

Salmon River Floodplain Management Plan

Meeting with Doug McFee of the Salmon River Enhancement Society

Summary Notes

May 10, 2006

1. Consideration of the four drainage options cannot be done without first developing an overall vision, a statement of community values, and a longer term plan for the area. This has been the position of the Salmon River Enhancement Society since the onset of this process. The Township has an official community plan and a broad level plan for all rural areas. However, there is no plan for the Salmon River Floodplain. This needs to be developed first, before looking at drainage options. All of this would require taking a planning and economic development approach first and an engineering approach second.
2. The Salmon River Enhancement Society believes that the process has been flawed from the outset, because of its sole focus on drainage options and achieving the ARDSA criteria. As a result, any decisions coming out of it will also be flawed and not achieve any degree of community consensus. The Salmon River Enhancement Society has never agreed with the current process and its sole focus on drainage options.
3. No attention has been given so far to considering other options for managing the floodplain such as acquisition of farm land. Again, this is a result of the process focusing only, or first, on drainage options.
4. The Salmon River Enhancement Society also believes that the agreement negotiated in the mid 1990s regarding the current pump station and its operations has not been adhered to (for example: pumps being operated outside of the growing season, and water levels being measured on the Fraser River and not the Salmon River). The 1990s negotiations of a foot drop in water level was a compromise agreed to reluctantly by the environmental side. Options presenting further reductions in the water levels constitute negotiating in bad faith. That agreement has just led to further demands, particularly from the farmers and the farmers' association, for further flood control measures. In other words, the agreement in the mid 1990s was just a first step down a "slippery slope" of increased demands for more flood control measures, to meet the needs of one interest group. Proceeding only looking at drainage options has just encouraged requests which will lead further down this "slippery slope".

5. The information that is presented in the summary table about the four drainage options is incomplete. The table should include a land acquisition option. As well it is not clear that all drainage options include changing the pump settings which the Salmon River Enhancement Society believes will drop water levels in the Salmon River by two or more feet. Further information is needed about:
 - a) the impacts of lowering the water levels in the Salmon River,
 - b) the impacts on both of the ARDSA criteria (The area with reduced flooding is provided in the summary information; however, there is no information on how many cells meet the 1.2 m of freeboard.),
 - c) the on-going maintenance and operating costs,
 - d) the sizes and costs of the screw pumps being proposed in the different drainage options, and
 - e) the location of the required ditch and culvert upgrades on private and public lands.

It would also help if the table referenced the sections in the consultant's report.

6. There is another drainage option that lies between the status quo option and Option 2, which would include land acquisition and culvert and ditch improvements off the main stem of the Salmon River, Davidson Ditch, and Davidson Creek.
7. The three proposed drainage options aimed at increased flood control all involve lowering the water levels in the Salmon River. A shallow area currently exists in the Salmon River meanders west of Fort Langley where the Coho currently have difficulty passing due to low water levels. The current levels are already a good foot below historical levels. The Salmon River Enhancement Society believes that the options presented will lower the Salmon River levels by at least two feet and at times up to three feet. This will have inevitable negative impacts on fish, and fish habitat, and on the ecology of the area. All three proposed options go beyond the agreements carefully negotiated in the mid 1990s. Dyking, as suggested in Option 3, will also reduce fish habitat.
8. The Salmon River Enhancement Society believes that the three enhanced drainage options presented will negatively impact the local community as well.
9. Constructing a dyke north of Rawlison Crescent and east of the Salmon River will impact the habitat negotiated as part of a court settlement related to dyke construction by the property owner.
10. The impacts of the four drainage options on the water levels, the aquifer, and on water quality need to be forecasted, and considered in assessing any of the options. These are important criteria in making any final decision. These impacts could be direct or indirect through increased value-added agriculture that could result from increased flood control protection (for example: increased use of pesticides and increased water use in agriculture).

11. Option 3 is by far the most negative option from a fish and fish habitat perspective, because of its impacts on river levels and access to fish habitat in the Davidson Ditch and Davidson Creek systems. Option 3 also leads to the largest area of farm land with no flooding at all, which could result in increased value-added agriculture and greenhouses.
12. Consideration needs to be given to forecasting and evaluating:
 - a) the longer term impacts of projected upstream development (for example: Trinity) on the effectiveness of the flood control options,
 - b) the potential impacts of the flood control options themselves on the land, terrain, and river (for example: potential lower land levels which would reduce any flood control gains), and
 - c) the impacts on the community, tourism, and the ecology of potential increases in value-added agriculture (for example: vegetables and greenhouses).
13. Experience elsewhere such as in New Orleans and along the Nile suggests that flood control measures have direct impacts on the terrain, and can result in lowered land levels, and therefore, increased flooding, making the proposed options undesirable from even an agricultural perspective. The subsidence of flood-protected land occurs due to:
 - a) reduction or complete loss of sediment deposition to recharge the land mass;
 - b) reduction or complete loss of the “fluffing up” effect that floods have on soils; and
 - c) reduction in land mass resulting from tilling of the soil for higher-value agriculture which increases compaction and brings organic material to the surface where it decomposes.

David Tattam, a dairy farmer on Vancouver Island, works with farmers who live in floodplains to encourage them plant hay and not other crops which lead to lower land levels.
14. Increasing flood control, increasing the amount of land that is never flooded, and adding dykes (as in Option 3) will likely lead to increased value-added agriculture, and potentially to greenhouses. Greenhouses would have a clear negative impact on the community of Fort Langley and on tourism.
15. Flood control measures need to be seen in the context of the potential impacts of climate change and global warming.
16. The Salmon River Enhancement Society believes that:
 - a) the proposed three drainage options to increase flood controls take the Salmon River further away from the condition that existed prior to the 1990s negotiated agreement,
 - b) are being proposed only because of the vocal interests of the farmers and the farmers’ association, and
 - c) represent short term thinking.

While the three options might increase flood control now and meet the interests of some farmers, there is no evidence that, in the longer term, they will be effective. The broader community's interests are not being met, either in the short or the long term.

17. The Salmon River Enhancement Society recommends that the Township of Langley develop an official community plan for the area, with community consultation, that would start with developing a vision for the long term desired future, and later include the issues of the management of the floodplain and possible drainage options. This process should start in the fall of 2006 as it is not practical or effective to seek this sort of community input during the summer months.
18. Such a planning process would need to look at the long term economic futures of the area, including tourism and community living, as well as agriculture and golf courses. The Salmon River Enhancement Society believes that increased flood control, and the three proposed drainage options to achieve this, would negatively impact tourism, both in the short and long term. These negative impacts would be both direct and indirect through increased value-added agriculture.
19. The Salmon River Enhancement Society sees no evidence that the potential economic returns from increased agriculture would outweigh the direct costs of the increased flood control options, and the negative impacts on fish, fish habitat, the ecology, the water, the community, and other economic uses such as tourism. Subsidence of the floodplain following the construction of flood control measures would negatively impact agriculture. The net result would be negative even if only viewed from the agricultural perspective.
20. The Salmon River Enhancement Society believes that, in the end, and after the development of a community plan for the area, the most sensible solution will likely be for the Township to buy the affected farm land, create enhanced habitat, environmental measures, and nature-based recreation opportunities with roughly 10% of the land, and lease the remaining farm land back to farmers for low level agriculture (for example: growing hay). The leases would offset the costs to the Township in the longer term as opposed to the significant operating costs that the Township would incur for any of the proposed drainage options.
21. Essentially there appear to be two major choices: (a) stay with the current floodplain control measures and develop alternative uses of the land or (b) increase the flood control measures with negative impacts on the community, the environment, and other economic uses of the land.
22. The Salmon River Enhancement Society would like to see the notes from all of the consultation meetings circulated to all of the stakeholders, and wants to make sure that there is sufficient time after the next Council report is prepared, for people to prepare their direct feedback to Council. They do not want to see a process similar to that which was followed with Yorkson Creek where the information from the consultation meetings was taken to Council and a decision was made before the

community had a chance to respond to the report. The Salmon River Enhancement Society would like an opportunity to present the environmental side of the Salmon River Floodplain issue to Council at a Council meeting.