ENVIRONMENTAL PROTECTION PRAIRIE & NORTHERN REGION Room 200, 4999-98 Ave. NW Edmonton, Alberta T6B 2X3

July 27, 2011

Heather Flynn Canadian Environmental Assessment Agency Suite 101, 167 Lombard Ave Winnipeg, Manitoba R3B 0T6

Dear Ms. Flynn,

RE: PROVIDENT ENERGY - PROPOSED NGL PIPELINE PROJECT - FOLLOW-UP

Further to our FCR response dated July 13, 2011, Environment Canada (EC) has completed its review of the Environmental Assessment (EA), (May 2011) for the above proposed project. EC is prepared to provide specialist advice or expert information or knowledge on the proposal as per subsection 12(3) of the CEAA with a focus on federal statutes, regulations, policy, and associated program concerns as defined by EC's mandate. Participating and providing comments at this time is not a constraint of fetter on EC in fulfilling our statutory responsibilities under CEAA, and under the Department's mandate as defined through specific statutes and regulations assigned to the Minister of the Environment. EC appreciates the opportunity to provide feedback on this matter. In general, 8 areas of redress were identified:

Our file #: 4194-10-5/3212

Your file #: 4828 / MP2011-031

- (1) Wetlands
- (2) Migratory Birds
- (3) Species at Risk
- (4) Invasive Species
- (5) Reclamation
- (6) Monitoring
- (7) Cumulative Effects
- (8) Environmental Emergencies

1. Wetlands

Section 6.2.7, Wetlands, page 6-12 of the EA states that "construction and maintenance activities within wetlands along the route will likely result in some minor disruption to the habitat function of wetlands" and that "short-term disturbances to wetlands are expected during the construction of the pipeline", but in section 7.2.7.2, Significance, page 7.7, that "no construction through wetlands is proposed".

EC requests clarification from the proponent: will the project result in impacts to wetlands? EC requests the proponent identify the function, type and area of wetlands that will be affected by this project.

EC reminds the proponent of The Federal Policy on Wetland Conservation, which promotes the wise use of wetlands and protection through adequate consideration of wetland concerns in environmental assessments of development projects. The objective of the Policy is to promote the conservation of Canada's wetlands to sustain their ecological and socio-economic functions, now and into the future. The Policy goals promote the maintenance of the functions and values derived from wetlands throughout Canada, recognition of wetland functions in resource planning and



economic decisions, enhancement and rehabilitation of wetlands in areas where continuing loss or degradation of wetlands or their functions have reached critical levels, and utilization of wetlands in a manner that enhances prospects for their sustained and productive use by future generations. Wetlands do not operate in isolation and adjacent upland habitats play an integral part in the maintenance of the functions of wetlands.

EC recommends that the proponent take all reasonable measures to avoid wetlands, where feasible, irrespective of whether they are wet or dry, and that buffers or setbacks originate from the one in one hundred year high water mark. Minimum one hundred metre setbacks should be utilized from the edge of the proposed development or associated feature (e.g., access route).

For those wetlands where avoidance is not possible, EC recommends that the proponent be consistent with the objectives of the *Federal Policy on Wetland Conservation*. EC recommends the proponent clearly demonstrate how it will comply with the provisions of the *Federal Policy on Wetland Conservation*.

EC also recommends that the reclamation of wetland areas restore the function, type and area of wetlands lost directly as a result of this project.

Furthermore, EC recommends monitoring of affected wetland areas within the project area to detect any impacts from weeds, and any changes to wetland area and wetland function that may result from this project.

2. Migratory Birds

EC's mandate includes the protection of migratory birds and their habitat. Regulations pursuant to the *Migratory Birds Convention Act* (MBCA) provide for the conservation of migratory birds and the protection of their nests and eggs. Section 5 of the regulations prohibits the hunting of a migratory bird except under authority of a permit, where "hunt" means chase, pursue, worry, follow after or on the trail of, lie in wait for, or attempt in any manner to capture, kill, injure or harass a migratory bird, whether or not the migratory bird is captured, killed or injured. Section 6 of the Regulations prohibits the disturbance, destruction, or taking of a nest, egg or nest shelter of a migratory bird. Possession of a migratory bird, nest or egg without lawful excuse is also prohibited. Section 5.1 of the *Migratory Birds Convention Act* prohibits the deposition of substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

This project occurs within locally important burrowing owl breeding habitat and nationally important duck breeding habitat in the Pipestone Plain habitat subregion (p. 5-11; see Poston et al. 1990), as well as potential habitat for several other migratory bird species at risk.

EC provides timing restrictions as general guidelines for industry to protect the great majority of migratory birds while realizing the practicalities of development activities on the landscape. However the onus remains with the proponent to comply with the legislation.

To minimize disturbance to breeding migratory birds in the Prairie and southern Parkland ecozones of Saskatchewan and Manitoba, in areas where migratory birds may be nesting, Environment Canada recommends:

(1) Habitat destruction activities (e.g. construction, mowing, vegetation clearing of any sort, trenching, reclamation activities, etc.) avoid at minimum the period between April 15 and July 31.

- (2) If an individual has a prior knowledge of an active nest, at any time during the year, it must be protected with a suitable species-appropriate buffer until the young have fledged.
- (3) Wetlands attractive to breeding migratory birds (e.g. those containing water) should not be cleared/destroyed at minimum between April 1 and August 31. Canada geese and Mallards may nest early and broods of waterfowl and waterbird species are dependent upon wetlands throughout August and beyond.
- (4) Raptors and upland game birds are Provincially-mandated species and are not protected under the MBCA, therefore proponents are first advised to consult Provincial wildlife authorities for appropriate buffers before consulting the Canadian Wildlife Service.
- (5) Federally listed Species at Risk and COSEWIC listed species may have speciesspecific timing restrictions which additionally need to be observed.

3. Species at Risk

The federal *Species at Risk Act* (SARA) is directed towards preventing wildlife species from becoming extinct or lost from the wild, helping in the recovery of species that are at risk as a result of human activities, and promoting stewardship. The Act prohibits the killing, harming or harassing of listed species; the damage and destruction of their residences; and the destruction of critical habitat. The prohibitions apply to all Threatened, Endangered and Extirpated species listed on Schedule 1 of SARA on federal lands. Also, on lands that are not federal lands, prohibitions apply to all Migratory Birds (under the *Migratory Birds Convention Act*) and aquatic species (under the *Fisheries Act*).

Under sections 5.1.8, Vegetation and section 5.1.9, Wildlife and Wildlife Habitat, pages 5-8 to 5-12 of the EA, EC notes that no field surveys for species at risk have been carried out on the proposed pipeline route and that surveys of wildlife, wildlife habitat, and rare plants are planned for areas of non-cultivated / native vegetation in 2011. EC recommends that, prior to project commencement, appropriately-timed, targeted surveys are carried out for migratory birds and each COSEWIC and SARA-listed species that may occur in the project area, in all potential habitats. Field surveys for migratory birds, COSEWIC, and SARA-listed species should occur during breeding seasons and/or in a manner that will allow for the best detection of target species. These surveys will allow the proponent to assess if and where these species are present in the area, and would enable necessary planning for avoidance or mitigation project activities. EC also recommends that the surveys include an assessment of wetlands impacted by the project or in close proximity to the project, to determine if these wetlands provide breeding or overwintering habitat for species at risk. EC requests the opportunity to review the "Wildlife and Wildlife Habitat for Species of Concern Report" and the "Rare Vascular Plant and Plant Community Survey Report" mentioned in Appendix 6B that will be produced following the 2011 surveys, and provide feedback on specific mitigation where any species at risk are found.

Based on information from the Manitoba Conservation Data Centre and from previous surveys in the general project area, the proponent states in section 5.1.9.1, *Wildlife Species and Habitat of Concern*, page 5-10, that loggerhead shrike, burrowing owl and ferruginous hawk are known to breed in the project area, and bobolink and northern leopard frog have been previously recorded nearby or have the potential to use habitat. Additionally, the project description identifies long-billed curlew, least bittern, peregrine falcon, piping plover, Sprague's pipit, yellow rail, whip-poor-will, chimney swift, whooping crane, red-headed woodpecker, northern prairie skink, snapping turtle, great plains toad, monarch, Dakota skipper, hairy prairie clover, buffalo grass, western spiderwort,

small white lady slipper, smooth arid goosefoot and rough agalinis as having potential to occur in the project area. **EC notes that other species at risk may also be present in the project area.**

In regards to species listed as Schedule 1 under the *Species at Risk Act* (SARA), EC reminds the proponent of their obligations under section 79(1) and 79(2) of the SARA.

"Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat."

"The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and actions plans."

EC recommends that an Environmental Monitor, knowledgeable in the identification of all species at risk that may occur in the project area, be present on site during project construction activities. In the event that species at risk are encountered during the project, EC refers the proponent to the *Petroleum Industry Activity Guidelines for Wildlife Species at Risk in the Prairie and Northern Region* (attached) and the *Activity Setback Distance Guidelines for Prairie Plant Species at Risk* (attached) for a list of species appropriate setbacks and timing restrictions. EC reminds the proponent that setbacks for ferruginous hawk nests, great plains toad and northern leopard frog breeding ponds and wintering sites, and burrowing owl nests and roosts are in effect year round. Furthermore, setbacks for burrowing owls apply to nests and roosts for 2 full years following the last known month of occupation.

With respect to Northern Leopard Frog breeding pond and wintering sites, EC also recommends that this project and its ancillary features specifically avoid wetlands where northern leopard frogs are present, and that project areas nearby be frog proofed and monitored and construction and traffic restricted. Where wetlands that do not provide wintering or breeding habitat cannot be avoided, frogs should be relocated to suitable wetlands nearby using sterile handling techniques under permit from provincial wildlife authorities.

With respect to Sprague's pipits, because nests are difficult to find, EC recommends that birds singing above territories, or behaviour indicative of nesting, should be interpreted as evidence of nests.

In addition to the setbacks described in the *Petroleum Industry Activity Guidelines for Wildlife Species at Risk in the Prairie and Northern Region* document, EC recommends the following minimum setback distances from nests (unless otherwise indicated) for high intensity activities:

Bobolink May 1 to August 31 200 m

Canada Warbler May 1 to July 31 300 m

Chimney swift April 1 to August 31 100 m

Common Nighthawk May 1 to August 31 200 m

Dakota Skipper Year round 100 m setback from suitable habitat

and occupied host plants

Monarch butterfly June 1 to Sept 30 30 m from occupied host plants

Olive-sided Flycatcher May 1 to August 31 300 m

Rusty Blackbird May 1 to July 31 300 m

Snapping Turtle Year round 400 m from potential nesting and

wintering sites.

Whip-poor-will May 1 to August 31 100 m

Under Section 1.3, Construction and Reclamation Plan Details, page 6A-5 of the EA, EC notes the proponent's plans to "avoid construction within the April 1 – July 31 peak nesting period along segments of the route that traverse lands associated for bird use (i.e. non cultivated/native vegetation areas)" where possible. EC recommends that all habitat destruction activities (including any vegetation clearing, construction, flooding, infilling of ponds, dewatering, reclamation and any mowing) avoid the period from April 15- August 31, to reduce the impacts on species at risk and migratory birds.

EC notes under section 10, *Plant Species of Concern Discovery Contingency Plan*, pages 6B-10 to 6B-11, that the proponent plans to implement contingency measures if any rare vascular plant species and/or communities are discovered during the 2011 surveys. **EC recommends a 300m no construction or disturbance buffer for all detectable individuals of SARA and COSEWIC – listed plant species.** The Recovery Team for Plant Species at Risk for the Prairies does not currently support the technique of transplantation or seedbank salvage with reseeding for plant species at risk. **As such, EC does not recommend transplantation or seedbank salvage or reseeding.**

4. Invasive Species

Invasive species spread readily along disturbance corridors and once established are virtually impossible to eradicate. Development of the project may provide additional opportunities for invasive species to establish, through dispersal of seeds on equipment, or in reclamation materials brought to the site.

As noted in Appendix 6A, *Detail 6A-16 Rare Plant Seed Collection*, page 6A-21 and *Detail 6A-21 Weed Management*, page 6A-23, EC acknowledges the proponent's plans to carry out a weed survey to address any weed issues along the pipeline route prior to construction. EC also acknowledges the proponent's commitment to several weed management measures during restoration. In addition to this, EC recommends that all equipment (for construction, clearing, restoration, etc.) is washed prior to working in the project area. EC recommends that all areas containing noxious weeds be clearly marked, so that equipment operators can easily recognize when passing through weed infested areas, and so that the spread of species from these areas can be monitored. EC also recommends that equipment and vehicles are thoroughly cleaned after passing through these areas in order to avoid transporting seed to other areas.

EC also notes that while milkweed is one of the species listed as noxious in Manitoba, it provides habitat and food for the SARA-listed Monarch butterfly.

5. Reclamation

Section 6.2.8, *Vegetation*, page 6-15, mentions the proponent's plans to seed disturbed areas of non-cultivated/native vegetation with "the appropriate native or agronomic seed mix unless

otherwise requested by the landowner". Section 1.3, *Construction and Reclamation Plan Details*, page 6A-4, also mentions the proponent's plans to salvage shrubs, collect seed and obtain seed locally where feasible, for revegetation purposes. **EC recommends that reclamation should** mimic native vegetation communities in the surrounding area, and that the species used in reclamation are locally sourced, certified and inspected to be free of invasive and noxious weed materials.

6. Monitoring

EC notes that under Section 8.5, *Post-Construction Monitoring*, page 8-5, that the proponent plans to commission two post-construction monitoring programs during the first and second complete growing seasons following construction and have the appropriate specialists to address reclamation and wildlife issue that arise. EC is interested in reviewing monitoring reports, with particular interest in the effects on migratory birds and species at risk, the progress of reclamation with native species in the project area, and the success in preventing the incursion of invasive species.

7. Cumulative Effects

EC notes that a cumulative effects assessment was carried out by the proponent. Once field surveys have been completed, EC recommends that the proponent expand their Cumulative Effects Assessment to specifically discuss 1) the cumulative environmental effects on species listed on Schedule 1 of SARA and those recognized as "at risk" by COSEWIC, the residences of their individuals and their critical habitat and measures to reduce these effects; 2) the cumulative effects on wetlands and wetland functions; and 3) the cumulative effects on migratory birds, their nests and nest shelters, and measures to reduce these effects.

8. Environmental Emergencies

EC notes that Section 8 of Appendix 6B, *Spill Contingency Plan*, pages 6B-5 to 6B-7, covers many scenarios and provides some information about the proposed response to emergencies. **EC** recommends the proponent ensure that sufficient containment/absorbent materials are available on site during construction to contain any spills or releases. During operations phase, will there be caches of spill cleanup and containment equipment along the pipeline to be used until the arrival of cleanup crews? Do they plan to conduct their own cleanup or will they contract a third party to perform the cleanup?

EC looks forward to continued dialogue and co-operation with respect to this Project. EC may also have additional questions and recommendations upon receipt of the above requested information. If you have any questions, please contact me at (780) 951-8946.

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