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Pêches et Océans
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December 20, 2007

Glen Robertson, Chief Administrative Officer
District of Mission
8645 Stave Lake Street
Mission, B.C. V2V 4L9

Dear Mr. Robertson

Subject: Silverdale Urban Reserve Planning Process

I am writing to share my concern regarding the current status of the Silverdale Urban Reserve Planning Process and the District of Mission's LAN.48 Policy.

Under the authority of the Federal *Fisheries Act*, Fisheries and Oceans Canada (DFO) has decision-making authority for the conservation and protection of fish and fish habitat in Canada. One of DFO's strategies for achieving its mandate is to participate in and encourage initiatives that incorporate fish habitat priorities into land use plans. It is our opinion that the District's LAN.48 Policy establishes the foundation for an achievable plan that will provide long term protection of fish and fish habitat within the Silverdale Urban Reserve Area (SURA). For this reason, DFO supports LAN.48 and the important objectives established within.

Based on our more recent involvement in the SURA planning process, we are concerned that the LAN.48 Policy objectives are at risk of being compromised, and as well, DFO's mandate to protect and conserve fish habitat. The vision in the LAN.48 Policy is one of identifying environmentally sensitive areas and establishing them as non-developable, to be protected in perpetuity. The current process, however, appears to have shifted to one in which environmentally sensitive areas are identified based on priority, with the assumption that lesser priority areas will be destroyed. As this creates conflicts with DFO's habitat management policy, objectives and legislation, it is unlikely that DFO can enter into agreements with the District based on the planning deliverables and process thus far. The intent of this letter is to highlight some of DFO's concerns and to encourage the District to pursue mutually agreeable objectives through SURA planning.

According to LAN.48, the Environmental Base Map (EBM) was to be completed prior to initiating the Neighbourhood Planning Process. At an April 20, 2007 meeting regarding the EBM, DFO provided preliminary comments regarding watercourse classification, fish sampling methodology and the importance of non-fish-bearing headwater streams. DFO also expressed concerns regarding false and inappropriate information presented in Table 1.1. As DFO had not been provided with a copy of the draft EBM prior to the meeting, comprehensive comments were not provided at that time. DFO advised the District that a detailed review would be deferred until the revised EBM was submitted.

Upon review of the May draft EBM, DFO determined that the EBM was insufficient to meet the objectives set forth in the LAN.48 document. DFO expressed concerns that headwater streams had not been adequately located in the field and identified on the map, and that comments provided by DFO at the April 20, 2007 meeting regarding the watercourse classifications, fish sampling and Table 1.1 appeared to have been disregarded. However, in response to the District's request, DFO did not object to the District proceeding to Neighbourhood Planning under the condition that the District would not **approve** nor

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consider establishing any neighbourhood boundaries, utility corridors, land use designations, stormwater plans, development permits or **any other agreements** prior to completion of the area-wide EBM.

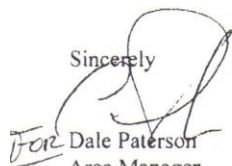
At a July 18, 2007 meeting with the District, DFO was advised that the Neighbourhood Environmental Studies Terms of Reference (TOR) would be developed through extensive consultation, review and input from DFO and that deficiencies in the EBM would be addressed through that consultation process. DFO understands that the TOR were approved by the District on August 7, 2007 and that DFO was not afforded the opportunity to review the TOR prior to approval. It is our opinion that many improvements should be made to the TOR to ensure the vision of the LAN.48 Policy is realized. Comments and recommendations regarding the TOR provided by DFO to the District are summarized in Appendix I of this letter.

On November 1, 2007 DFO received copies of the opportunities and constraints documents provided to the District by the developer's consultants and were invited to attend a November 14, 2007 meeting to discuss the documents. Upon receipt of the documents, DFO advised the District that in the absence of the completed environmental studies, it is inappropriate to make any conclusions on the opportunities and constraints presented by environmental conditions in the area. Furthermore, the environmental report seemed to speak more to the work plan than actual opportunities and constraints and referred to items in the TOR that DFO had already recommended against or asked for further clarification upon. DFO nevertheless agreed to attend the meeting for information purposes and had serious concerns regarding the message being presented. While DFO recognized that the map depicting primary, secondary and tertiary areas of importance for protection was in draft form, the District needs to be aware that DFO cannot support any plan based on the map presented.

In order to ensure SURA planning is carried out in a manner that will avoid potential conflicts between development activities and the protection of fish habitat, DFO requests that the District arrange a meeting between DFO's Area Habitat staff (Lisa McDonald and Craig Sciankowy) and the District's Director of Planning and Manager of Environmental Services. If the District is amenable to this request, please phone Lisa McDonald directly at 604.814.1070 to arrange a meeting place and time.

DFO appreciates the opportunity to participate in this valuable planning initiative and shares the District's commitment to continuous improvement through adaptive management. If you have any questions regarding this letter or would like to discuss DFO's habitat management policy objectives in further detail, please contact the undersigned directly by phone at 604.666.0315 or by e-mail at patersond@pac.dfo-mpo.gc.ca.

Sincerely



Dale Paterson
Area Manager
Habitat and Enhancement Branch
Lower Fraser Area

c.c.: Sharon Fletcher, Director of Planning – District of Mission
Mike Younie, Manager of Environmental Services – District of Mission
Terry Lyster, Project Planner South West Mission – District of Mission
Sylvia Letay, Ecosystems Officer - Ministry of Environment

Appendix I

The following concerns/recommendations regarding the Environmental Studies Terms of Reference were provided to the District during the September 21, 2007 and October 11, 2007 meetings:

1. The introduction indicates that the *"this work plan deals only with field surveys and data collection, and not specifically with reporting or use of the data to identify environmentally sensitive areas, conservation areas, priority habitat areas for management, for developing guidelines to implement as part of the Neighbourhood process, or for adopting Best Management Practices (BMPs) for listed species conservation"*. The LAN.48 document indicates that the primary objective of the environmental studies is to *"further identify and protect additional environmentally sensitive areas"*. It is our opinion that the TOR should be revised to incorporate all of the above. Otherwise, it is unclear to DFO the purpose of the TOR.
2. The introduction also indicates that several tasks identified in LAN.48 as environmental studies, including the Stormwater Management Conceptual Plan, are not related to biological or associated investigations. It should be noted that stormwater management is intimately associated with biological responses, and should be accounted for within the TOR.
3. Figure 1 identifies the boundaries for the Neighbourhood One Environmental Studies Area. The LAN.48 document indicates that *"environmental assessment at the neighbourhood level will require an evaluation of the potential impacts of land development upon the larger watershed that is characterized to that neighbourhood area"*. However, the boundary presented in Figure 1 crops the headwaters of many creeks, contrary to watershed planning principles. Neighbourhood studies areas should be established based on natural boundaries (e.g. topographic breaks, catchment basins or watersheds).
4. Section 1.1.1 indicates that *"If a responsible authority (e.g. a DOM road engineer) confirms that a manmade barrier can be reasonably modified to provide fish access, then reaches from that point upstream to the next barrier will be designated as fish-bearing"*. Please note that under section 20 of the Fisheries Act, DFO has the authority to direct the owner or occupier of any obstruction to remove the obstruction or create a fish-way or canal to permit the free passage of fish. Furthermore, a road engineer is likely not qualified to make such a determination. In the absence of a natural barrier and ephemeral conditions upstream of the human barrier, all portions of watercourses upstream of human barriers should be considered potentially fish-bearing.
5. Section 1.1.1 indicates that *"Permanence of a stream will be determined through visual observations or thermistor measurements of temperatures that demonstrates when surface water is present in watercourse channels"*. This statement is vague, and should be clarified. When will visual observations be made? Where/when will thermistors be installed? Stream permanence is frequently used as a condition for establishing streamside protection and enhancement areas. Under the Riparian Area Regulation Simple Assessment, one of the qualifying factors is whether or not a stream runs for more than six months of the year (considered a permanent stream), or not (considered a non-permanent stream). In the absence of a minimum of one year's worth of data, indicating that a particular stream ran dry for six months or more, the stream should be classified as permanent.
6. Section 1.1.1 states that *"Catchment flow paths will be assessed in detail during the neighbourhood or subdivision planning process"*. Since the TOR is for the Neighbourhood level planning process, it is unclear as to why a TOR was not provided for their assessment in this report.
7. Section 1.1.2 indicates that *"Existing baseline mapping is of sufficient detail to enable stream locations to be identified in the absence of flows. Recent topographic surveys have also provided stream location points, and these points will be used as control checks to verify the level of accuracy."* DFO does not support this statement and requests clarification.
8. Section 1.1.2 indicates that stream mapping methodology will employ the provincial *"Reconnaissance 1:20,000 Fish and Fish Habitat Inventory"* data cards and that *"These cards are also consistent with portions of the SHIM methodology that are applicable to land use planning exercises."* As clearly identified in the LAN.48, mapping is to be conducted at a scale of 1:2500. The provincial reconnaissance document is not sufficient to enable mapping to the LAN.48 identified scale. DFO recommended against utilizing multiple guideline documents to complete a single task, and therefore recommended that mapping methodology be limited to that presented in the SHIM Guidebook. The TOR indicates that, according to

the SHIM Guidebook, stream characteristics relevant to centerline surveys for the purposes of land-use planning are limited to channel dimensions, segment gradient, riparian class, riparian band width, top of bank, bank stability, dominant bank materials and bank slope. However, according to the SHIM Guidebook, the land-use mapping requirements presented are typically limited to those required when establishing streamside setbacks only, and do not include other pertinent information that would be required when undertaking a comprehensive planning initiative, such as that presented in LAN.48. As such, the characteristics identified under the Fish Habitat Inventory type of SHIM mapping should be collected.

9. Section 1.2.1 indicates that *"A summary report will be prepared that documents specific methods..."* Specific methods should be established within the TOR, not the deliverable document.
10. Section 1.3 states that *"Neighbourhood One investigations will be completed during summer 2007 and will include streams within the neighbourhood boundary except where it is determined that stream reaches outside the boundary are important for interpretations within the boundary"*. It is not preferred to conduct stream survey and location exercises only during summer months. Streams that exhibit little to no flows in the summer months become increasingly difficult to locate during that time, due to dense vegetation obscuring the channel. DFO recommends that stream inventory exercises be completed once during the high flow season (late November – mid March) and once during periods of lower flows, to help locate and characterize features difficult to identify during high flows (e.g. bank erosion, discharge pipes, etc.).
11. Section 2.3 indicates that Module 4 – Stream Invertebrate Survey of the Streamkeeper's Handbook will be utilized for sampling and analyzing benthic invertebrate communities. DFO advised that Streamkeeper method was a very simplified method developed for inexperienced volunteers, and that it was inappropriate for this level of study. DFO recommended that the Benthic Index of Biological Integrity method be utilized to sample and analyze benthic communities. DFO also requested clarification as to how this sampling would be integrated into the ISMP, and requested further details regarding the TOR for the ISMP monitoring program.
12. Section 3.2 refers to establishing fisheries setback zones through the detailed RAR assessment. It is unclear to DFO as to why the TOR is referring specifically to the detailed assessment methodology when the District has an existing by-law for establishing streamside protection and enhancement areas. The TOR should speak to the existing by-law, including under what circumstances variances will be considered by the District. DFO advised that a variance from the District's by-law on any particular stream would not automatically trigger a detailed RAR assessment for the entire area.
13. Section 3.3 – DFO advised that the measure of Riparian Forest Integrity should be based on setbacks established based on the District's existing streamside protection by-law, and not that of a detailed RAR assessment as presented in the TOR.
14. Task 8 – Update on Hydrology Studies – DFO advised that the methodology and deliverables presented in the TOR were vague and were unsure of the usefulness of the data that would be generated from the methods provided. DFO concurred with the Ministry of Environment's recommendation that the Land and Water BC *Hydrological Guidelines for Water Power Projects* (2004) should be utilized to develop an appropriate hydrological study.
15. Section 9 – Water Quality Studies – DFO advised that the water-quality sampling program as presented would provide limited useful information. DFO recommended that a water quality sampling program be established as part of the ISMP TOR, and that the program be based on an acceptable standard guideline or methodology, such as the RISC Standards *Continuous Water Quality Sampling Programs: Operating Procedures* (2007).
16. Task 15 – Watercourse Monitoring Data for Flow Regimes and Water Quality – DFO advised that this section was incomplete and reference should be made to standard acceptable guideline documents.
17. Task 16 – Watershed Management Plan – DFO advised that this section was incomplete and would require further refinement and clarification. The watershed management plan should include methods to identify and characterize watershed processes, prescribe solutions to avoid impacts to those processes, develop an implementation strategy and monitoring program to assess the success of the plan (adaptive management). The plan should identify existing impacts to watershed processes and enhancement/restoration opportunities.
18. Tasks 17, 18, 19, 21 and 22 were incomplete and required clarification. DFO recommended that standard acceptable BMP and guideline documents be referred to in these sections.