



PGL File #: 0130-12.02
DATE: August 24, 2010
TO: Fairwinds Planning Team
FROM: Matt Hammond, R.P.Bio.
Re: Responses to Environmental Concerns

This memo provides responses to recent public comments regarding environmental issues in the Lakes District. PGL was asked to conduct a third party review of the biological work completed by Cascadia Biological Services, and to conduct an Environmental Impact Assessment (EIA) for the project to determine whether there are potential significant adverse effects from the project that can not be avoided or mitigated. The EIA provides a series of mitigation and management measures that can be agreed at appropriate (later) stages of the approval process and implemented as required during the development process. With these measures incorporated, we do not expect this project to result in significant environmental effects.

PGL has conducted and reviewed many EIAs for land development projects and a variety of other industries. We have experienced EIA specialists and biologists that are skilled in impact assessment and mitigation. We have been chosen to conduct similar peer reviews of other projects, including large projects such as the proposed Interior to Lower Mainland transmission line and the Enbridge Northern Gateway Pipeline.

RESPONSES TO LETTER FROM ARROWSMITH PARKS AND LAND-USE COUNCIL TO REGIONAL DISTRICT OF NANAIMO (RDN) JUNE 25, 2010

A) Deficiencies in Environmental Studies – Biological Inventory

Comment #1: *“Incorrect identification of ecological boundaries for Sensitive Ecosystems [...]”*

Fairwinds and a Registered Professional Biologist (R.P.Bio.) worked with the Garry Oak Ecosystem Recovery Team (GOERT) to establish locations and boundaries of Garry oak meadow ecosystems (14.1ha). The Lakes District Neighbourhood Plan (the Plan) proposes to protect 100% of these meadows through dedication to the RDN as public parkland. Due to their rareness and importance for protecting species at risk, the Garry oak meadows were given highest priority for protection. The biophysical studies also identified other Garry oak forest ecosystems located in several fragmented patches across the Plan area. Together, the Garry oak forests and Garry oak meadows comprise the Garry oak ecosystems (or “Environmentally Sensitive Areas”, as identified in the biophysical reports and the EIA). The Plan area contains approximately 35.6ha of Garry oak ecosystems, which is approximately 10% of the shallow soil Garry oak ecosystems estimated to remain in the Nanaimo/Nanoose area (298ha)¹. The Plan protects 90% of the 35.6ha of Garry oak ecosystems (including 100% of the Garry oak meadows), meaning that the Plan limits the loss to 1% of the existing Garry oak ecosystems in the Nanaimo/Nanoose area.

PGL conducted a third party review of Cascadia’s biological inventory work. Cascadia used provincially recognized standards and appropriate methods to identify the boundaries of ecosystems and paid special attention to the sensitive areas (i.e., wetlands, riparian areas, Garry oak ecosystems). Field work methods followed the guidance of the provincial Resources Information Standards Committee. Cascadia’s R.P.Bio.

¹ Lea, T. 2006. *Historical Garry Oak Ecosystems of Vancouver Island, British Columbia, pre-European Contact to the Present*. *Davidsonia* 17(2):34–50

conducted aerial photo interpretation and a field survey of the Garry oak ecosystems and other habitat types. The biologist identified the meadows' boundaries in the field using a GPS to map the areas. In 2008, the mapped Garry oak meadows areas were provided to the GOERT and the Ministry of Environment for comment. The resulting Garry oak meadow polygons were established and became integral components of the Plan's parks areas so that none of these areas would be impacted by the design. We are confident that the boundaries are materially accurate.

Comments #2: *"Insufficient protective buffers around sensitive ecosystems; including inappropriate use of the Riparian Areas Regulation for the protection of wetlands"*

PGL conducted an Environmental Impact Assessment (EIA) that included examination of the potential significant (i.e., meaningful) effects on sensitive areas. We concluded that the average buffers (setbacks) in the proposed plan with the application of mitigation and future management measures (described in the EIA) will be adequate to protect these areas from significant impact.

The Plan has given special attention to ensuring the protection of wetlands and the provision of corridors for wetland wildlife to access upland resources. The Plan has implemented riparian buffers around all watercourses and wetlands to protect upland terrestrial habitats. The average buffers around Enos Lake, the wetlands, and creeks exceed the required setbacks determined by Cascadia's Qualified Environmental Professional under the Riparian Areas Regulation (RAR):

Waterbody	Average required RAR setback*	Proposed average setback in the Plan
Enos Lake	17.6m	44.3m
Enos Creek wetland (lake outlet)	17.9m	21.2m
Enos Lake wetland (lake inlet)	17.4m	35.6m
Wetlands west of Enos Lake: North - S3**	17.3m	24.6m
South - S6.2**	19.1m	30.6m

* RAR setbacks vary around the circumference of a waterbody based on ecological measurements, so averages are calculated in order to compare minimum RAR requirements and the proposed setbacks.

** As named in the The Lakes District Biophysical report (Waterbodies Map)

As these calculations demonstrate, the proposed riparian buffers far exceed the minimum RAR standards to protect the aquatic habitats for fish and wildlife.

In addition, project planning has followed all practicable recommendations in the Ministry of Environment's *Best Management Practices for Amphibian and Reptiles in Urban and Rural Environments in British Columbia*. The assessment in the EIA concludes that the protection measures will maintain populations of wetland wildlife such as beavers and red-legged frogs, which will both have continued access to upland forest habitats.

Comments #3: *"Incomplete inventory of species present"*

From the PGL review, we consider the level of diligence by the biologists on the project to have been sufficient to document the species to occur (or likely to occur) on the site. The work used standard international EIA methods to focus the effort on specific 'focus species' (i.e. rare or of other social interest), and a habitat-based assessment where practical. We believe that sufficient information was collected for the site to appropriately avoid or mitigate significant impacts on sensitive populations in the area.

Comment #4: *“No systematic inventory of plants and animals in Sensitive Ecosystems”*

Following standard international EIA procedure, Cascadia focused their inventory effort on areas that were vulnerable to impact from the proposed Plan. As such, areas already designated for protection didn't require an exhaustive inventory. More effort was placed on fully understanding the values in the areas vulnerable to impact so as to best inform the selection of possible impact mitigation measures. PGL supports this strategy and believes the proposed design is improved as a result.

B) Deficiencies in Environmental Studies – Environmental Impact Assessment

Comment #5: *“Impact assessments were based on incomplete faulty biological inventory data. Therefore the report's claim of “minimal impact” cannot be supported by the baseline data.”*

PGL conducted a review of the biological data to identify any possible gaps that might affect the completion of a thorough and comprehensive EIA. We consider the data to be sufficiently comprehensive to guide our recommendations of required mitigation measures, identify required specific management plans, and conclude on the potential for significant impacts. In our opinion, the biological studies made efficient use of data to provide the best advice to the project design, and ultimately provide confidence in the decisions made in an EIA. Based on our many years of professional experience in environmental assessment, we are confident that the data are sufficient to support the decisions made in the EIA.

Comment #6: *“Impact assessments did not consider the forest fragmentation issue”* and **Comment #10:** *“failure to consider the impacts of forest fragmentation”*

While any alteration of a landscape will change the shape and interconnectedness (i.e., fragmentation) of existing habitats, significant effects of this habitat change on regional populations of wildlife can be mitigated through the use of established practices for responsible land development planning. It is important to note that each species is affected very differently by these landscape changes due to different habitat requirements (some populations are affected positively, and some negatively – all to varying degrees). There are three general potential effects of habitat fragmentation that may influence wildlife populations: (1) pure habitat loss; (2) loss of habitat connectivity; and (3) change in habitat patch sizes.

With the goal of preserving biodiversity, a site-specific approach to mitigating overall effects on wildlife populations needs to integrate 'best practices' in development planning to balance the varying effects on different populations:

- (a) Keep habitat loss to a minimum** – The Plan proposes to protect almost half of the Lakes District as natural area. This is a significant achievement of the proposed Plan.
- (b) Plan around wildlife corridors** – The Plan provides wildlife corridors consisting of wide (30m or more in most cases) bands of protected natural areas that create a matrix of wildlife passages and strategically connects different habitat types within, and adjacent to the property. The Plan also proposes the use of wildlife underpasses where roads intersect a wildlife corridor to maintain wildlife habitat connectivity. The use of wildlife underpasses is a common and successful practice of establishing wildlife corridors and is successfully used throughout North America.
- (c) Vary the size of habitat patches** – The Plan includes different sizes of protected patches including large areas of different habitat types on the Lookout (to the edge of Enos Lake) and on the Notch.

Comment #7: *“There was no consideration of the social values attached to the Sensitive Ecosystems”*

In scoping and conducting the EIA, we recognized that the social values of the various ecosystems on the site are highly linked to their level of rareness and sensitivity from an ecological perspective. These were the same areas focused on in the biological work and the EIA. As a result, the avoidance or mitigation of impacts to sensitive areas in general will also minimize the effect on the social value attributed to these same sites.

Comment #8: *“There was no public input to the calculation of potential impacts”*

In conducting the EIA, we had the enormous benefit of reviewing extensive documentation of comments and concerns from the many open houses, public meetings, special committee meetings, and letters provided by various members of the public over 2+ years. The public consultation conducted for this project has equalled or exceeded that provided on many much larger projects undergoing provincial and federal level environmental assessments. The public input provided from these resources was very helpful in providing a professional EIA specialist with the context to determine the level of potential impact.

Comment #9: *“the precautionary principle should have been applied”*

In preparing the recommended management measures for this Plan, a precautionary approach was taken in all areas where there might be uncertainty (regardless of the amount of effort in data collection). Protection of the Garry oak meadows, Enos Lake, and plant species at risk (SAR) were specific areas where additional diligence and caution were applied to ensure that significant impacts are avoided or mitigated.

The EIA has produced a comprehensive Environmental Management Plan that addresses potential impacts using a precautionary approach. Specifically, the Environmental Management Plan includes recommendations for:

- Garry Oak Meadows Management Plan, including invasive species management;
- Construction Environmental Management Plan, including an arborist’s tree retention strategy in areas adjacent to the Garry oak meadows;
- Careful trail design and implementation of trail management practices near the meadows;
- Adherence to guidelines for landscaping and maintenance;
- Environmental Homeowner’s Manual, including the *Garry Oak Gardener’s Handbook*; and
- Enos Lake Protection and Monitoring Program, including a continued water quality sampling program and adaptive management framework.

To ensure ongoing environmental best practices, the EIA recommends that Fairwinds adopt the commitments in Table H of the EIA report (and attached to this memo).

Comment #10: *“lacking is any consideration of the implications of losing this significant remaining intact habitat on the overall conservation of the endangered Nanaimo Lowlands Ecoregion and Coastal Douglas Fir forest zone.”*

The Nanaimo Lowlands extends 280km along the east coast of Vancouver Island from Sayward on Johnstone Strait to Jordan River west of Victoria. The Coastal Douglas fir zone covers a similar area along eastern Vancouver Island from Campbell River area to the island’s southern tip. The Fairwinds property is a small portion of this land mass. In general, the conservation values of the Coastal Douglas Fir zone are well-represented by the remaining old-growth Douglas fir forests and the biodiversity of the dry ecosystems (Garry oak ecosystems and rocky outcrops).

No old-growth forest exists on the Fairwinds site, though significant portions of second-growth fir forest will be protected on this site in perpetuity to allow natural succession to proceed. The Plan protects the Garry oak meadows in their entirety. The EIA determined that the sensitive ecosystems on this property would be sufficiently protected in the proposed Plan to protect almost 50% of the land in its natural state. As a result, the effect of the Plan on the entire Nanaimo Lowlands ecoregion will be minimal. In addition, the proposed Plan provides a significant public benefit, in that it will result in the public protection of significant portions of this zone that are currently located on private developable land.

C) Appendix – Sensitive Bird Species

Comment #11: “if the proposed development were to go forward, the Ruffed Grouse, Sooty Grouse and Western Screech-owl would face extirpation from the Nanoose Peninsula.”

Each of these species of concern has been appropriately addressed in the environmental work for the Neighbourhood Plan. These species – if present in The Lakes District – can co-exist in the Nanoose Peninsula with the proposed development for the reasons explained below.

Ruffed and Sooty Grouse

With the habitat proposed for protection in the Neighbourhood Plan and the availability of suitable habitat for grouse in the provincial lands west and north of the Plan area, and the federal lands to the south, there is sufficient habitat to support Ruffed and Sooty Grouse populations in the Nanoose Peninsula.

Ruffed Grouse is a Yellow-listed species in BC (secure and not at risk of extinction). This species nests in forests or woodlands and prefers young (second growth) forest with abundant ground cover. As expected, Ruffed Grouse were observed in The Lakes District during wildlife surveys. The Neighbourhood Plan protects large patches of second growth fir forest on the Notch and the Lookout hills to provide habitat for woodland species such as the Ruffed Grouse. With the continued availability of habitat provided by the Plan, Ruffed Grouse will not be extirpated from Nanoose Peninsula by the proposed development in The Lakes District.

Sooty Grouse is a Blue-listed species in BC (special concern). The Nanoose Naturalist bird list has records of three Sooty Grouse observations in the Nanoose area: (1) along Powder Point Road in May 2006; (2) along Fairwinds Drive in May 2006; and (3) along the Forestry Service Road in Nanoose Bay between NW Bay Rd and Hwy 19 in October 2007.² During wildlife surveys for the proposed Neighbourhood Plan, no Sooty Grouse were observed.

Sooty Grouse may inhabit areas in the Nanoose Peninsula outside of The Lakes District, as evidenced by the locations of the observed individuals. Sooty Grouse have high breeding site fidelity. Territorial males return to the same breeding site and most adult females return to the same general areas each year. Like the Ruffed Grouse, this species lives in forests with well-developed understory vegetation as in young second-growth or old-growth with canopy openings. On Vancouver Island, their home range is approximately 2.1ha (0.4-5.2ha, $n = 34$)³. With the development of the Neighbourhood Plan, there will be abundant contiguous forested land remaining on Nanoose Peninsula to support these home ranges. Grouse will continue to inhabit the forests of Nanoose and may use the connected forests of The Lakes District to fulfill their habitat requirements.

Western Screech-owl

The coastal subspecies of Western Screech-owl occurs along the length of the B.C. coast from south-coastal Alaska to central Mexico. The only documented observation of a Western Screech-owl in the Nanoose area was outside the breeding period in December of 2005 (exact location unknown)⁴. Nocturnal call-playback surveys were conducted for Western Screech-owls in The Lakes District. No Western Screech-owls were detected, but two Barred Owls and two Great Horned Owls were observed. The presence of these two owl species, which both predate on the smaller Western Screech-owl, is strong evidence that a local, sustainable Screech-owl population is unlikely to occur.

It is widely believed that the recent expansion in range of the Barred Owl, across western North America, is leading to the competitive exclusion of the Western Screech-owl from parts of their range. In areas where pressures from other owl species have not completely excluded them, the Western Screech-owl may exist as long

² Bird List for the Nanoose Area – Nanoose Naturalists: http://members.shaw.ca/halaue/Nanoose_Birdlist/

³ McNicholl, M. K. 1978. Behaviour and social organization in a population of Blue Grouse on Vancouver Island. Ph.D.diss., Univ. Alberta, Edmonton.

⁴ Bird List for the Nanoose Area – Nanoose Naturalists: http://members.shaw.ca/halaue/Nanoose_Birdlist/

as there are suitable cavities for nesting and roosting, and sufficient prey. To address this, the Neighbourhood Plan will protect wildlife trees within the proposed parkland, which are currently of highest density in the proposed riparian protection areas. These areas will be further enhanced with nest boxes. Western Screech-owls can co-exist with human landscapes if these critical elements are available, and if nest boxes are provided they will readily use them⁵.

RESPONSES TO ADDITIONAL COMMENTS:

D) Handout entitled “Biologist’s Concerns About Fairwinds’ Lakes District Proposals” (provided at Public Information Meeting)

Comment #12: *Biologist #1 – concerns regarding the level and rigor of biological data: See Comments #1, #3 and #4 above*

Regarding concerns over degradation through “trampling”, the EIA recommends that trail management procedures be established with the RDN to control pedestrian traffic in and around sensitive habitats.

Comment #13: *Biologist #2 – concerns regarding the protection of plant SAR*

The Neighbourhood Plan’s strategy to protect populations of plant SAR used a common risk-based approach for large properties, and included:

- Scoping exercises to identify the species that could occur in the habitats identified on the site;
- Identifying the habitat areas where the likelihood of occurrence of plant SAR is highest and labelling these areas as “environmentally sensitive areas”;
- Protecting these sensitive areas in the Plan;
- Conducting biological surveys (by an R.P.Bio.) focused on areas contemplated for development to determine the risk of impact; and
- Conducting an EIA using biological baseline data of the site’s habitat to evaluate the overall risk of impact to plant SAR and further manage the risk with the identification of construction mitigation measures.

The EIA reviews the plant SAR possibly found on the site and describes that these species are typically found in Garry oak ecosystems, rocky bluffs, or streams and wetlands. Over 91% of these habitats types are preserved in the Plan so the risk of significant impact on populations of plant SAR is minimal. As part of a precautionary approach to preserving plant SAR, the EIA recommends that plant SAR surveys be conducted prior to development in specified areas adjacent to the Garry oak meadows. Any sensitive plants encountered can be salvaged and replanted in protected areas. These measures will further reduce the risk of impact to plant SAR.

E) Other verbal comments made at the Public Information Meeting

Comment #14: *impact potential for collisions between vehicles, deer, and beavers*

Risk of impact to human safety and wildlife populations will be minimized by:

- Speed limits and traffic control (see Neighbourhood Plan Street Standards);
- Road design providing visible corners; and
- Road underpasses for beavers and other wildlife.

⁵ Demarchi, M.W. and M.D. Bentley. 2005. Best management practices for raptor conservation during urban and rural land development in British Columbia. Prepared for B.C. Ministry of Environment.

The use of wildlife underpasses to mitigate impacts on wildlife from roads is supported in *Wildlife and Roads* (2009)⁶, a resource by a focus group of ecologists and engineers from around North America. A web-based tool kit developed by wetland stewards and Environment Canada provides many guidance resources and techniques for discouraging beaver damming of culverts (WetKit, 2004)⁷. A peer-reviewed study published in the journal *Biological Conservation* (2004)⁸ demonstrated the effectiveness of wildlife underpasses in reducing wildlife mortality by 65% on a heavily traveled highway in Florida.

⁶ Wildlife and Roads. 2009. Evaluation of the Use and Effectiveness of Wildlife Crossings. Online: <http://www.wildlifeandroads.org>

⁷ WetKit. 2004. Tools for working in wetlands in Canada. Online: <http://www.wetkit.net>

⁸ Dodd et al, 2004. Effectiveness of a barrier wall and culverts in reducing wildlife mortality on a heavily traveled highway in Florida. *Biological Conservation* 118 (2004) 619–63.

Table H: Recommended Commitments for Fairwinds' The Lake District and Schooner Cove Neighbourhood Plans

Recommended Commitments	Responsibility to Prepare/ Register/ Distribute	Approving Agencies	Advisor
A) Detailed Design / Pre-construction Subdivision (Post Neighbourhood Plan)			
Environmental Considerations During Detailed Design of Each Development Phase			
1. For the Enos Creek crossing , design a clear span bridge, or other design approved by DFO, and design clear span bridges or open-bottomed culverts for other watercourse crossings.	Fairwinds	DFO, MOE	
2. Work with biologists, RDN and MOE to identify: (1) candidate lots for restrictive conservation covenants , (2) the dimensions and details of the covenants, and (3) a procedure for covenant monitoring.	Fairwinds	RDN, MOE	CAG – item (3) only
3. Design the detailed marine shoreline development in Schooner Cove with: (a) DFO to meet regulatory requirements and (b) a marine biologist to achieve a net enhancement of the shoreline ecology, considering Greenshores principles.	Fairwinds	DFO	Marine Biologist
4. Develop a Stormwater Management Plan (SMP) using DFO's BMPs wherever practicable. Based on the SMP and project detailed design, conduct a Hydrological Impact Assessment to meet Official Community Plan expectations.	Fairwinds	MOTI, RDN	
5. Complete a detailed layout of the trail system design in consultation with a professional biologist to limit impact on sensitive areas (SPEAs, Garry Oak meadows) following MOE guidance.	RDN		Technical Advisory Committee
6. Design wildlife road underpasses at locations noted in Appendix 6 for passage of beavers and other small wildlife, following the advice of a biologist's survey to identify the most suitable locations.	Fairwinds		CAG
Environmental Elements of the Fairwinds Values & Procedures Statement			
7. Develop an Enos Lake Protection and Monitoring Program including invasive species management practices	Fairwinds	RDN, MOE	CAG
8. Develop integrated pest management practices for the landscape planning and maintenance of common lands following environmentally-friendly practices to control pests without the use of toxic chemicals.	Fairwinds		CAG
Garry Oak Meadows Management Plan			
9. Prepare a Garry Oak Meadows Management Plan including invasive species management practices and monitoring program that are linked to an adaptive management decision framework.	RDN	Fairwinds	GOERT

Recommended Commitments	Responsibility to Prepare/ Register/ Distribute	Approving Agencies	Advisor
Environmental Protection Planning for Construction Phase			
10. Conduct and submit a pre-construction stage RAR assessment (“Construction RAR”) to define the protection methods for the SPEAs. Conduct an arborist’s assessment of tree retention and management in the SPEAs for input to the Construction RAR assessment	Fairwinds	RDN, MOE	
11. Conduct pre-construction plant species at risk surveys by a qualified vegetation ecologist/botanist to identify plants that can be avoided or salvaged in areas specified in the EIA.	Fairwinds	MOE	
12. Conduct an Archaeological Impact Assessment in areas of potential risk specified in the AOA (as may be refined through focused PRF work during the detailed design stage) based on the detailed design of the development phase to identify any required mitigation	Fairwinds	Nanoose First Nation, Nanaimo First Nation, BC Archaeology Branch	
13. Develop a Construction Environmental Management Plan (CEMP) with an environmental professional that includes: <ul style="list-style-type: none"> • erosion and sediment control plan • spill contingency and response practices • terrain management practices • fire protection practices • tree management and vegetation restoration measures • protection measures for works near water, riparian areas and Garry oak meadows • any mitigation measures from plant species at risk surveys • any mitigation measures from the Archaeological Impact Assessment • construction schedule that avoids or limits activities during sensitive environmental periods (as set forth under ‘B’ below) • water quality parameters and targets for sediment control and other substances used around waterbodies • requirements for vegetation clearing to avoid destruction or disturbance of bird nests, including pre-clearing nest surveys if during applicable nesting season • practices for amphibian salvages where necessary • construction traffic management 	Fairwinds	RDN, MOE, DFO	

Recommended Commitments	Responsibility to Prepare/ Register/ Distribute	Approving Agencies	Advisor
14. Include the CEMP in construction tender documents and require construction contractor adherence to the CEMP as part of contractual obligations	Fairwinds		
B) Construction Phase			
1. Engage a qualified Environmental Monitor to monitor and report on the construction activities' adherence to the CEMP, regulations and other environmental best management practices.	Fairwinds	RDN, MOE, DFO	
2. Salvage amphibians prior to construction in and around wetlands, creeks and riparian habitats in areas identified by a wildlife biologist. To be conducted by a wildlife biologist under a <i>Wildlife Act</i> permit from MOE.	Fairwinds	MOE	
3. Avoid vegetation clearing outside April 1 to July 31 general bird nesting season, or conduct pre-clearing nest surveys by a qualified wildlife biologist according to MOE/CWS protocol to identify any mitigation (nest avoidance/protection) required	Fairwinds	MOE/CWS	
4. Avoid vegetation clearing outside January 1 to July 31 raptor (owl, eagles, hawks, etc) nesting season of or conduct raptor nest surveys according to MOE protocol to identify any mitigation (nest avoidance/protection) required	Fairwinds	MOE/CWS	
5. Identify the number of wildlife trees (under supervision by a biologist) that are planned for removal and compensate in nearby protected areas with nest boxes and/or other wildlife habitat restoration (e.g., wildlife tree creation following advice from an arborist) based on a biologist's assessment of the highest and best use of restoration effort on a site-by-site basis.	Fairwinds		
6. Restore disturbed riparian habitat following a vegetation restoration procedure prepared by a qualified vegetation ecologist	Fairwinds		
C) Post-Construction			
<ul style="list-style-type: none"> • Prior to completion of construction, develop and promote an Environmental Homeowner's Manual which includes guidance for ecologically responsible: <ul style="list-style-type: none"> • landscaping (Garry Oak Gardener's Handbook), • water conservation, • recreation, • respect for local sensitive areas, and • participation in community-based stewardship 	Fairwinds		CAG
2. Implement the Enos Lake Protection and Monitoring Program	Fairwinds		Area residents
3. Develop and implement a trail management plan to identify sensitive areas and monitor use to inform any required post-development restoration and access restriction decisions.	RDN		Fairwinds + area residents

Recommended Commitments	Responsibility to Prepare/ Register/ Distribute	Approving Agencies	Advisor
4. Develop an environmental education initiative for recreational users which includes education on the locally sensitive areas and their value, provides direction on methods of protection and promotes involvement in stewardship activities	Fairwinds		Area residents
5. Implement the Garry Oak Meadows Management Plan	RDN		GOERT