GEORGE GORDON FIRST NATION

George Gordon First Nation (GGFN) (Band No. 391), a Cree Nation, is affiliated with the Touchwood Agency Tribal Council Inc. and a signatory of Treaty 4 (AANDC 2016; Barnes 2015). George Gordon First Nation falls under the *First Nations Election Act* election provisions, represented by a Chief and eight Councillors elected for a four-year term (AANDC 2016).

George Gordon First Nation is located northwest of Fort Qu'Appelle and has two reserves: Gordon Reserve #86 (14,438.3 ha) and Last Mountain Lake Reserve #80A (508.2 ha), in addition to shares in Treaty Four Reserve Grounds #77 (37.9 ha). Gordon Reserve #86, located 61 km northwest of Fort Qu'Appelle, Saskatchewan, is the most populated (AANDC 2016). George Gordon First Nation has also acquired six parcels of land totalling 1,086.5 ha through the Treaty Land Entitlement (TLE) process (Barnes 2015). As of March 2016, George Gordon First Nation had a registered population of 3,582 members, with 1,158 members on reserve, 75 members on other reserves, and 2,349 members living off reserve (AANDC 2016).

LOCATION RELATIVE TO THE PROJECT

Gordon Reserve #86 is located 90.6 km from the Project development area (PDA). George Gordon First Nation has reported in secondary sources not related to the Project that George Gordon First Nation Traditional Territory encompasses the area subject to Treaty 4 (Barnes 2015). George Gordon First Nation reported that the traditional territories are located near the Project and the Nation holds land titles where the proposed RoW passes (GGFN 2015a). George Gordon First Nation declared the Project will use TLE land in Whitewood, Saskatchewan (GGFN 2015b); based on current Project data, the Whitewood TLE parcel is located 8.5 km from the PDA.

TLRU INFORMATION SOURCES

Five George Gordon First Nation members presented oral traditional evidence (OTE) to the National Energy Board (NEB) regarding the Project. The hearing was held in Regina, Saskatchewan on November 9, 2015. The transcript from this hearing, which is available on the NEB Project directory (GGFN 2015b), represents the traditional land and resource use (TLRU) information source for George Gordon First Nation considered in this report. The transcript was reviewed and information was incorporated into Table 5, columns "Traditional Land and Resource Use Information" and "George Gordon First Nation Mitigation Recommendations".

George Gordon First Nation is also participating in an independent TLRU study, but the results are not available for use at the time of filing Volume 25.

KEY TOPICS IDENTIFIED BY GEORGE GORDON FIRST NATION IN RELATION TO THE PROJECT

The following key topics were identified from OTE hearing information provided by George Gordon First Nation in relation to the Project (GGFN 2015b):

- Potential for reduced wildlife numbers and access to hunting areas, which will result in greater economic hardship for George Gordon First Nation members.
- Potential spills or use of chemicals related to the Project in Whitewood, Saskatchewan.
- Current restrictions on access to traditional use areas due to private land ownership limit harvesting opportunities.
- Cumulative effects of development on wildlife, plants, and fish for current and future generations.

George Gordon First Nation did not identify TLRU sites within the PDA, TLRU local assessment area (LAA), or TLRU regional assessment area (RAA). As described in Volume 16, Part B, Section 5.3.2 for the purposes of the TLRU assessment: (1) the PDA is defined as the area of physical disturbance associated with the construction or operation of the Project; (2) the LAA is defined as the area that extends 1 km beyond the PDA; and (3) the RAA is defined as the area that extends 15 km beyond the PDA. Energy East has developed standard mitigation measures, outlined in Table 5 below, that should effectively address potential effects from the Project on this site. Energy East is committed to meeting with George Gordon First Nation to discuss these mitigation measures and determine if additional mitigation measures are required.

George Gordon First Nation noted one existing pipeline within Treaty 4 territory (GGFN 2015b). George Gordon First Nation expressed concern about protection for the environment, including construction practices that minimize waste (GGFN 2015b). George Gordon First Nation declared an interest to engage in a process with the proponent to identify risks and strategies for mitigation (GGFN 2015b). George Gordon First Nation members appreciate participating in the Project and noted that consultation with the Nation should occur early (see Consolidated Application Volume 10, Appendices 10-15A and 15B [George Gordon First Nation]).

GEORGE GORDON FIRST NATION TLRU INFORMATION AND MITIGATION TABLE

PROJECT DESCRIPTION[1] FOR SASKATCHEWAN AND MANITOBA SEGMENT (SASKATCHEWAN ONLY[2]): This segment includes a portion of the Cromer lateral (2.4 km in Saskatchewan; 55.4 km in Manitoba), 21 pump stations (12 in Saskatchewan; 9 in Manitoba), a tank terminal at Moosomin, Saskatchewan, permanent access roads to aboveground facilities, installation of mainline valves, watercourse crossings on the Cromer lateral, and conversion of approximately 1,078 km of natural gas pipeline to oil pipeline (612 km in Saskatchewan; 466 km in Manitoba). In Manitoba, the Assiniboine River crossing will be replaced, and there is one re-alignment around existing TransCanada facilities at Iles des Chenes mainline valve 41-4. Environmental protection measures for construction are included in the New Pipeline Environmental Protection Plan (EPP), Conversion Segments EPP, Pump Station EPP, Temporary Facilities EPP and Tank Terminal EPP (see Volume 21). There are three preliminary camp locations in Saskatchewan and none planned in Manitoba. The existing RoW was not included in the PDA that was assessed as part of the ESA.

During operation, maintenance will be conducted within the PDA for all Project components. Environmental protection measures for maintenance including pipeline integrity management will follow TransCanada's health, safety and environmental management framework.

PROJECT CONTEXT: This segment is in southern Saskatchewan; George Gordon First Nation has not identified locations farther than 50 km from the PDA.

MITIGATION MEASURES: Energy East will implement the following mitigation measures specific to TLRU:

- Energy East commits to ongoing communication with Aboriginal groups regarding Project activities (e.g., access during construction, mitigation measures, reclamation planning, post-construction monitoring and access management).
- All applicable stakeholders and Aboriginal groups affected by the Project will be notified of the intended Project schedule before the start of construction.
- Known TLRU sites and areas deemed appropriate for inclusion by Aboriginal groups will be identified on the environmental alignment sheets or environmental figures (see the EPPs). If TLRU-sensitive features not previously identified are discovered during construction, the TLU Sites Discovery Contingency Plan (see the EPPs) will be followed.
- Clearly mark all TLRU sites and areas identified in the resource-specific mitigation tables and the environmental alignment sheets or environmental figures within the immediate vicinity of the PDA before the start of clearing. Following clearing, marking will be undertaken to delineate the sensitive resources.
- An environmental and site safety orientation will be developed and implemented by the Contractor for all Project staff and visitors on actions to take if TLRU sensitive features are found.
- TLRU access will be maintained to current access roads within or adjacent to the PDA, or temporary pathways will be created to fishing, trapping, hunting, and plant harvesting areas; habitation sites, and cultural or spiritual sites; recreational areas and affected navigable waterbodies; and streams and rivers used for boating (see the EPPs).
- An access management plan will be developed prior to construction to manage and control temporary and permanent access during the life of the Project.
- A Post-Construction Monitoring Program (PCMP) will be implemented that confirms that specific reclamation performance expectations and conditions are met and if further actions are needed. The PCMP also addresses the requirements of any follow-up program under the Canadian Environmental Assessment Agency.

The approach to identifying additional relevant mitigation measures from the EPP and ESA in Table 5 is based on the following assumptions:

- TLRU and valued component (VC)-specific mitigation measures are included only if the TLRU sites and areas occur within the TLRU LAA or a VC LAA. The LAA is the area in which Project interactions may occur. Outside the LAA, it is predicted there will be no Project effects on the TLRU site or area or on any of the identified VCs.
- TLRU sites and areas identified in TLRU studies provided to Energy East for the Project (e.g., burial sites, sacred sites, archaeological sites, habitation sites, and trails and travelways) and during ongoing engagement as possibly resulting in interactions with the PDA will be reviewed to determine whether they meet criteria to be identified as heritage resource sites. If required, sites and areas will be evaluated through the appropriate provincial regulatory process for heritage resources. Sites and areas deemed to be heritage resources may potentially require mitigation (including avoidance) if they occur within the PDA.

TLRU ASSESSMENT:

The effects considered are as follows:

- temporary or permanent loss of hunting areas or opportunities
- temporary or permanent loss of fishing areas or opportunities

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[1] For the complete Project Description, see Volume 14, Section 2.
[2] George Gordon First Nation has provided information on the Saskatchewan region. It should be noted that the Saskatchewan region falls under the Saskatchewan and Manitoba segment of the Project.

- temporary or permanent loss of trapping areas or opportunities
- temporary or permanent loss of plant harvesting areas or opportunities
- temporary or permanent loss of trails or travelways, or their use (including navigation)
- temporary or permanent loss of habitation sites or their use
- temporary or permanent loss of cultural or spiritual practices or sites

Other categories (e.g., accidents and malfunctions, cumulative effects) that may affect TLRU are also included, based on information provided by George Gordon First Nation.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
Before Europeans arrived in Canada, GGFN used the entire landscape for hunting, travelling, fishing and roots for ceremonies. “There was no land that wasn’t traditional to us because we had the right to hunt, fish—fishing and gathering” (GGFN 2015b). GGFN continues to harvest. “We still hunt. You know, we still gather.” (GGFN 2015b). GGFN commented that First Nations peoples have been here for a very long time and established resilient, thriving societies. GGFN stated that First Nations were self-governing and depended on the buffalo and other animals to meet needs.		Traditional Land and Resource Use (Volume 16 Part B) Fish and Fish Habitat (Volume 15 Part B) Vegetation and Wetlands (Volume 15 Part B) Wildlife and Wildlife Habitat (Volume 15 Part B) Human Occupancy and Resource Use (Volume 16 Part B) Heritage Resources (Volume 16 Part B)	In the TLRU assessment, Project effects on hunting, fishing, plant harvesting, travel, cultural or spiritual practices and sites for traditional purposes are addressed through consideration of temporary or permanent loss of hunting areas or opportunities, temporary or permanent loss of fishing areas or opportunities, temporary or permanent loss of plant harvesting areas or opportunities, temporary or permanent loss of trails or travelways or their use (including navigation), and temporary or permanent loss of cultural and spiritual practices or sites. In the Consolidated ESA, Project effects on the biophysical and socio-economic environment were assessed under the following valued components: fish and fish habitat; vegetation and wetlands; wildlife and wildlife habitat; human occupancy and resource use; and heritage resources. With the application of recommended mitigation measures during construction and operation, residual Project effects on fish and fish habitat, heritage resource sites, and lands used for fishing, hunting, and trapping and changes in vegetation and wetlands, and wildlife and wildlife habitat are predicted to be not significant over the life of the Project.		Energy East acknowledges this historical activity by GGFN and the importance of the historical traditional use activities as they relate to contemporary use. Refer to the TLRU mitigation measures listed above this table to mitigate potential effects from the Project on TLRU. Refer to the Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP for a list of general mitigation measures that mitigate potential effects pertaining to construction and maintenance activities in Saskatchewan (see “Project Description for the Saskatchewan and Manitoba Segment”) on fish and fish habitat, access to waterbodies used for fishing, traditional use plants, wildlife and wildlife habitat, lands used for hunting and trapping, and heritage resources.

[3] The recommendations for mitigation in this column have been provided to Energy East by Aboriginal groups through the results of a TLRU Study or an OTE hearing. Energy East will discuss the recommendations here, as well as any additional measures, with each Aboriginal group.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
Temporary or Permanent Loss of Hunting Areas or Opportunities					
GGFN hunters share meat with other members of the community. GGFN remarked that there are increasing restrictions on where they can hunt, which were not part of the treaty and have been implemented without consulting with GGFN.	The extent of GGFN Traditional Territory was not provided by GGFN in information sources for the Project.	Traditional Land and Resource Use (Volume 16 Part B) Wildlife and Wildlife Habitat (Volume 15 Part B) Human Occupancy and Resource Use (Volume 16 Part B)	In the TLRU assessment, Project effects on hunting for traditional purposes are addressed through consideration of temporary or permanent loss of hunting areas or opportunities. In the wildlife and wildlife habitat assessment, habitat types (e.g., native grasslands) for selected wildlife species are used to assess change in habitat availability and change in habitat connectivity. Habitat suitability for selected wildlife species is determined using habitat associations (i.e., based on species preference of the habitat types). The change in mortality risk is considered for selected wildlife species. See also the human occupancy and resource use assessment, where the Project effects on lands used for hunting are addressed through consideration of temporary or permanent loss of use for fishing, hunting, or trapping. In cases where hunting activities are overlapped by both the PDA and the LAA, the Project will have an effect on lands used for hunting as well as wildlife habitat within the PDA, and may have an effect on these areas within the LAA during construction. During the life of the Project, the PDA of the facilities and access roads will not be available for hunting or for wildlife habitat. However, the areas used for hunting or as wildlife habitat outside the PDA but within the LAA of the facilities and access roads may be affected. Habitat adjacent to the facilities may be affected during operations due to sensory disturbance. The Project will not affect lands used for hunting and wildlife species in areas that are located outside of the LAA for the wildlife and wildlife habitat, and human occupancy and resource uses assessments. As determined in the wildlife and wildlife habitat assessment in the Consolidated ESA, the Project will not threaten the long-term viability of wildlife within the RAA. Similarly, for the human occupancy and resource use assessment, the Project will not change or disrupt current resource use (e.g., hunting) in the RAA.		There are general mitigation measures as outlined below that mitigate potential effects on wildlife and wildlife habitat and lands used for hunting that pertain to construction and maintenance activities in Saskatchewan (see “Project Description for the Saskatchewan and Manitoba Segment”). **TLRU** In addition to the TLRU mitigation measures listed above this table, to mitigate potential effects from the Project of temporary or permanent loss of hunting areas or opportunities, the following mitigation could be implemented by Energy East, subject to engagement (see Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP): • The EPPs include seasonal timing constraints for wildlife and fisheries resources. These timing constraints are to be followed unless otherwise approved by an appropriate regulatory authority. • Leave gaps in windrows (i.e., grubbing piles, topsoil, grade spoil, rollback) and strung pipe at obvious drainages and wildlife trails, and to allow for wildlife, livestock and vehicle/machinery passage across the right-of-way. Locations where gaps are appropriate will be determined in the field by the Environmental Inspector(s). Gaps should align. The Environmental Inspector(s) will identify and notify the Contractor of the appropriate locations for gaps. • All construction traffic will adhere to safety and road closure regulations. Speed limits will be established as per the traffic control management plan. Refer to the Traffic Control Management Plan (see EPP). • Clearly delineate areas that have access restrictions. Restrict access to essential construction personnel only. Direct all other personnel to the RoW via alternate access routes. • Reclaim disturbed areas following completion of construction; restore access to and use of affected areas not required for permanent facilities. • Project personnel are not permitted to hunt on the work site. **Construction** Prior to construction, mitigation measures include: • Undertake seasonally appropriate surveys to identify key habitat and habitat features (e.g., wetlands, burrows, nests) of species of management concern before undertaking construction. During construction, mitigation measures include (see the Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP): • The Contractor will monitor the open trench for trapped wildlife. Should any wildlife be identified, the Contractor will contact the Environmental Inspector(s) and Construction Manager. The Environmental Inspector(s) will contact the appropriate

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
					provincial regulatory agency or a Wildlife Resource Specialist, where required, for direction. • If listed or sensitive wildlife species are identified during construction of the Project, implement the Wildlife Species of Concern Discovery Contingency Plan (see EPP). • Do not harass or feed wildlife. Do not permit construction personnel to have dogs on the RoW or facility site. Firearms are not permitted in Project vehicles, on the RoW, pump station site, or at associated Project facilities. In addition, prohibit the recreational use of all-terrain vehicles (ATVs) or snowmobiles by construction personnel on the right-of-way and pump station sites. Report any incidents with nuisance wildlife or collisions with wildlife to provincial regulators and the local police detachment, if applicable. • Appropriate signs will be posted along access roads and in the vicinity of construction activities to warn the general public of construction activities. Where and when required (e.g., construction activities potentially interfering with road traffic); staff shall be assigned to direct traffic. **Operation** Following the completion of construction, TransCanada Operating Procedures (TOP) will be used during operation in conjunction with the EPPs where appropriate. For example, during operation mitigation measures include: • Follow TransCanada's health, safety and environment (HSE) management framework maintenance activities.
Temporary or Permanent Loss of Plant Harvesting Areas or Opportunities					
GGFN members have noted a decrease in roots for medicinal purposes and in the number of berries, including Saskatoon berries and chokecherries.	The extent of GGFN Traditional Territory was not provided by GGFN in information sources for the Project.	Traditional Land and Resource Use (Volume 16 Part B) Vegetation and Wetlands (Volume 15 Part B)	In the TLRU assessment, Project effects on plant harvesting for traditional purposes are addressed through consideration of temporary or permanent loss of plant harvesting areas or opportunities. In the vegetation and wetlands assessment, Project effects on traditional use plants are indirectly assessed through consideration of change in native vegetation communities and loss or disturbance of wetlands. The presence and abundance of native vegetation communities and wetlands in the PDA is determined through desktop analysis and field surveys. In cases where plant harvesting activities are overlapped by both the PDA and the LAA, the Project will have an effect on vegetation communities and plant species within the PDA, and may have an effect on these areas within the LAA, during construction. The PDA of the facilities and access roads will be reclaimed at the end of the Project; the pipeline PDA will be reclaimed following construction.		There are general mitigation measures as outlined below that mitigate potential effects on traditional use plants and traditional use plants that pertain to construction and maintenance activities in Saskatchewan (see "Project Description for the Saskatchewan and Manitoba Segment"). **TLRU** In addition to the TLRU mitigation measures listed above this table, to mitigate potential effects from the Project of temporary or permanent loss of plant harvesting areas or opportunities, the following mitigation could be implemented by Energy East, subject to engagement (see Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP): • Provide opportunities for harvesting plants or other resources before construction, where feasible. If TLRU sites not previously identified are discovered during construction, follow the TLU Sites Discovery Contingency Plan (see EPP). • Prohibit the use of herbicides within 30 m of an open body of water, unless the herbicide application is conducted by ground application equipment, or otherwise approved by the relevant regulatory agency, where applicable.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
			The Project will not affect vegetation communities or plant species located outside of the LAA for the vegetation and wetlands assessment. As determined in the vegetation and wetlands assessment in Consolidated ESA, the Project will not affect the long-term sustainability of vegetation communities in the RAA, or result in long-term wetland loss that cannot be mitigated.		• All construction traffic will adhere to safety and road closure regulations. Speed limits will be established as per the traffic control management plan. Refer to the Traffic Control Management Plan (see EPP). • Clearly delineate areas that have access restrictions. Restrict access to essential construction personnel only. Direct all other personnel to the RoW via alternate access routes. • Reclaim disturbed areas following completion of construction; restore access to and use of affected areas not required for permanent facilities. **Construction** During construction, mitigation measures include (see the Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP): • Prohibit clearing of extra temporary workspace within 10 m to 30 m of a watercourse to protect riparian areas, based on site-specific conditions and provincial requirements. This area shall be clearly marked prior to clearing operations. The RoW will be narrowed through the riparian area, if possible. • Establish and clearly identify a riparian buffer or minimal disturbance zone (MDZ) for all watercourses before the start of clearing activities. RoWs should be narrowed in these areas to the extent practical. Disturbance in the MDZ should be restricted to allow access crossing installation (if required), excavation of the trench, and installation of the pipeline. MDZ will range from 3 m to 10 m based on site specific conditions (e.g., potential for erosion). • Install cross ditches and berms on moderately steep and steep slopes on pasture, bush and forested lands in order to prevent runoff along the right-of-way and subsequent erosion. Install berms immediately downslope of all trench breakers (see EPP). • Natural recovery is the preferred method of reclamation for wetlands. Do not seed wetland areas. • Seed disturbed banks and riparian areas with an approved native seed mixture. The Environmental Inspector(s) will determine onsite whether other restoration methods need to be applied to stabilize banks (e.g., soil wraps, brush layers, and matting). • Implement permanent bank reclamation measures to re-establish riparian vegetation as a part of backfill operations (see Typical Drawings). • Where practical, leave stumps in place, particularly on streambanks, to provide surface stability. Dispose of stumps removed from the required work areas by burning or chipping. • The Contractor will use Certified No. 1 seed in its seed mixes, unless Certified No 1 is not available for select reclamation seed species (e.g., native species). Certificates of seed analysis from qualified independent seed laboratories are required for all seed mixes and will be approved by Energy East.

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Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
					• Reduce the removal of vegetation in wetlands to the extent possible. • Conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing. The method of removal of wetland vegetation is subject to approval by Energy East. • Salvage and store wetland organic layer separately from upland topsoil. Salvage topsoil as indicated on the Environmental Alignment Sheets and in accordance with the typical drawings (see EPP). • Reduce grading within wetland boundaries. Do not use extra temporary workspace within the boundaries of wetlands, unless required for site specific purposes. Extra temporary workspace within the boundary of a wetland must be approved by the Environmental Inspector(s). • Where the open trench has the potential to dewater a wetland, undertake trenching in a manner that prevents the flow of water along the trench. Use ditch plugs or similar water control structures in the trench at either end of wetland crossings where there is the potential of water migration along the trench as a result of changes to wetland soil permeability and immediately adjacent upland soil permeability. • Re-establish preconstruction contours within wetland boundary to ensure cross RoW drainage. • Install berms, cross ditches and/or silt fences between wetlands (non-peat) and disturbed areas when deemed necessary by the Environmental Inspector(s). • Direct grading away from wetlands. • Energy East will obtain regulatory approval prior to infilling wetlands. **Operation** Following the completion of construction, TransCanada Operating Procedures (TOP) will be used during operation in conjunction with the EPPs where appropriate. For example, during operation mitigation measures include: • Follow TransCanada's health, safety and environment (HSE) management framework maintenance activities. • Prohibit the use of herbicides within 30 m of an open body of water, unless the herbicide application is conducted by ground application equipment, or otherwise approved by the relevant regulatory agency, where applicable.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
Other Environmental					
GGFN expressed concern about the health of animals. “You can’t eat the fish. They’re full of mercury” (GGFN 2015b)		Traditional Land and Resource Use (Volume 16 Part B) Fish and Fish Habitat (Volume 15 Part B)	In the TLRU assessment, Project effects on fishing for traditional purposes are addressed through consideration of temporary or permanent loss of fishing areas or opportunities. In the fish and fish habitat assessment, fish species that can be fished for subsistence are considered under commercial, recreational, and Aboriginal (CRA) fisheries. Habitat potential for fish species that contribute to a CRA fishery in watercourses and waterbodies crossed by the Project is determined through existing information and field surveys. Restricted activity periods are applicable for all species considered for CRA fisheries and are considered in recommended mitigation measures. The potential effects from the Project on fish and fish habitat are change in fish habitat, change in fish movement, migration and fish passage, change in fish mortality and introduction of deleterious substances. As determined in the fish and fish habitat assessment in the Consolidated ESA, the Project effects on fish and fish habitat are predicted to be not significant.		There are general mitigation measures as outlined below that mitigate potential effects on fish and fish habitat, and access to waterbodies used for fishing that pertain to construction and maintenance activities in Saskatchewan (see “Project Description for the Saskatchewan and Manitoba Segment”). **TLRU** In addition to the TLRU mitigation measures listed above this table, to mitigate potential effects from the Project of temporary or permanent loss of fishing areas or opportunities, the following mitigation could be implemented by Energy East, subject to engagement (see Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP): • Prohibit the use of herbicides within 30 m of an open body of water, unless the herbicide application is conducted by ground application equipment, or otherwise approved by the relevant regulatory agency, where applicable. • The EPPs include seasonal timing constraints for wildlife and fisheries resources. These timing constraints are to be followed unless otherwise approved by an appropriate regulatory authority. • Adhere to regulations, standards and guidelines for watercourse crossings as outlined in the EPP. • All construction traffic will adhere to safety and road closure regulations. Speed limits will be established as per the traffic control management plan. Refer to the Traffic Control Management Plan (see EPP). • Clearly delineate areas that have access restrictions. Restrict access to essential construction personnel only. Direct all other personnel to the RoW via alternate access routes. • Reclaim disturbed areas following completion of construction; restore access to and use of affected areas not required for permanent facilities. • Create new, temporary portages to allow transport of watercraft around active construction areas. • Project personnel are not permitted to fish on the work site. **Construction** During construction, mitigation measures include (see Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP): • Energy East will obtain all applicable permits and/or authorizations prior to the commencement of the crossings. • Postpone watercourse crossing construction if excessive flows or flood conditions exist or are anticipated, and if construction methods cannot be modified to cope with the increased flow, follow the Flood and Excessive Flow Contingency Plan (see EPP).

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures

					• Post signs immediately following clearing (including name, number and KP) for watercourses. Signs will be posted 100 m from the watercourse or at the top of the valley slope, whichever is greater, to alert the Contractor of the upcoming watercourse.
					• The Contractor shall develop a detailed site specific watercourse crossing plan and submit the plan to Energy East prior to initiating watercourse crossing activities (for pipeline and road crossing).
					• Establish and clearly identify a riparian buffer or minimal disturbance zone (MDZ) for all watercourses before the start of clearing activities. RoWs should be narrowed in these areas to the extent practical. Disturbance in the MDZ should be restricted to allow access crossing installation (if required), excavation of the trench, and installation of the pipeline. MDZ will range from 3 m to 10 m based on site specific conditions (e.g., potential for erosion).
					• Prohibit clearing of extra temporary workspace within 10 m to 30 m of a watercourse to protect riparian areas, based on site-specific conditions and provincial requirements. This area shall be clearly marked prior to clearing operations. The right-of-way will be narrowed through the riparian area, if possible.
					• Limit clearing at watercourse crossings to the removal of trees and shrubs to the ditch line and work side areas required for vehicle crossings.
					• Implement permanent bank reclamation measures to re-establish riparian vegetation and fish habitat as a part of backfill operations (see Typical Drawings).
					• No construction activity will occur within the RAP or outside the instream work window of least risk for any watercourse crossing unless:
					  • it is dry or frozen to the bottom at the time of construction;
					  • if trenchless techniques are employed; or
					  • approval from the appropriate regulatory agency is obtained.
					• Seed disturbed banks and riparian areas with an approved native seed mixture. The Environmental Inspector(s) will determine onsite whether other restoration methods need to be applied to stabilize banks (e.g., soil wraps, brush layers, and matting).
					• For detailed description for mitigation during construction for fish and fish habitat refer to Section 8.4 (Watercourse Crossings) of the New Pipeline EPP. Other mitigation within Section 8.4 deals with establishment of riparian buffers, direction on grading near waterbodies, and establishment of sediment and erosion control measures, including the Soil and Erosion Control Contingency Plan (see EPP). It also includes mitigation measures for vehicle crossings in both frozen and unfrozen conditions, and mitigation measures for crossing methods (open cut, isolated, and trenchless crossings). Where required (i.e., for an isolated crossing), conduct fish salvage, in

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Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
					accordance with permit conditions, using appropriate methods and equipment. Release all captured fish to areas outside of the work area that provide suitable habitat. A Flood and Excess Flow Contingency Plan (see EPP) is included in the event of flooding or high flow events. **Operation** Following the completion of construction, TransCanada Operating Procedures (TOP) will be used during operation in conjunction with the EPPs where appropriate. For example, during operation mitigation measures include: • Follow TransCanada's health, safety and environment (HSE) management framework during maintenance activities. • Prohibit the use of herbicides within 30 m of an open body of water, unless the herbicide application is conducted by ground application equipment, or otherwise approved by the relevant regulatory agency, where applicable.
GGFN stated that traditional medicines are being affected by pesticides used by farmers. GGFN remarked that overspray carries for miles, killing roots used for medicinal purposes and a lot of traditional plants. GGFN owns lands within the town of Whitewood and are concerned about potential effects to these lands from chemicals use by the Project.	Whitewood is within the TLRU RAA[4].	TransCanada Operating Procedures for Invasive Vegetation Weed Control Management Integrated Vegetation Management Program Traditional Land and Resource Use (Volume 16 Part B) Vegetation and Wetlands (Volume 15 Part B)	In the TLRU assessment, Project effects on plant harvesting for traditional purposes are addressed through consideration of temporary or permanent loss of plant harvesting areas or opportunities. The effect of herbicides was not assessed for vegetation and wetlands. The use of herbicides for the Project will follow TransCanada's Operating Procedures and provincial permits (i.e., when used in the vicinity of waterbodies), and only be used on a site-specific basis. During construction, mitigation measures are used to prevent the introduction or spread of invasive species (e.g., cleaning stations). Herbicides might be used where required to control invasive species. Herbicides will not be used for RoW vegetation management to control woody vegetation on the pipeline RoW.	GGFN asked about Energy East's plans for safe use of chemicals; GGFN noted that if chemicals are not used safely they could poison the environment	Energy East acknowledges this request for information about safe work practices for dangerous goods; Energy East will discuss the recommendations here, as well as any additional measures, with GGFN. There are general mitigation measures as outlined below that mitigate potential effects on traditional use plants that pertain to construction and maintenance activities in Saskatchewan (see "Project Description for the Saskatchewan and Manitoba Segment"). **TLRU** In addition to the TLRU mitigation measures listed above this table, to mitigate potential effects from the Project of temporary or permanent loss of plant harvesting areas or opportunities, the following mitigation could be implemented by Energy East, subject to engagement (see Temporary Facilities EPP, Pump Station EPP, Tank Terminal EPP, New Pipeline EPP, and Conversion Segments EPP): • Provide opportunities for harvesting plants or other resources before construction, where feasible. If TLRU sites not previously identified are discovered during construction, follow the TLU Sites Discovery Contingency Plan (see EPP). • Prohibit the use of herbicides within 30 m of an open body of water, unless the herbicide application is conducted by ground application equipment, or otherwise approved by the relevant regulatory agency, where applicable. • All construction traffic will adhere to safety and road closure regulations. Speed limits will be established as per the traffic control management plan. Refer to the Traffic Control Management Plan (see EPP).

[4] For this table, sites and areas identified as being within the TLRU RAA assumed to be outside the TLRU LAA.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
					• Clearly delineate areas that have access restrictions. Restrict access to essential construction personnel only. Direct all other personnel to the RoW via alternate access routes. • Reclaim disturbed areas following completion of construction; restore access to and use of affected areas not required for permanent facilities. **Vegetation Management** Energy East will implement the weed management procedures outlined in TransCanada's Integrated Vegetation Management Program (IVMP) and TransCanada's Operating Procedure (TOP) for Invasive Vegetation Weed Control Management during the construction and operations of the Project. Energy East commits to restrict the general application of herbicides on a site-specific basis near discrete traditional land use sites, as agreed upon with the affected Aboriginal community. In order to commit to restricting the general application of herbicides near traditional land use sites, Energy East requires specific locations of traditional land use sites that are located on or adjacent to the Project footprint and that can be clearly delineated and mapped. These locations will be shown on the environmental alignment sheets. During construction and operation, mitigation measures pertaining to maintenance activities along the existing pipeline RoW include (see the New Pipeline EPP and Conversion Segments EPP): • Restrict the use of herbicides on a site-specific basis near identified traditional land use sites. • Weed management will follow procedures outlined in TransCanada's Integrated Vegetation Management Program and TransCanada's Operating Procedures for Invasive Vegetation Weed Control Management. • Prohibit the use of herbicides within 30 m of an open body of water, unless the herbicide application is conducted by ground application equipment, or otherwise approved by the relevant regulatory agency, where applicable. • Herbicides are applied by licensed applicators and in accordance with applicable provincial permits.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
Community Health and Wellbeing					
GGFN expressed concern about the loss of the language: "The Indians speak -- we -- I speak my own language, but we're starting to lose it on account of residential schools." (GGFN 2015b)		Traditional Land and Resource Use (Volume 16 Part B)	In the TLRU assessment, Project effects on cultural or spiritual practices and sites for traditional purposes are addressed through consideration of temporary or permanent loss of cultural or spiritual practices or sites.		There are general mitigation measures as outlined below that pertain to construction and maintenance activities in Saskatchewan (see "Project Description for the Saskatchewan and Manitoba Segment"). **TLRU** Refer to the TLRU mitigation measures listed above this table to mitigate potential effects from the Project on TLRU. During the life of the Project, Energy East will strive to be respectful of Aboriginal culture. Opportunities to add value include: • involving communities in carrying out land use studies, and • providing company support for local Aboriginal community organizations and initiatives.
Employment and Livelihood					
As the quality of education for GGFN youth increases, so will the demand for meaningful employment opportunities: "We're getting children that are going to be well educated and they're going to try and look for the best jobs they can." (GGFN 2015b)		Employment and Economy (Volume 16, Part B) Aboriginal Economic Opportunities (Consolidated Application Volume 10, Section 5)	Project activities might have an effect on employment and the economy in a number of ways. For example, the Project will generate: • employment opportunities at the national, provincial, and regional levels • business opportunities at the national, provincial, and regional levels by offering contracts and other business opportunities to local and Aboriginal businesses and communities near the Project	GGFN asks that meaningful employment opportunities be available to GGFN: "…we hope that you, the people that are in this type of business, would recognize us." (OTE Transcript 2015, p. 16)	Energy East acknowledges this request for employment opportunities; Energy East will discuss the recommendations here, as well as any additional measures, with GGFN. Energy East recognizes the importance of encouraging and enabling community participation in the Energy East Project. The following mitigation measures have been identified by Energy East to enhance the Project's positive effects (e.g. employment and business opportunities) for local and Aboriginal workers and businesses: • Continue to work in collaboration with local First Nation and Métis communities and organizations, to identify opportunities for capacity development. • Work with provincial authorities, contractors, trade unions, educational institutions, Aboriginal communities and potentially other developers to create a training program to help meet the Project's need for skilled labour. • Develop employment and procurement programs that actively promote local opportunity, including for Aboriginal workers and businesses, taking into consideration the competitiveness and relative capacity of local suppliers. Before starting work, communities in the immediate area, including Aboriginal communities, should be contacted to gain an understanding of the resources available. • Further encourage the participation of Aboriginal workers and businesses on the Project by following TransCanada's Aboriginal Contracting and Employment Program.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
Accidents and Malfunctions					
GGFN has lands within the town of Whitewood and asked what assurances can Energy East give that there will not be a spill.	Whitewood is within the TLRU RAA.	Accidents and Malfunctions (Volume 19)	The accidents and malfunctions assessment in the ESA analyzed the potential frequency of oil spills of different volumes and completed a risk assessment of oil spills on sites of interest which were selected based on environmental sensitivity. The sites of interest are representative of similar locations elsewhere along the pipeline route and include watercourse crossings, water well supplies, and private well clusters. Within Saskatchewan, Regina's municipal intake and private well clusters in the Regina area were included as sites of interest; however, the Whitewood urban area is not specifically addressed in the accidents and malfunctions assessment. Based on the analysis presented in the accidents and malfunctions assessment, the predicted frequency of incidents and the probability of a large spill occurring is low. Consequently, the risk of environmental effects is minimal. Compliance with regulations, application of TransCanada's Capital Planning Management System and Asset Management System and Emergency Response Plan (ERP), and adherence to safety procedures will result in the pipeline being operated in an environmentally responsible and safe way with a focus on spill prevention.		**Emergency Response Planning** TransCanada's operations and emergency response philosophy focuses on minimizing any impact from an emergency incident by stopping the flow of the pipeline and thereby minimizing the potential impact from an incident. In parallel, processes are started to assess the emergency situation and begin an immediate and full response. Energy East will develop an Emergency Response Plan (ERP). Federal regulations require pipeline operators to have ERPs prepared and in place to respond to emergency incidents that might occur well in advance of the application for leave to operate. The goals of Energy East's ERP are to: • establish guidelines and procedures to follow in emergencies that protect the health and safety of the public and responders • minimize hazards resulting from pipeline emergencies • establish procedures for training employees on emergency procedures • establish guidelines for continuing educational and liaison programs designed to inform community first responders and the public of the procedures to follow in recognizing, reporting and responding to an emergency condition Energy East will develop communication protocols as part of the ERP that will include notifying the public in the event of an emergency. In the event of a spill, Energy East will consult with regulatory agencies to determine the appropriate and preferred approach to clean-up and monitoring. Together with the regulatory agencies, a plan will be created to ensure that short and long term environmental effects are minimized. Energy East would be responsible for cleanup of any contaminated soils. Groundwater would not be released from the site of a spill until all applicable regulations and cleanup standards are met. As part of operation of the Project, the Integrity Management Program (IMP) threat management process completes risk analyses for pipeline segments identified as susceptible to a potential threat. Results of the risk analyses are used to determine and prioritize activities to manage and/or resolve the operating threats. Activities for managing threats identified by the IMP process for pipeline segments are captured annually in the pipeline maintenance plan (PMP). Valves are a key component of pipeline safety; they are designed not only to retain high pressure product, but to resist stresses that may be exerted in an operating pipeline. The following are considered with respect to their inspection and operation: • Valves are inspected and tested (partially or fully cycled) once per year on a scheduled basis by trained technicians. The primary goal of routine, annual valve inspection is to verify and ensure the valve(s) will cycle on demand.

Table 5 TLRU Information and Mitigation – George Gordon First Nation

Traditional Land and Resource Use Information	Location Relative to Project Development Area	Relevant Consolidated ESA Documents	Context from the Consolidated ESA	George Gordon First Nation Mitigation Recommendations[3]	Consolidated ESA/EPP Mitigation Measures
					• The sites where the valves are located are fenced and the valves/actuators are locked to prevent unauthorized use. Valve sites are inspected more frequently (at least every 3 months, usually once per month) and valves and associated facilities are inspected for any leaks. • All mainline and pump station isolation valves are telemetered to Oil Control, which has full remote control capability to cycle valves on demand. The valves are also operable by a technician at the valve site. • The actuators which provide the opening/closing functionality are electric powered and very reliable. In the rare event a valve/actuator fails to cycle, it is repaired or replaced on an immediate basis. All actuators are equipped with a manual hand wheel to allow for local manual operation in the absence of power.

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