14-01.

TABLE 14-01: PROJECT LAND TAKE AFFECT ON SPRING AND SUMMER REINDEER PASTURES

Type of Pasture	Number of Hectares				%
	Total Area	Pipeline ROW	Access Roads*	Piltun Landfall	
Burnt Pasture	15,000	31.7	26.7	0.0	0.39
Spring Pasture	7,500	4.9	0.9	0.0	0.08
Summer Pasture	17,500	19.3	12.0	6.6	0.22
TOTAL	40,000	55.9	39.6	6.6	0.26

*Includes footprint of existing road.

14.2 MITIGATION/MONITORING ACTIONS

14.2.1 SEIC Mitigation/Monitoring Actions

ALL MITIGATION MEASURES ARE APPLICABLE TO PILTUN LANDING AND PIPELINE KM 0-45	
<p>The following mitigation measures for reindeer herding have been developed in view of the potential impacts outlined above. These measures will be further developed and implemented in consultation with the herders themselves and other members of local communities who may be affected:</p>	
TOPIC	SEIC ACTIONS
Community Liaison and IP Consultation Efforts during Construction and Operations	<p>SEIC will maintain an active and ongoing consultation programme - through the SA Group, IP Team and Community Liaison Officers (CLOs) - with Uilta reindeer herders throughout the construction period in areas north of Val and between pipeline KM 0-45. While herders are on the summer and spring pastures such consultation will occur a minimum of once or twice a month depending on the location of the herd. Consultation will be conducted as necessary and as practicable while herders are on their autumn and winter pastures (Note: it is extremely difficult to access herders in winter pastures in the taiga due to lack of readily available transport and severe winter conditions). The CLOs will work with local herders and contractors to facilitate an exchange of information about construction activities and methods to minimise potential impacts by:</p> <ul style="list-style-type: none"> - Providing information about the location and expected duration of construction activities in areas used for spring and summer pastures, - Organising meetings and workshops with local herders to inform them about appropriate safety measures and behaviour close to Project construction and actions to taken in case of emergencies, and - The Sakhalin II Project will continue to consult with the Sakhalin I Project regarding activities that could be jointly financed/implemented to minimise each project's potential adverse effects on the spring/summer pastures.
Monitoring	<p>SEIC will monitor:</p> <ul style="list-style-type: none"> - Contractor adherence to the ITT requirements and SEIC Code of Conduct, and - The success of the re-vegetation programme, not only for stabilising construction-disturbed soils, but also for suitability of such areas for reindeer grazing. This will be assessed through consultation with herders and on-the-ground observation.
Behaviour of Reindeer/Changes in Access During Construction	<p>SEIC will work with herders and contractors to:</p> <ul style="list-style-type: none"> - Inform herders of the proposed timing and location of construction activity on or near reindeer pastures, - Help herders find practicable bypass routes to summer pastures on Chaivo Spit (if needed), and - Provide assistance to herders including guards for reindeer while they are on the spring/summer pastures during construction.

ALL MITIGATION MEASURES ARE APPLICABLE TO PILTUN LANDING AND PIPELINE KM 0-45

The following mitigation measures for reindeer herding have been developed in view of the potential impacts outlined above. These measures will be further developed and implemented in consultation with the herders themselves and other members of local communities who may be affected:

TOPIC	SEIC ACTIONS
Access Roads and Induced Access Issues, Especially Access Road OA-1/NA-1	<p>SEIC will continue consultation with herders about access roads and induced access issues. As noted above, differences in opinion exist among the herders about how the access roads should be treated during and after construction (especially OA-1/NA-1). As currently proposed, any temporary access roads will be removed post-construction. Legal public access roads will be treated according to the conditions of the permit issued by local authorities.</p> <p>To the extent practicable, SEIC will:</p> <ul style="list-style-type: none"> – Avoid constructing new roads and try to use old roads as much as possible. – Close access roads newly constructed by SEIC (NA-1, OA-2, 3, 4, and 5) near spring and summer pastures. Restrict access of strangers and open the access roads for the reindeer herders, and – Re-cultivate temporary access roads after construction is completed. – Also see Section 'Losses' below.
Increased Hazard To Animals/Risk of Damage to Summer/Spring Pasture as a Result of Accidents/Pollution	<p>SEIC will work with herders and contractors to:</p> <ul style="list-style-type: none"> – Temporarily fence construction sites, as appropriate and feasible for construction sites such as the Piltun Landfall, – To the extent practicable, minimise road use by company transport during periods that the reindeer are crossing major roads and/or grazing near construction areas, – Provide educational workshops about appropriate safety measures to be taken in case of accidents and general safe behaviour close to Sakhalin II Project pipelines, facilities and construction sites, – Work with herders to develop a system of information concerning potentially dangerous accident sites so they can avoid these locations, and – Consult with herders when developing emergency response plans (e.g., oil spill response plans).
Restoration of Pastures	<p>SEIC will work with herders and contractors responsible for re-vegetation of disturbed soils to complete the following:</p> <ul style="list-style-type: none"> – Develop a soil restoration programme, as required by regulations, in consultation with herders and institutions with knowledge and experience in developing similar re-vegetation programmes. – As part of the restoration programme, replant areas disturbed by construction using plants (e.g., larch and willow) and grasses suitable for spring and summer reindeer grazing. – Explore the possibility of accelerating the rate of recovery of burned pastures in consultation with local herders, and if possible organise development/implementation of these measures as part of SEIC community development activities.
Compensation for Construction Damages	<p>The herders are aware of compensation monies and SEIC will continue to consult with and inform the Bayausa and Valetta herders of the proposed distribution of funds by the Local Administration. The pastures belong to the Federal Forest Fund and the compensation will go to the Federal budget. If a satisfactory solution is not found, then SEIC will consider compensation via the Supplemental Assistance programme.</p>
Losses of Spring/Summer Reindeer Pastures	<p>To the extent feasible, minimise the clearance of unburned pastures during construction, especially between pipeline Km 0-7. Options include:</p> <ul style="list-style-type: none"> – Winter construction on snow pads to minimise the need to strip existing vegetation other than directly over the pipeline trenches, – Modification of the work zone within the overall pipeline ROW where feasible, to reduce the need for topsoil stripping or damage to existing vegetation surfaces, – To the extent practicable, change methods and location of stockpiling trench topsoil and sub-soils as well as backfilling (e.g., using a narrower footprint along the north and west sides of the pipeline ROW used for soil stockpiling and as a track for vehicles used for backfilling), – Implement actions to minimise adverse impacts on existing vegetation surface within pipeline ROW and other work zones including utilisation of existing damaged tracks/areas where possible, and – The Sakhalin II Project, will consult with the reindeer herders and the Sakhalin I Project about restoration/ re-vegetation of temporary access roads and old seismic roads crossed by both projects' pipeline ROW. The purpose of this consultation would be to reduce the potential for induced access. Currently, herders do not use areas suitable for reindeer grazing north of access road OA-1/NA-1 due to the large number of old seismic roads in this area.
OPERATIONS-RELATED ISSUES	
Support of Local Reindeer Herding Enterprises	<ul style="list-style-type: none"> – Provide assistance to reindeer herders to prepare and submit proposals for the development and support of local indigenous reindeer herding enterprises, including training of young herders, market research for the sale of reindeer meat, and development of a reindeer crafts market through SEIC. – Consult with the Sakhalin I Project about opportunities that may be pursued jointly to support such proposals by indigenous reindeer herders.

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14.2.2 Contractor Mitigation/Monitoring Actions

The following SEIC actions will be incorporated into contractor (and subcontractor) requirements as a condition of the project award for construction of: Piltun Landing; the pipeline between pipeline MP 0 and 15; associated access roads; areas crossed during seasonal migration between pipeline MP 15 and 45; and other related construction.

PLAN FOR MANAGEMENT OF CONSTRUCTION ACTIVITIES IN REINDEER GRAZING AREAS	
Applicable temporary and permanent facilities	<ul style="list-style-type: none"> – Facilities: Piltun Landing. – Pipeline ROW: Between pipeline MP 0 and 45 Access Roads: OA-1/NA-1, OA-2, OA-3, OA-4 and OA-5. Miscellaneous: Other Associated Improvements; other construction not yet determined.
Management Plan	<ul style="list-style-type: none"> – The Contractor will review SEIC commitments made and prepare for review and approval a concise plan of measures for managing potential impacts during construction in areas of spring/summer pastures used by the Uilta reindeer herders. Depending upon the proposed seasons of site preparation and construction, the types of actions to be implemented may vary considerably. – This plan will be reviewed and approved by SEIC in consultation with potentially affected herders.
Code of Conduct	<ul style="list-style-type: none"> – Contractor will be required to adopt the SEIC code of conduct in these areas.
Liaison Requirements	<ul style="list-style-type: none"> – Contractor community liaisons will work with herders and SEIC community liaison staff to establish appropriate notification procedures during construction.
Education and Training	<ul style="list-style-type: none"> – As part of the new employee orientation programmes, contractors will review the expected code of conduct (especially as it relates to treatment of animals) and explain expected behaviour when domestic reindeer are on their spring and summer pastures. – Contractors will invite herders to participate in safety orientation meetings and other emergency response training during the period they are on the summer/spring pastures, if practicable. – Alternatively, such training may be provided at more convenient times and locations by the CLO staff.
Assessment of Potential Construction Impacts	<ul style="list-style-type: none"> – FEED and Contractor design staff will review and assess the feasibility of implementing methods to minimise physical impacts on pastures and methods to ensure continuing safe access to spring and summer pastures during construction as described in the SEIC commitments above. – Contractors will prepare the management plan as described above taking into consideration the periods of use of the spring/summer pastures and the annual migration cycle. – If pipeline construction takes place during periods when herders need to cross the construction right-of-way according to the Onshore Pipeline Construction Specification (PCS-01), the Contractor will consult with herders to ensure the following: <ul style="list-style-type: none"> – Section 5.8. In locations where the trench is cut across a road, track, path, walkway, etc., CONTRACTOR shall provide a temporary bridge or diversion road of adequate strength and properly constructed to allow the passage of normal traffic with a minimum of inconvenience and interruption and to Company Site Representative approval, and – Section 6.1. Stringing states: CONTRACTOR shall string the pipe in such a manner so as to cause no interference with public roads, footpaths, tracks, etc. Suitable gaps shall be left at intervals as necessary to permit the passage of livestock and/or equipment across the ROW and as directed by Company Site Representative.
Contractor Reporting Requirements and Indicators	<ul style="list-style-type: none"> – In order to monitor this process the Contractor will be required to regularly report: <ul style="list-style-type: none"> – Interactions/consultations with herders, and – Any incidents related to employee/subcontractor harassment/other incidents related to disturbance of local reindeer grazing behaviour. In such cases the Contractor will describe measures taken to ensure such event is not repeated and appropriate consultation with herders as to appropriate mitigation measures.

14.2.3 Residual Impacts

IMPACT	RESIDUAL
Short-Term Construction Impacts	
Construction nuisances and short-term inability to use some parts of spring/summer pastures	<ul style="list-style-type: none"> – Moderate for the 60-day period during construction at Piltun Landing due to the season of construction. – Low if pipeline construction at any time other than the two-month period that the pastures are used. Residual impacts will be related to loss of the 28-m wide pipeline corridor for grazing until the new vegetation is established. – Moderate if construction occurs during the calving season and period during which the pastures are used. Herders may need to use different calving areas (as was done in 2002) and perhaps re-route to access summer pastures.
Long-Term Operations-Related Issues	
Loss of Pastures	<ul style="list-style-type: none"> – Minor. The total direct impact area is less than about 0.3% of the area damaged from the 1989 and 1998 fires. As per the mitigation measures SEIC will work to re-vegetate the pipeline ROW in the areas of the pastures with vegetation preferred by reindeer for grazing.