

Updating “A Living,
Working River: the
Estuary Management
Plan for the
Fraser River”
November 28, 2002
Workshop

Workshop Report

*Fraser River Discovery Centre
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Management Plan for the Fraser River”
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Updating “A Living, Working River: the Estuary Management Plan for the Fraser River”

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Executive Summary

The workshop *Updating “A Living, Working River: the Estuary Management Plan for the Fraser River”* was held on November 28, 2002 at the Fraser River Discovery Centre, hosted by the Fraser River Estuary Management Program (FREMP). Participants attended the session to hear about progress to-date and provide input towards updating the Estuary Management Plan (EMP).

The goals of the workshop were:

1. To report on consultations to-date, including issues and ideas that have been identified;
2. To obtain feedback on proposals for updating the Plan’s six action programs and to identify components of the original Plan that have been completed or are obsolete; and
3. To identify and discuss barriers that may exist to implementing proposed actions.

Following three panel presentations and an overview of the Estuary Management Plan Update, participants moved into five breakout groups. Working in these facilitated groups, participants discussed objectives, actions, barriers and priority actions in relation to the six “action programs” outlined in the working paper entitled “Proposed Objectives and Actions for the updated Estuary Management Plan”.

Objectives: All groups found the proposed objectives in each action programs to be appropriate, although not all found them to be achievable or complete. The groups questioning whether the objectives were achievable found the wording to be too general. In cases where the objectives were found to be incomplete, additional objectives were suggested.

Two groups identified EMP-wide issues that were found to be missing from the draft document:

- A need to clarify roles and responsibilities; and
- Monitoring and assessment.

Actions: Participants generally found the actions to be appropriate, although not all found them to be achievable or complete. Similar to the feedback on the objectives, the groups that questioned whether the actions were achievable found the wording to be too vague or too passive, the actions to be too numerous, or the lists to be incomplete.

More than one group identified the following broader issues (not specific to any one action program) that require action:

- Concerns relating to the FREMP boundary at Kanaka Creek;
- A need for public engagement and outreach; and

- A desire for involvement by industry and individuals.

Individual groups identified the following additional issues (not specific to any one action program) that require action:

- Cumulative effects;
- Accessibility of information and data-sharing;
- Database and information management;
- Education;
- Communication and networking to take advantage of local expertise (such as Streamkeepers groups);
- Evaluation mechanisms for individual objectives to measure progress towards completion; and
- Increased federal and provincial support for the plan.

Barriers: The five groups identified a range of barriers to implementing the draft updated Plan including:

- Public education and outreach;
- Lack of commitment by partners; and
- The FREMP boundary.

Additional overarching barriers included a lack of:

- Harmonization between jurisdictions and partners;
- Accessible and shared information;
- Integration between action programs;
- Overall enforcement; and
- Monitoring.

Other barriers were specific to individual action programs.

Priority Actions: Priority actions were identified for each action program. More than one group identified the following priority actions, not specific to any one action program:

- Monitoring and assessment;
- Education;
- Information sharing; and
- Partnerships.

Individual groups identified the following additional overarching priority actions:

- Clarification of roles and responsibilities among FREMP partners;
- Linkages between the EMP and other processes;
- Facilitation of research;
- Education, coordination and capacity building;
- Building on FREMP's successes;
- Audits of projects;
- Increased involvement of industry and landowners; and
- Increased support from senior governments.

Other priority actions were specific to individual action programs.

Updating “A Living, Working River: the Estuary Management Plan for the Fraser River”

Workshop Report

1. Introduction

The workshop *Updating “A Living, Working River: the Estuary Management Plan for the Fraser River”* was held on November 28, 2002 at the Fraser River Discovery Centre, hosted by the Fraser River Estuary Management Program (FREMP). Approximately 58 individuals attended the session to hear about progress to date and provide input towards updating the Estuary Management Plan (EMP). These participants represented FREMP partners, non-government and business organizations, and individuals. A list of participants can be found in Appendix 7.

This report documents the background to the workshop, a summary of the morning panel presentations, a summary of common issues stemming from the five breakout groups, and a summary of breakout group discussions. Appendix 1 contains the workshop agenda. Appendix 2 contains a summary of three of the four panel presentations, and a summary of the questions and answers following the panel presentations. Appendix 3 contains the fourth panel presentation, and Appendix 4 provides a summary of the Estuary Management Plan Update. Appendix 5 contains the breakout group agenda. Appendix 6 contains a summary of the workshop evaluation. Appendix 7 contains a list of participants.

2. Background to Workshop

The Estuary Management Plan (EMP) was developed in 1994 as a living document, with the intention that it would reflect changes over time and remain a valuable guide for decision-making. Eight years later, in light of current realities, new legislation and a changing institutional context, the EMP needs to be updated to incorporate renewed objectives and action programs.

As part of Phase 2 in updating the EMP – that of gathering input – this workshop followed a series of regional workshops held in June and July 2002 along with extensive consultation with groups and individuals with an interest in the estuary. In advance of this workshop, participants were provided with a working paper entitled “Proposed Objectives and Actions for the updated Estuary Management Plan”. The working paper presented options resulting from ideas and suggestions gathered through the initial consultations.

During the introductory remarks at the workshop, the following goals were established for the day:

1. To report on consultations to-date including issues and ideas that have been identified;

2. To obtain feedback on proposals for updating the Plan's six action programs and to identify components of the original Plan that have been completed or are obsolete; and
3. To identify and discuss barriers that may exist to implementing proposed actions.

To meet the first goal, the workshop opened with a panel presentation. Panelists were invited to speak to what they do or what their program involves, and their linkages with FREMP. The purpose of the panel was to situate FREMP within a context of other, related organizations and to spark discussion on the purpose and focus of an updated Estuary Management Plan. The four panel members were:

1. Hugh Kellas, Administrator for Regional Growth Strategies in the Policy and Planning Department at the Greater Vancouver Regional District (GVRD)
2. Bruce Kay, Manager, Georgia Basin Coordination Office, Environment Canada
3. Judy Williams, Co-Chair, Fraser River Coalition, and
4. Bob Purdy, Director of Corporate Development, Fraser Basin Council

Summaries of the first three panel presentations are contained in Appendix 2. The fourth panel presentation is summarized in Appendix 3.

Anna Mathewson of FREMP then provided an overview of the Estuary Management Plan Update. A summary of her presentation is contained in Appendix 4.

Participants were then instructed on the purpose, format, and agenda for the breakout groups. Participants worked simultaneously in five facilitated breakout groups for one and a half hours to discuss the six action programs proposed for the updated Estuary Management Plan:

1. Water and Sediment Quality Action Program
2. Fish and Wildlife Habitat Action Program
3. Navigation and Dredging Action Program
4. Log Management Action Program
5. Industrial and Urban Development Action Program
6. Recreation Action Program

The third breakout group discussed both the Navigation and Dredging Action Program and the Log Management Action Program. As a result, there were only five breakout groups.

Participants selected their preferred action program in advance of the workshop. Breakout groups considered the following questions about their respective action programs:

1. Are the objectives appropriate and achievable?
2. Do any of the objectives require revisions?
3. Are there gaps? If so, what objectives are missing?
4. Are the actions appropriate and achievable?
5. What other actions could be employed to achieve the objectives?
6. What are the barriers to implementing the actions?
7. What kind of barriers are they (e.g., institutional, resource, other)?
8. What are the priority tasks?

FREMP staff and two partners from the Fraser Basin Council served as facilitators and note takers for the breakout groups. The breakout group agenda can be found in Appendix 5.

3. Common Themes Arising

Working in facilitated breakout groups, participants discussed objectives, actions, barriers and priority actions in relation to the six “action programs” of the updated Estuary Management Plan. This section discusses findings and recommendations that were common between action programs, and that relate to the Estuary Management Plan (EMP) specifically and FREMP more broadly. For a summary of individual breakout group discussions, please see Section 4.

3.1 Objectives

All groups found the proposed objectives in each action programs to be appropriate, although not all found them to be achievable or complete. Those groups questioning whether the objectives were achievable found the wording to be too general. In cases where the objectives were found to be incomplete, additional objectives were suggested.

Two groups identified EMP-wide issues that were found to be missing from the draft document:

- **Clarify roles and responsibilities:** One group identified the need for a section to clarify the roles and responsibilities of the various partners and agencies involved with the EMP. This same group suggested that the EMP requires overarching goals from which the action program objectives and actions would follow.
- **Monitoring and assessment:** Two groups identified the need for provision of monitoring and assessment within the plan.

3.2 Actions

Participants generally found the actions to be appropriate, although not all found them to be achievable or complete. Similar to the feedback on the objectives, those groups that questioned whether the actions were achievable found the wording to be too vague or too passive, the actions to be too numerous, or the lists to be incomplete.

During discussions about actions, more than one group identified the following broader issues (not specific to any one action program) that require action:

- **Boundary:** Three groups identified the boundary at Kanaka Creek to be problematic, and suggested that the FREMP boundary be extended eastward beyond that point. Reasons given included enabling consideration of upstream areas, removing constraints to water quality assessments, and addressing the ecosystem as a whole (wet and dry sides of the dyke).
- **Public engagement and outreach:** Two groups called for improved public engagement and public outreach to municipal councils, stewardship groups and the broader public.
- **Involvement by industry and individuals:** Two groups called for increased

involvement by individuals (including landowners) and industry in co-management and work on implementing the EMP.

- **Other:** Individual groups identified the following additional issues (not specific to any one action program) that require action, including:
 - cumulative effects;
 - accessibility of information and data-sharing;
 - database and information management;
 - education;
 - communication and networking to take advantage of local expertise (such as Streamkeepers groups);
 - evaluation mechanisms for individual objectives to measure progress towards completion; and
 - increased federal and provincial support for the plan.

3.3 Barriers

The five groups identified a range of barriers to implementing the draft updated Plan that were not specific to any one action program:

- **Public education and outreach:** Four groups identified a lack of public education and outreach as a barrier. Related to this barrier, one group identified a lack of a clear role for the public in the EMP. Further, a lack of public awareness was identified regarding agency roles in relation to the EMP, and more broadly in relation to FREMP.
- **Lack of commitment by partners:** Three groups identified a lack of commitment by FREMP partners to implement the EMP as a barrier. Several groups identified barriers related to the commitment of partners:
 - a lack of political will, cooperation and financing; and
 - the gap between an increasing demand for studies and assessments and decreased funding for these same studies and assessments.
- **Boundary:** Two groups identified the FREMP boundary as a barrier. One group identified deregulation as a barrier and another identified regulatory complexity as a growing challenge.
- **Overarching barriers:** Additional overarching barriers, not specific to any one action program included a lack of:
 - harmonization between jurisdictions and partners;
 - accessible and shared information;
 - integration between action programs;
 - overall enforcement; and
 - monitoring.

Other barriers were specific to individual action programs.

3.4 Priority Actions

Priority actions were identified for each action program. More than one group identified the following priority actions not specific to any one action program:

- **Monitoring and assessment:** Three groups identified the need for monitoring and

assessment as a priority: to track the health of the river, to monitor habitat loss and gain from compensation sites, and to provide data required for evaluations.

- **Education:** Two groups included education in their list of priority actions. One group identified education in general, and the other called for education, coordination and capacity building.
- **Information sharing:** Two groups identified information and data sharing among partner agencies and with the public as priority actions. One of these groups more specifically called for regular compilation and distribution of available knowledge and ongoing research on estuarine processes. They called for periodic opportunities for information sharing and exchange, and discussion of new findings.
- **Partnerships:** Two groups included partnerships in their priority action list. One group identified partnerships as a priority twice: once to identify critical lands requiring protection in the estuary, and again to involve local and regional governments, and stewardship groups in facilitating habitat improvement on priority sites. Another group identified a priority need for GVRD's use of partnerships to acquire and protect land.
- **Other:** Individual groups identified the following additional overarching priority actions not specific to any one action program:
 - Clarification of roles and responsibilities among FREMP partners;
 - Linkages between the EMP and other processes;
 - Facilitation of research;
 - Building on FREMP's successes;
 - Audits of projects;
 - Increased involvement of industry and landowners; and
 - Increased support from senior governments.

Other priority actions were specific to individual action programs.

4. Summary of Breakout Group Discussions

This section provides a summary of each breakout group discussion, including:

- Draft objectives and actions, as excerpted from the working paper, in boxes;
- An overview of specific recommendations relating to the proposed objectives and actions; and
- Barriers and priority actions.

Some breakout groups developed clear recommendations, and other groups were less directive and more descriptive.

4.1 Water and Sediment Quality Action Program

The Water and Sediment Quality Action Program breakout group discussed big picture issues and was less focused on the specific draft action program. During their discussions, they raised issues that relate to the EMP in general. For example, the group discussed public education and data accessibility and the importance of reflecting these activities in the EMP.

4.1.1 Objectives - Water and Sediment Quality

Objective 1: Improve water and sediment quality in the estuary by preventing pollution at its source, minimizing the discharge of pollutants, and remediating contaminated sediments.

Objective 2: Develop an integrated water quality monitoring framework for the estuary.

Recommendations:

In general, participants reported an overall sense that the objectives themselves were appropriate, but given their vagueness, were unable to determine whether they were achievable.

Objective #1: A specific concern regarding the achievability of Objective #1 was whether sediment sampling at Wreck Beach would lead to any remediation (participants suggested that past results have revealed a presence of toluene but nothing has apparently been done). It was also noted that FREMP should "pick up the slack" and ensure that sampling is conducted and that results of sampling are acted upon if action is required.

In discussing revisions to the objectives, participants observed that the objectives read more like general goals for the Action Program. They developed the following recommendations:

- Expand the objectives and re-write them to be more specific.
- Reverse the order of the two objectives so that the overall framework comes before the targets.

During discussions of gaps and missing objectives, participants identified a number of overarching concerns:

1. There is a need for a section (perhaps to be included either as an appendix to the EMP or as a specific Action Item) to clarify roles and areas of responsibility among the FREMP partners. This was identified as a **PRIORITY** item. Questions of a specific nature included:
 - Who exactly is responsible for what?
 - What are their roles?
 - How do they engage in the Action Program specifically? and
 - How is quality assurance and quality control of data undertaken?
 These questions stemmed from a desire by participants for clear accountability to ensure that actions are achieved, and that the overall EMP is implemented.

2. The draft EMP does not reflect FREMP's central role in setting overall goal(s) in the Action Program. It was suggested that FREMP's role is to provide a coordinated perspective among partners and the public regarding where we want to go. The group discussed the notion of goals for each action program, more specific objectives to support them, and clear actions to get there.

3. The draft EMP does not adequately reflect the important role the FREMP partners must play in ensuring ongoing monitoring and assessment of the health of the river. This was identified as a **PRIORITY** item.

Specific gaps identified below could be considered as either gaps in the objectives (if they are expanded and reworded to be more specific and measurable as suggested above), or gaps in actions (if the plan remains with only two objectives in this section).

Recommendations to address specific gaps included:

- Clarify how the EMP objectives and actions would be linked and coordinated with the GVRD LWMP process. This was identified as a **PRIORITY** item.
- Make specific reference to what the EMP would expect to clean up (target areas for example) as part of any remediation (Objective #1) or framework for monitoring (Objective #2)
- Learn from other jurisdictions in general, and from Toronto specifically, to identify approaches to deal with separate industrial, sewage and storm waters.
- Make specific reference to FREMP's primary role as a coordinating body among partners. Clarify this role in the EMP, perhaps in the section on roles and responsibilities.
- Address monitoring of ambient water quality and illegal dumping in the estuary.

4.1.2 Actions - Water and Sediment Quality

Action 1.1: Achieve inter-agency agreement on water quality targets for the estuary.

Watershed-based Planning

Action 1.2: Promote the principle that watersheds are the fundamental level for water quality management in the estuary.

Action 1.3: Working with the Stormwater Interagency Liaison Group, coordinate water quality initiatives within the estuary with municipal integrated storm water management plans as they are prepared by municipalities within the FREMP area.

Pollution Prevention and Control

- Action 1.4:** Agencies with jurisdiction within FREMP boundaries will continue developing guidelines and enforcing legislation regarding abatement of pollution from point and non-point sources.
- Action 1.5:** Support efforts to increase awareness of source control measures and best management practices for pollution prevention.
- Action 1.6:** Reinforce existing measures and develop new incentives to reduce the introduction of pollutants into the estuary from agricultural practices and run-off.
- Action 1.7:** Through existing programs, new regulations and incentives encourage boat owners and other water users to adopt a code of good environmental practice by not discharging sewage or garbage into the waters of the estuary. Encourage and support marina operators and ports in providing sewage pump-out stations.

Sediment Remediation

- Action 1.8:** Continue to manage contaminated sediment assessment and remediation activities on a site-by-site basis through the FREMP coordinated project review process.
- Action 2.1:** Establish an information management system to track ongoing water quality monitoring and scientific research programs in the estuary.
- Action 2.2:** Determine the duplication and information gaps in the existing monitoring programs, and work with the GVRD Environmental Monitoring Committee to reconcile all monitoring initiatives in the estuary.

Recommendations:

As reported for the objectives, the group indicated overall support for the actions, but given their vagueness, they felt that it was not possible to determine whether or not they are achievable. Participants observed that there were too many actions and suggested that it would be better to focus on a smaller number and ensure that they are addressed.

Continue to include Best Management Practices in the EMP as a tool for achieving action.

Action 1.1: Participants discussed the importance of ensuring that targets are scientifically based, although it was also acknowledged that there are significant differences among agencies in the interpretation of targets and thresholds. As well, they expressed concern that targets may change from year to year, and that FREMP will not have control over them.

In their discussion of thresholds and targets, concern was expressed regarding deregulation, and specifically, the challenges of setting targets in an increasingly unregulated environment.

Participants suggested that a core role for FREMP and the EMP is to "promote interagency and public understanding of targets, and where possible, promote agreement on specific targets" (rephrase of Action 1.1). This was identified as a **PRIORITY** item.

Action 1.4: Participants expressed a concern regarding the accessibility of pollution prevention plans. They felt that FREMP should have access to all prevention plans for areas in their jurisdiction.

Specific revisions to the proposed actions included avoiding words such as 'improve' or 'at source' as they are too vague and are not measurable unless combined with specific targets.

Recommendations to address specific gaps included:

- Address cumulative effects in the EMP.
- Include an action on accessibility and sharing of information and data both among partner agencies and with the public. Participants expressed concern that agencies tend to keep information to themselves, and they felt strongly that information must be made public. There was specific reference to the key role that the FREMP website should play in this regard. This was identified as a **PRIORITY** item.
- Take action to ensure proper information management and database maintenance.
- Identify education as a specific action item in the EMP. Some participants suggested that FREMP should coordinate the educational efforts of other organizations. They questioned how actions based on words such as "promotion" (Objective #1, Action #2) would be achieved without education. This was identified as a **PRIORITY** action.
- Identify a specific linkage with the Georgia Basin Ecosystem Initiative (GBEI) (similar to the action on the GVRD LWMP and the request for a supporting section of documentation clarifying roles and responsibilities and linkages with the EMP.)
- Create a specific role for public engagement in identifying goals and objectives for the estuary.
- Clarify the process used for risk management in the interpretation of thresholds and targets. Improved clarity on this process would assist the partner groups, external interests and the public.

4.1.3 Barriers - Water and Sediment Quality

Overarching barriers to reaching the objectives included:

- **Thresholds and targets:** A lack of agreement and lack of harmonization among FREMP partners on thresholds and targets.
- **Deregulation and changing role of government:** The trend to deregulation and self-regulation, and by inference, the changing role of governments in environmental protection.
- **Data:** The lack of accessible and shared data both among partners and with the public.
- **Public role:** The lack of a clear public role in identifying broad priorities and objectives that leads to lack of public (and consequently lack of political) support and awareness of the action program.
- **Education:** The lack of public education (linked to the above)
- **Commitment:** The lack of commitment from partners to undertake the actions in the EMP.
- **Awareness:** The lack of awareness and understanding regarding agency responsibilities in relation to the EMP.
- **Harmonization:** The lack of harmonization between jurisdictions.

- **Function:** The absence of a lobby or oversight function.

Specific barriers included:

- The redefinition of what is meant by "contaminated sites." It was reported that the definition of "contaminated sites" is changing and therefore it is difficult to agree on remediation priorities.
- It was suggested by several participants that the boundaries of FREMP constrain true assessment of water quality. Several participants identified reconsidering these boundaries as a **PRIORITY**.

4.1.4 Priority Actions - Water and Sediment Quality

- **Roles and responsibilities:** Develop a reference section (as an appendix to the EMP or as a specific Action Item) to clarify roles and areas of responsibility among the FREMP partners.
- **Education:** Include education as a specific action item in the EMP. Participants questioned how actions based on words such as "promotion" (Action 1.2) would be achieved without education.
- **Accessibility:** Include an action on accessibility and sharing of information and data both among partner agencies and with the public. The FREMP website should play a key role in this regard.
- **Boundary revision:** Revisit the boundaries of FREMP to specify how upland areas are linked in, and how the river upstream of Kanaka Creek is considered. A revision of the boundaries would also remove constraints to proper assessments of water quality.
- **Targets:** A core role for FREMP and the EMP is to "promote interagency and public understanding of targets, and where possible, promote agreement on specific targets".
- **Monitoring and assessment:** Ensure the EMP adequately reflects the important role FREMP must play in ensuring ongoing monitoring and assessment of the health of the river.
- **EMP link with LWMP:** Clarify how the EMP objectives and actions would be linked and coordinated with the GVRD LWMP process.

4.2 Fish and Wildlife Habitat Action Program

4.2.1 Objectives - Fish and Wildlife Habitat

Objective 1: Conserve and enhance the existing habitat base in the estuary.

Objective 2: Secure protection for habitat areas with high ecological and biodiversity significance.

Objective 3: Monitor habitat losses and gains.

Recommendations:

In general, participants found the objectives to be appropriate and achievable. A key concern related to the lack of linkages between this and other Action Programs. Participants called for better integration and linkages between the objectives of this action program and FREMP's other action programs. They envision a holistic set of coordinated objectives and actions, integrated goals and a comprehensive overall sustainable framework for the river.

Participants identified implicit links and overlaps in the actions related to Objectives #1 and #2, and suggested there was an opportunity to simplify the actions. In addition, they recommended that the focus in Objective #1 on the existing "habitat base" should relate more to the ecological features and functions criteria specified in Objective #2. Looking at ecological features and functions is integral to determining an existing habitat base. It is not simply a question of quantity of habitat, but the quality and the role it plays in the ecological functioning of river reaches.

In relation to gaps and missing objectives, participants suggested that the commitment to increasing habitat is missing from the FREMP objectives, as is effective monitoring. They called for efforts to link and integrate management of the wetted and upland activities of the river in pursuing an ecological functions approach.

4.2.2 Actions - Fish and Wildlife Habitat

Action 1.1: Continue to use and update the FREMP habitat ("colour") coding system based on an Ecological Features and Functions approach.¹

Action 1.2: Continue to use Coordinated Project Review to support the adoption of FREMP partner policies and guidelines for protecting and managing habitat.

Action 1.3: Work in partnership with local and regional governments and stewardship groups to facilitate habitat improvement on priority sites as identified by the FREMP habitat sub-committee.

¹ Ecological Features and Functions (EFF) approach attempts to identify the natural and human processes (e.g.: sediment transport; fish migration) that need to be preserved in any given location, then identifies the types of activities that can occur in these places without compromising these processes. Rather than focusing on specific resources, the EFF approach attempts to reveal and protect the underlying needs within a system (e.g.: tall trees for bird nesting; deep water for ship moorage, etc.).

Action 1.4:	Regularly compile and distribute available knowledge and ongoing research of estuarine processes. As part of this effort, sponsor periodic information exchanges where participants can share and discuss new findings.
Action 1.5:	Coordinate the establishment of administrative and financial arrangements between academic institutions, government agencies and the private sector to facilitate management-related research projects.
Action 1.6:	Work with Port Authorities and other partners to promote additional habitat compensation banking projects in the estuary.
Action 2.1:	Work in partnership to identify critical habitat lands that still need protection in the estuary.
Action 2.2:	Support efforts to protect critical habitat lands through management arrangements and acquisition by partnership.
Action 2.3:	Participate in developing the regional Biodiversity Conservation Strategy for the Lower Mainland.
Action 3.1:	Continue to monitor habitat loss and gain from compensation sites as well as habitat enhancement, restoration, and creation projects. As part of this, monitor and report on changes in the habitat colour coding (red/yellow/green trends) over time.
Action 3.2:	Continue to conduct audits of projects through the Coordinated Project Review's Environmental Review Committee (ERC).

Recommendations:

Overall, participants felt that the wording for most of the actions was passive rather than proactive. They again identified the overlap between Action 1.1 and Objective #2.

Action 1.3:

- Place FREMP's issues (or the issues of the environmental partners) on the agendas of municipalities.
- Improve outreach to municipal Councils surrounding the estuary, and in particular communicate and share information about particular upland features and functions.
- Improve outreach to Councils, stewardship groups and the public because awareness of FREMP's work is not reaching a broader audience.
- Need for more communication and networking to take advantage of local expertise, stream keepers groups etc. in helping to preserve critical habitat.
- The provincial and federal governments need to get more involved with the public and others to facilitate habitat improvement on priority sites and to capitalize on the energy and expertise out there.
- Involve stewardship groups on FREMP's Sub-Committees.
- Get the EMP's issues and work program on the partners' agenda for implementation.

Action 1.4:

- FREMP should undertake a greater role in educating and reaching out to the community to communicate about the importance of the estuary and the work FREMP does. It was suggested that since the Fraser Basin Council took over that role from FREMP/BIEAP,

- the program's profile and support have dropped off (both internally and externally).
- Having access to tools and knowledge for community groups is an important program priority.

Action 2.1:

- Define what critical habitat is for all partners.

Actions 2.2 and 2.3:

- Capitalize on connectivity in dealing with ecological features and functions – it is not just critical habitat land, but also the structure and function of surrounding public and private lands (buffers, edges, connective corridors) which ensure habitat vitality
- Develop incentives to involve private industry and individuals in co- management. This is crucial for sharing the burden in a time of change and a challenging financial environment.

Actions 3.1 and 3.2:

- The group was pleased with these actions and suggested that each objective should have a proper evaluation framework or mechanism (i.e., each objective should have a bullet under it to properly evaluate whether each objective is being reached).

4.2.3 Barriers - Fish and Wildlife Habitat

Participants identified a number of barriers to action, primarily resource issues (lack of funding and buy-in), institutional barriers (competing priorities and needs between agencies), philosophical differences and geographic barriers:

- **Geographic barrier:** A failure to address the ecosystem as an integrated whole and combine the wetted sides of the dyke with the uplands and beyond. *Recommendation:* Extend FREMP's boundaries above Kanaka Creek.
- **Education and lack of public outreach and publicity:** Public knowledge can help to place pressure on governments to act. The decision by FREMP to get out of public education was a mistake as reflected in the decline of support for FREMP activities. Even something as simple as "Voices for Choices" plays an important role in community outreach. Moreover some participants felt that the Fraser Basin Council has not adequately taken up the task. We need to focus on hot issues like water quality. *Recommendation:* "Get public" and "get the knowledge" up amongst the public.
- **Lack of integration between action programs:** A potential for conflict between the action programs resulting from the "silo" treatment of issues. *Recommendation:* Integrate action programs as a part of the process, not as an afterthought.
- **Lack of overall enforcement:** A lack of overall enforcement resulting in part from agency downsizing (staff and resources). Legislation alone is not enough to protect the environment
- **Lack of political will, financing and cooperation:** The lack of political will and the need for more financing and cooperation.

Above all they felt that it is essential that FREMP be effective and be seen as effective in order to continue to attract support and funding.

4.2.4 Priority Actions - Fish and Wildlife Habitat

In their discussion of priority actions, participants suggested that all objectives are equally important, but there is a need to link Objectives 1 and 2. In addition, Objective 3 was identified as a key objective, and they recommended that it be strengthened.

Objective 1: Actions 1.3, 1.4, and 1.5 should be deemed key priorities in identifying and preserving critical habitats (as defined by the ecological features and functions approach). Action 1.2 is the base regulatory approach. It needs to be supplemented by involving others and getting the word out. Education, coordination and capacity building are the priorities.

Objective 2: Actions 2.1 and 2.3 are most immediate and important, with Action 2.2 being a long term strategy.

Objective 3: All actions under the monitoring component are important and provide a framework for evaluation.

1. Key priorities in identifying and preserving critical habitats (as defined by the ecological features and functions approach) include:
 - **Partnerships for habitat improvement:** Work in partnership with local and regional governments and stewardship groups to facilitate habitat improvement on priority sites as identified by the FREMP habitat sub-committee (Action 1.3).
 - **Information sharing:** Regularly compile and distribute available knowledge and ongoing research of estuarine processes. As part of this effort, sponsor periodic information exchanges where participants can share and discuss new findings (Action 1.4).
 - **Facilitate research:** Coordinate the establishment of administrative and financial arrangements between academic institutions, government agencies and the private sector to facilitate management-related research projects (Action 1.5).
2. **Education, coordination and capacity building:** Continue to use Coordinated Project Review to support the adoption of FREMP partner policies and guidelines for protecting and managing habitat: This is the base regulatory approach. It needs to be supplemented by involving others and getting the word out. Education, coordination and capacity building are the priorities.
3. **Building on successes:** FREMP should capitalize on its accomplishments. This is especially important in an era of shrinking resources.
4. Under Objective 2, Actions 2.1 and 2.3 are most important, with Action 2.2 being a longer term strategy
 - **Partnerships for habitat protection:** Work in partnership to identify critical habitat lands that still need protection in the estuary (Action 2.1).
 - **Champion the Biodiversity Conservation Strategy:** Participate in developing the regional Biodiversity Conservation Strategy for the Lower Mainland (Action 2.3).
 - **Long term leadership:** Support efforts to protect critical habitat lands through management arrangements and acquisition by partnership (Action 2.2).
5. All actions under the monitoring component are important and provide a framework for evaluation

- **Monitoring:** Continue to monitor habitat loss and gain from compensation sites as well as habitat enhancement, restoration, and creation projects. As part of this, monitor and report on changes in the habitat colour coding (red/yellow/green trends) over time (Action 3.1).
- **Audits:** Continue to conduct audits of projects through the Coordinated Project Review's Environmental Review Committee (ERC) (Action 3.2).

Other Issues:

- To overcome barriers, focus on a habitat area and initiate additional, more integrated pilot projects, which are geographically inclusive and attain critical habitats.
- Catalogue our successes through case studies, use toolkits.
- Include reference to climate change. Climate change will have an impact on fish and wildlife habitat.
- Look at effects of flood protection and sediment loading on fish, and the issue of invasive species.
- Document the economic benefits of preserving ecology and biodiversity as information pieces for the public.
- Use stewardship groups to communicate with the public and distribute educational resources.
- Spell out objectives for specific resources.
- Incorporate the idea of adaptive management (i.e., how do we know where we are going, how do we know when we get there and what mechanisms and feedback loops are in place to act if our actions are not happening).
- FREMP must capitalize on its accomplishments. This is especially important in an era of shrinking resources.

4.3 Navigation and Dredging Action Program and Log Management Action Program

4.3.1 Objectives - Navigation and Dredging, and Log Management

Objective 1: Develop and maintain a functional navigation system that supports water-dependent development and protects environmental quality.

Objective 2: Manage the removal of sand from the river in a manner that balances with the sediment budget of the river system.

Recommendations:

Objective 1: The port authority needs to cultivate additional funding sources to pay for dredging (no wording changes).

Objective 2: Expand definition of dredgeate beyond sand to include all components of the sediment budget.

4.3.2 Actions - Navigation and Dredging, and Log Management

Action 1.1: Develop a comprehensive dredging strategy for the estuary that would, among other issues, address the impacts of dredging on habitat.

Action 1.2: Continue to ensure that an adequate level of channel maintenance is undertaken to support a functional navigation system.

Action 1.3: Study the relationship between dredging and flood plain management.

Action 2.1: Evaluate the predictive performance of the sediment budget equation every five years, to ensure its usefulness as a management tool.

Action 2.2: Coordinate a monitoring program that supplies the data required to evaluate the sediment budget equation.

Recommendations:

Action 1.1: Given the lack of clarity regarding the intent of the dredging strategy, this should be split into 2 actions:

- Action 1.1a: Develop a macro-policy Comprehensive Dredge Management Strategy to provide a contextual framework ("macro") or policy statement regarding the navigation system's relationship with the environment, and
- Action 1.1b: Create guidelines or a flowchart ("micro") that would address impacts of dredging in various locations and conditions, create or incorporate existing BMPs, and list inventory and assessment requirements or expectations tailored to general classifications of dredging applications.
- Remove the words "address the impacts of dredging on habitat" since they tend to focus attention on a single (albeit important) facet of any comprehensive dredging management strategy.

Participants felt that once Action 1.1 was split into Action 1.1a and Action 1.1b,

they would be appropriate and achievable.

Action 1.2: With revisions to Action 1.1, Action 1.2 is not an “active concern”, but leave it in.

Action 1.3: Leave this action in to provide a link to boost the Port Authority’s ability to raise outside funding for its dredging program.

Action 2.1: A vital action that must be financially prioritized to make sure it is achievable.

Action 2.2: Full support for this action.

Action 2.3: **NEW:** As part of any analysis that FREMP would undertake as part of its sediment budget process, participants wanted to add Action 2.3 which would "examine sediment movements in the sand flats, marshes, secondary channels, and other natural storage areas within the river, but outside the navigation channel". The group wanted FREMP to recognize that "the river is wider than the navigation channel".

4.3.3 Barriers - Navigation and Dredging, and Log Management

The following barriers to action were identified in the navigation and dredging action program:

- **Complex regulations:** Complexity resulting from the breadth of regulatory requirements leads to inconsistency and requires more co-ordination.
- **Funding, funding, funding:** Alternative sources of funding to pay for dredging might include user fees and a new power of taxation for the Port Authority.
- **Funding responsibilities:** Lack of clarity regarding funding responsibilities (especially beyond the navigation channel of the main arm of the Lower Fraser River).
- **Lack of funding for studies and assessments:** Increasing demands for studies and assessments by senior governments that are no longer willing to dedicate funds to this kind of research.

Participants emphasized their expectation that the barriers as described above would be mentioned in the text of the updated Estuary Management Plan.

4.3.4 Priority Actions - Navigation and Dredging, and Log Management

The group identified the following priority actions:

- **Guidelines for dredging:** Create guidelines or a flowchart ("micro") that would address impacts of dredging in various locations and conditions, create or incorporate existing Best Management Practices (BMPs), and list inventory and assessment requirements or expectations tailored to general classifications of dredging applications (High).
- **Monitoring:** Coordinate a monitoring program that supplies the data required to evaluate the sediment budget equation (High).
- **Evaluation:** Evaluate the predictive performance of the sediment budget equation every five years, to ensure its usefulness as a management tool (High).
- **Dredge management strategy:** Develop a macro-policy Comprehensive Dredge Management Strategy to provide a contextual framework ("macro") or policy statement regarding the navigation system's relationship with the environment (High).
- **Study:** Study the relationship between dredging and flood plain management

(Medium).

- **Channel maintenance:** Continue to ensure that an adequate level of channel maintenance is undertaken to support a functional navigation system (Medium).
- **Sediment movement:** Examine sediment movements in the sand flats, marshes, secondary channels, and other natural storage areas within the river, but outside the navigation channel". (Low)

4.4 Industrial and Urban Development Action Program

4.4.1 Objectives - Industrial and Urban Development

Objective 1: Direct development to areas in the estuary where conflicts with habitat protection and incompatible uses are minimized.

Objective 2: Protect strategic land and water areas for water-dependent industries and encourage them to locate in the estuary.

Objective 3: Incorporate water-based transportation in the estuary into the regional transportation system.

Recommendations:

Objective 1:

- Relate Objective 1 to Objective 2 in a more direct way.
- Reverse order of Objectives 1 and 2. Consider rewording the objective by replacing the word "direct" with "facilitate" or "encourage".
- Address the possible or potential conversion of log storage to other land uses.
- Reflect the changing nature of waterfronts, as in Steveston, where the fishing industry is giving way to other maritime sectors, such as pocket cruisers and related tourism spin-offs.
- The Fraser River as the "economic heart" of the region may not necessarily refer only to the industrial sector.

Objective 2: The current economic reality is that the demand for waterfront industry is declining while the demand for other urban uses of the waterfront (primarily residential) is increasing. This is related to the first objective and this objective will be appropriate once we know what to protect.

- Address land use issues between the "nodes", particularly in the context of the impact of industrial nodes on adjacent land uses.
- Identify strategic locations for water-dependent industry.
- Add an objective to define strategic locations and follow that with the objective to protect them. The sites should be related to possible nodes in the inter-modal transportation system.

Objective 3: Clarify the objective to note the need for different approaches for goods transport and passenger transport. Work in this area requires coordination of the ports, railways, and Translink.

4.4.2 Actions - Industrial and Urban Development

Action 1.1:	Complete Area Designations with all municipalities.
Action 1.2:	Promote development that is compatible with the river and other uses.
Action 2.1:	Protect existing nodes and accommodate new nodal developments for water-dependent industries.
Action 2.2:	Develop partnerships to identify and increase market demand for water-related business and encourage creative revenue generation concepts for public lands.
Action 2.3:	Work with various levels of government to promote water-related businesses and integrated waterfront development.
Action 3.1:	Work with GVTA, Transport Canada and others on strategic intermodal transportation planning within the estuary, including the infrastructure needed to support intermodal nodes.
Action 3.2:	Continue to work with Transport Canada and provincial departments on regulatory standards for water-based movements.
Action 3.3:	Monitor research on applicable regional air quality, and track global trends in water-based environmental standards and regulations.

Recommendations:

Action 1.1: Area Designation Agreements have been concluded with six of twelve municipalities. The area designation tool actually pre-dates the EMP. With the introduction of new planning tools – regional growth strategy, municipal regional context statements in OCP bylaws, and port authority land use plans – the need for area designation agreements has been questioned. FREMP work on new agreements with the remaining six municipalities has been suspended. Nevertheless, there is support for mechanisms to coordinate water, foreshore and upland activities and future development. The idea is to ‘dovetail’ habitat protection with zoning and policy as well as to provide the development community with a uniform interpretation of designations across a dozen municipalities.

The ability of FREMP to move Area Designation Agreements forward was questioned.

It was suggested that the EMP address the issue of the conversion of, for example, green coded sites containing sawmills to other uses.

Action 1.2: Need wider recognition of development objectives and more complete information about what is now a confusing development regulatory process.

- Pursue actions to conserve ‘green coded’ shoreline.
- Revise Action 1.1 to reflect a more flexible approach to achieving the same end as Area Designations.
- Municipalities should be encouraged to recognize area designations and habitat codes.

Action 2.1: Identify the nodes in the first place. This could be a separate action. Once the nodes have been identified, the action to protect nodes would be more useful.

- Review existing nodes to determine their feasibility.

Action 3.1: This type of work is underway. Perhaps the objective needs re-wording. The action generally remains valid.

Action 3.2: Yes standards have impacts. There is a need to understand the environmental/regulatory/recreation and safety implications of water-based transportation.

Action 3.3: The intent of this action should be clarified in the context of air quality versus energy use and mode of transportation. Air quality is a key recognition but it needs to be made relevant to any shift back to water transport.

New Action: Reduce Knight Street truck traffic dramatically by establishing a barge shuttle between the VPA and Fraser Port.

- Consider water transport across the Fraser, especially between Richmond and Delta.

4.4.3 Barriers - Industrial and Urban Development

Participants identified the following barriers:

- Real estate market pressures for redevelopment of industrial sites presents a barrier to conserving industrial waterfront lands.
- Approval process is too lengthy and complex and generally not understood.
- The lack of resources of FREMP to implement the action programs.
- Cross-subsidization of transportation directs the market and land uses.

The following actions were identified to meet objectives without encountering barriers:

- Establishment of habitat compensation banks to help with streamlining the development approval process.
- Coordinate with Translink with respect to intermodal and water-based transport. Translink is in the process of updating its regional transportation plan.

4.4.4 Priority Actions - Industrial and Urban Development

The following priority action items were identified:

- **Regional transportation planning:** Identify nodes and transportation linkages and coordinate with Translink on regional transportation planning.
- **Project review process:** Streamline the project review process – strive for continuous improvement and better coordination among levels of government (i.e., through FREMP).
- **Area Designation Agreements and alternatives:** Review Area Designation Agreements and alternatives to them while ensuring the same outcome – which is linking foreshore and upland land uses and planning.
- **Water-based transportation:** Explore the implications and linkages between water-based transportation, and environmental and safety regulations.

Participants developed the following recommendations for other actions:

- Tie in actions on the Coordinated Project Review Process with habitat compensation, especially habitat compensation banks.

4.5 Recreation Action Program

4.5.1 Objectives - Recreation

Objective 1: Develop regional greenways between parks in the estuary.

Objective 2: Develop a water-based recreation plan for the estuary.

Recommendations:

The recreation breakout group found the two objectives to be achievable and appropriate, but incomplete. They suggested rewording was required to incorporate more in terms of parks and dikes.

Objective 1: Pay more attention to parks and dikes. Include more parks than just Greater Vancouver Regional District (GVRD) parks. Mention other regional parks and green spaces. Account for all the open green spaces along the river in the plan.

Objective 2: Specifically mention marina and recreational boaters in the objectives.

In their discussion of gaps and missing objectives, the recreation breakout group made the following recommendations:

- Make reference to rip rap and how to make it ‘greener’, and define what proper rip rap is and what other alternatives can be used.
- Add view corridors.
- Expand FREMP area beyond Kanaka Creek.
- Develop concrete ways of implementing the plan with municipalities and the public. The municipalities would like a guiding framework that works better with their Official Community Plans. The municipalities need to be better, more active partners and commit to the “buy-in” of the plan.

4.5.2 Actions - Recreation

Action 1.1: Support municipal and regional efforts to develop greenways between major parks in the estuary.

Action 1.2: Support GVRD efforts to use partnerships to acquire and protect land acquisition for both recreation and conservation purposes.

Action 2.1: Facilitate development of a “Blueways” water-based recreation plan for the estuary that incorporates issues around navigation, public access, safety and boating.

Recommendations:

Participants felt that the proposed actions were appropriate and achievable, but that more needs to be done. The following comments were offered in relation to the above actions:

Actions for Objective 1:

- Engage industry and landowners in work on the EMP.
- Ensure that federal and provincial governments provide more support for the plan.
- Revisit the FREMP habitat coding (this is already taking place) to see how it fits in with recreational water areas
- Develop specific water-based zoning for recreational areas.
- Provide more support for GVRD efforts to use partnerships to acquire and protect land.

Actions for Objective 2:

- Provide more support for GVRD efforts to use partnerships to acquire and protect land.
- Secure more safety zones that protect people in foreshore areas around Wreck Beach and other recreational areas. Hazards include water quality issues and safety for swimmers against boaters.
- Achieve municipal/government action to increase public access to the North Arm conservation area
- Make development of Deas Slough and other sensitive areas prominent in the plan.
- Tidy up the accretion area in the North Arm.

Three new actions were proposed:

1. Develop new artificial parks on the waterside: more small pocket beaches and parks.
2. Look at developing derelict land in the area into active waterfront access areas.
3. Increase and improve signage for recreational areas. Set a common standard for the river that is accepted and followed by all municipalities and government agencies.

4.5.3 Barriers - Recreation

1. **Institutional** (e.g., people or organizations not working together)
 - Need a multi-agency land acquisition department or agency.
 - Need more funding for more people.
 - Need an educational framework that is municipality-based. Different municipalities will have different concerns.
 - Need more commitment to the partnership.
 - Need new ideas for partnership (e.g., The Riverkeepers program that was used for the Hudson River in New York uses volunteers to patrols and monitor the river and educate the public.)
2. **Resources** (e.g., lack of funding, staff, or expertise)
 - Need more funding for monitoring. There needs to be long term projects which would require more funding and people.
 - Need more marketing dollars for FREMP to make it a household name. Use ads or public service announcements.

3. Other

- **Physical:** Rip rap designs could be more friendly to people and the habitat.
- **Educational:** More information has to be shared and exchanged with the public, the municipalities and other levels of government. This information cannot come off as “preachy”. Municipalities need to be recognized for their in-house expertise. There needs to be more information available on the river itself.

4.5.4 Priority Actions - Recreation

All the actions presented were considered priorities. All of the action items were ranked as ‘High’ except for the action of “Need to revisit the FREMP habitat coding to how it fits in with recreational water areas” which was ranked as “medium” as it is already taking place.

- **Involve industry and landowners:** The plan needs to work with industry and landowners more.
- **Support from senior governments:** Federal and provincial governments also need to provide more support for the plan.
- **FREMP habitat coding:** Need to revisit the FREMP habitat coding (this is already taking place) to how it fits in with recreational water areas
- **Water-based zoning:** There needs to be specific water-based zoning for recreational areas
- **Partnerships:** There needs to be more support for the GVRD efforts to use partnerships to acquire and protect land.
- **Foreshore safety:** Foreshore areas around Wreck Beach, and other recreational areas, need more safety zones that protect people. Hazards include water quality issues and safety for swimmers against boaters.
- **Public access:** Need to have municipal/government action that gives more access to the public to the North Arms conservation area
- **Sensitive areas:** Development of Deas Slough and other sensitive areas need to be prominent in the plan.
- **North Arm accretion:** Need to tidy up the accretion area in the North Arm
- **Artificial parks on waterside:** Develop new artificial parks on the waterside: more small pocket beaches and parks.
- **Active waterfront access:** Look at developing derelict land in the area into active waterfront access areas.
- **Signage for recreational areas:** There needs to be better and more signage for recreational areas. There needs to be a standard set for the river that is accepted and followed by all the municipalities and government agencies.

Appendix 1. Workshop Agenda

Updating “A Living, Working River” November 28, 2002 Workshop Fraser River Discovery Centre and Paddlewheeler Boat

Agenda

8:30 - 9:00 am	Coffee and Registration
9:00 – 9:15 am	Welcome and Introductions
9:15 – 9:50 am	Panel Presentations Hugh Kellas, GVRD (Sustainable Region Initiative) Bruce Kay, Georgia Basin Ecosystem Initiative Bob Purdy, Fraser Basin Council Judy Williams, Fraser River Coalition
	Overview of Estuary Management Plan Update
	Questions and Answers
9:50 – 10:00 am	Instructions for Break Out Group Discussions
10:00 – 10:15 am	Refreshment Break
10:15 – 11:30 am	Break Out Group Discussions
11:30 – 11:45 am	Report Back from Break Out Groups to Plenary
11:45 – 12:00 pm	Closing Remarks and Next Steps

Lunch and Boat Tour

12:00 – 3:30 pm	Lunch and Boat Tour of River <ul style="list-style-type: none">• Lunch provided on board The Paddlewheeler• Tour to Douglas Island and back (partly narrated)• Informal discussion opportunities
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Appendix 2. Summary Notes: Panel Presentations and Question and Answer Session

Summary Notes: Panel Presentation

1. Hugh Kellas – Greater Vancouver Regional District (GVRD) (Sustainable Region Initiative)

Hugh is Administrator for Regional Growth Strategies in the Policy & Planning Dept at the GVRD. Hugh spoke about the GVRD's Sustainable Region Initiative. The Sustainable Region Initiative (SRI) will provide a framework, vision, and action plan for Greater Vancouver based on the concept of sustainability that embraces economic prosperity, community well-being, and environmental integrity

- The purpose of the Sustainable Region Initiative (SRI) is to build a region-wide network of organizations interested in sustainability.
- The objective is to establish three short-term actions for sustainability for discussion and confirmation at a conference in the spring.
- The Estuary Management Plan (EMP) is a good example of a sustainability initiative – the SRI should provide a framework for the EMP.
- Issues relevant to the EMP include:
 - Ecological integrity
 - Land use and ecological health – upland and watershed planning
 - Economic activity - a strategy is currently lacking
 - Water quality – monitoring the Liquid Waste Management Plan.

2. Bruce Kay – Georgia Basin Ecosystem Initiative

Bruce is the Manager of the Georgia Basin Coordination Office at Environment Canada. The Georgia Basin Ecosystem Initiative (GBEI) is a partnership among government agencies that provides tools, support and framework for action towards sustainability in the Georgia Basin.

- The GBEI is a partnership of three federal and three provincial departments/ministries.
- The Initiative operates within the context of four issues areas: air, water, habitat and sustainable communities.
- In addition, there are four broad goals that the GBEI is in the process of defining and wishes to achieve:
 - Collaborative stewardship
 - Land and aquatic resource-based planning
 - Improving the understanding of how ecosystems function
 - Taking direct action at ecosystems under stress.
- The GBEI is seeking to broaden its membership to include social and economic

interests.

- Some issues that the Estuary Management Plan update process might address are:
 - Watershed based planning and stormwater management
 - Non-point source pollution management
 - Knowledge management and outreach
 - Collaborative research
 - Climate change
 - First Nations involvement.

3. **Judy Williams, Fraser River Coalition**

Judy is co-chair of the Fraser River Coalition. Active since 1977, the Coalition's aims are the preservation, conservation, and enhancement of the Fraser River, with particular emphasis on the estuary and delta.

Text of Judy William's presentation:

The initiative for the Fraser River Coalition has always been, since June 1977, the preservation, conservation, and enhancement of the Fraser River eco-system. In other words, as Bert Brink put it, "we're green!" In June 1977, a conference attended by NGO's, reps of various agencies and academics was held to consider the current health of the river and 17 resolutions were passed, the most important one, #1, that: "There should be established an overall authority for the Fraser River." From that simple resolution, the Fraser River Estuary Study with public involvement became the precursor for the Fraser River Estuary Management Plan. A partial list of other resolutions included a call for more public involvement, a moratorium on developments in sensitive areas, adequate standards of effluent and enforcement of these standards, a phasing out of log transportation, booming and storage in the waters of the Fraser River and its estuary, and a three-fold designation of foreshore lands—conservation areas, development areas, and moratorium areas."

From that initial conference, the Fraser River Coalition was born and the seeds for the beginning of FREMP took root. Since panelists were asked to explain how our group's initiative relates to FREMP, we believe our goal of preserving, conserving and enhancing the Fraser River eco-system ties in clearly with many of FREMP's stated goals in a "Living, Working River." However, we have a number of issues that we have considered to be key over the years and now, into the future.

The Fraser River Coalition has always had a strong interest in education and deeply regrets that FREMP has left education and information dissemination in the hands of each agency that comprises FREMP. FREMP was to have served as a clearinghouse, but that is a function that hasn't operated all that well. A more sharply defined method whereby FREMP relates to the public is needed. An example of this is the poorly attended community workshops held earlier this year.

The use of the wetted sides of the dykes as a boundary for the North Fraser Port Authority does not include the green areas and parkland immediately adjacent to the dykes. Surely the estuary does not end at the dykes?

In considering boundaries for the FREMP area, is Kanaka Creek as an upper boundary, a good one considering the amount of debris that originates above Kanaka Creek? Dr. Brink recalls Mr. McFarland complaining about debris because he had no control above Kanaka Creek. Also, since fish do not recognize man-made boundaries, the FREMP boundaries should include the spawning gravel beds above Mission and Aggaziz.

FREMP brought forth a group of indicators representing each agency. Each of these indicators should be reconsidered with a statistical base, be estuary-wide, and follow basic principles of scientific design. As one example, herons are only avian indicators. Another bird besides the heron should also be included. When these indicators are reviewed, they should also include a better balance of good economic indicators with more emphasis than exists now on environmental indicators.

In “The Living, Working River,” the emphasis has been more on economics than the living part of the rivers. For example, only regional parks are included and FREMP needs to include municipal parks and the dykes such as are in Paul Skyte’s greenway programs. Additionally, the recreational indicators only deal with numbers using the parks, not the quality of parks and how these parks are helping to preserve habitat.

We have many more issues than can be dealt with here today with which the Coalition has grappled since 1977. Some of them involve the Point Grey Dumpsite which is still being used, Burns Bog which has still managed to keep development at bay, the lack of planning perspective by government agencies at all levels that leads to significant incremental habitat loss, Finn Slough which is still threatened, and navigation and dredging. Basically, then we are concerned with the cumulative impacts of development within the estuary as we have been for the past twenty-five years!

4. Bob Purdy, Fraser Basin Council

Bob is Director of Corporate Development for the Fraser Basin Council. The Fraser Basin Council is a not-for-profit, charitable organization established in 1997 to ensure the sustainability of the Fraser Basin. The Council works to facilitate problem solving by bringing together the people necessary to make decisions that balance social, economic and environmental values

- See Appendix 3 for a summary of Bob’s presentation.

Summary Notes: Question & Answer Session

The following summarizes some of the comments and questions raised after the panel presentations:

- It was noted that there were no First Nation representatives at the workshop. It was further noted that First Nations were invited but resources and other issues prevented them from attending.
- FREMP is weak in public education – the Program should look at schoolroom education as it did in past years.
- The boundaries of the FREMP area are artificial and should be expanded.
- A question was raised in connection with water treatment and how the river can be sustainable in the absence of major upgrades to the GVRD water treatment facilities. It was noted that there is a long-term plan for major upgrades, and that the timing and upgrade plans are dependent on political and economic choices. It was further noted that a national strategy on municipal effluent is currently being prepared.
- A comment was made about how little has been accomplished in environmental improvement in the last thirty years. It was noted that considerable progress has been made and an example of this is the contaminated sediment clean-up associated with an industrial plant near the North Fraser River Port Authority. The GVRD should be monitoring outfalls rather than the receiving waters. A comment was made that the GVRD has a comprehensive and effective monitoring strategy.
- It was noted that to participate in events and activities organized by the Fraser Basin Council, participants must pay at least \$400. Bob Purdy offered to speak to participants to explore ways to accommodate all interested individuals at Fraser Basin events.

Appendix 3: Bob Purdy's presentation

The Fraser Basin Council:
Collaborative Governance for a Sustainable Basin



Presentation Overview


- Introduction to the Fraser Basin Council (FBC)
- Recent FBC Activities Regarding the Estuary
- Looking Ahead: Challenges and Opportunities




The Fraser Basin



Typical Fraser Basin Council Roles



- Catalyst to Bring People Together to Solve Problems
- Impartial Facilitator
- Jurisdiction and Conflict Resolution agent
- Sustainability Educator
- Resource in Support of Informed Dialogue & Decision-Making



The Fraser Basin Council
A Unique Model of Governance

A balanced and flexible partnership, comprised of:


“4 Orders” of Canadian Government
(Federal, Provincial, Local, First Nations)

+

Private Sector

+

Civil Society



**Recent FBC Activities
Supporting a Healthy Fraser River Estuary**




- Integrated Flood Hazard Management
- Waterborne Debris Management
- *Changing Face of the Fraser River Estuary* Symposium
- Greater Vancouver Gateway Council waterborne transportation study
- Memorandum of Understanding with FREMP/BIEAP
- Sustainability Indicators / State of the Fraser Basin Conference
- Partner in the GVRD Sustainable Region Initiative



**Looking Ahead: Some of the Challenges
(From a Process Perspective)**

- Resources to Support Informed Decision-Making
- Integration of Social, Economic and Environmental Considerations in Decision-Making
- First Nations Engagement
- Citizen Fatigue
- Public Education
- Increasing Conflict When “Times Are Tough”



**Looking Ahead: Opportunities
(Again, From a Process Perspective)**

- Updating the Estuary Management Plan
- The GVRD Sustainable Region Initiative
- New directions for the Georgia Basin Ecosystem Initiative
- Marpole Basin “big picture view” potential pilot project
- Updating the FBC - FREMP/BIEAP MOU
- Using Dialogue / Win-Win vs. Debate / Win-Lose




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Appendix 4: Anna Mathewson's presentation


Updating
A Living Working River:
the Estuary Management Plan for the
Fraser River

November 28, 2002
Workshop, New Westminster

Setting the context

- Overview of FREMP
- The Estuary Management Plan (EMP)
- Updating the EMP
- Consultation input to date
- Workshop objectives

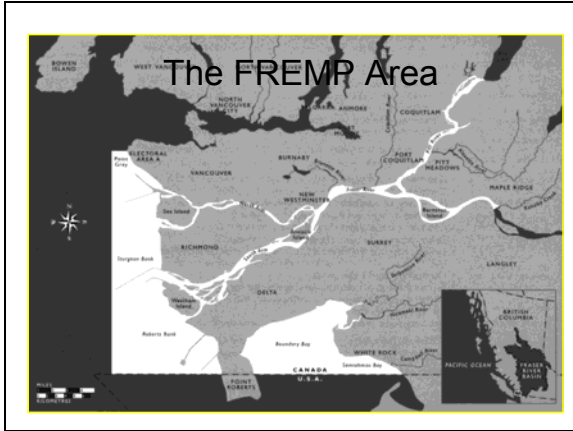
The Fraser River Estuary



- Globally significant ecosystem
- Rich habitat for fish and migratory birds
- Marine transportation route
- Expansive urban region
- Recreational asset

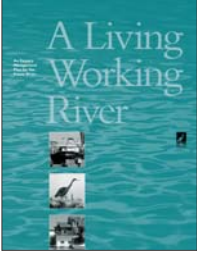
FREMP

- FREMP is a partnership for integrated management of the estuary
- FREMP emphasizes “made-in-the-region” policy solutions
- FREMP coordinates the environmental review of projects that can affect the environment



- ### The FREMP Partnership
- Ministry of Water, Land and Air Protection
 - Environment Canada
 - Fisheries and Oceans Canada
 - Fraser River Port Authority
 - North Fraser Port Authority
 - Greater Vancouver Regional District

The Estuary Management Plan



- Vision, Goals & Principles
- Six Action Programs
 - TARGETS
 - ACTIONS

The Estuary Management Plan

Vision:
To improve environmental quality in the Fraser River estuary while providing economic development opportunities and sustaining the quality of life in and around the estuary

- ### The Estuary Management Plan
- Goals:**
1. Conserve and enhance the environmental quality of the estuary to sustain healthy fish, wildlife, plants and people.
 2. Further the estuary's role as the social, cultural, recreational and economic heart of the region.
 3. Encourage human activities and economic development that protect and enhance the environmental quality of the estuary.

- ### The Estuary Management Plan
- Action Programs:**
- Water Quality Management
 - Fish and Wildlife Habitat
 - Navigation and Dredging
 - Log Management
 - Industrial and Urban Development
 - Recreation

Achievements

- Development and updating of habitat classification system
- Net gain of productive habitat
- Sustainable sediment removal (through dredging)

Achievements

- Compliance with FREMP log storage guidelines
- Completion of six Area Designation agreements with municipalities
- Expansion of parks and trails

Reasons for updating the Plan

- To ensure the EMP remains a useful tool for sustainability
- To reflect change in the estuary
- To accommodate change in legislation
- To identify new targets and actions

Process for updating the Plan

1. Phase 1: Announce Update
2. Phase 2: Gather Input (current phase)
 - Community workshops June and July 2002
 - One-on-one consultations
 - Workshop and boat tour November 28, 2002
3. Phase 3: Drafting and Review (Winter and Spring 2002/2003)
4. Phase 4: Approval and Endorsement (Plan ready for approval April 2003)

What we've heard: EMP scope

- Purpose of EMP has evolved
- Focus on fewer, more practical issues
- Set targets that are achievable
- Improve links between Action Programs

What we've heard: Vision, Goals & Principles

- Vision and goals are still valid
- Refocus vision on achieving a healthy ecosystem
- Third goal unclear and needs to be reworked
- Incorporate concepts of sustainability

What we've heard: Action Programs

- Six Action Programs still a useful framework
- Continue certain actions
- Some actions obsolete or completed
- Include new actions and ideas

Workshop objectives

- Report on consultations to date
- Review and prioritize proposed objectives and actions within the six Action Programs
- Identify and discuss any barriers to implementation

Next Steps

- Report out from today's workshop
- Begin drafting the updated Plan
 - Internal drafting and review
 - First draft circulated and posted on web
 - Open House to review draft in Feb. 2003
 - Plan ready for approval April 2003

Appendix 5: Breakout Group Agenda

10:15 – 10:20 am Welcome and Introductions (5 minutes)

- Facilitator and participant introductions
- Review of breakout group agenda
- Request a volunteer note taker

10:20 – 10:30 am Objectives (10 minutes)

1. Review draft objectives for your selected action program
2. Are these objectives appropriate and achievable?
3. Do any of the objectives require revisions?
4. Are there gaps? If so, what objectives are missing?
5. Fill in template sheet

10:30 – 10:45 am Actions (15 minutes)

1. Review draft actions for your selected action program
2. Are these actions appropriate and achievable?
3. What other actions could we employ to meet these objectives?

10:45 – 11:00 Barriers to Actions (15 minutes)

1. What are the barriers to action in this action program?
2. What kind of barriers are they (discuss one at a time)?
 - a. Institutional (e.g., people or organizations not working together)
 - b. Resource (e.g., lack of funding, staff, or expertise)
 - c. Other
3. What other actions could be employed to meet the objective without encountering the barriers?
4. Fill in template sheet

11:00 – 11:05 Priority Actions (5 minutes)

1. What are the priority tasks in this action program? Rank the actions. (Consider priorities in terms of likelihood of occurrence and significance of impact.)
2. Fill in template sheet

11:05 – 11:15 am Other Issues (10 minutes)

1. Other Action Programs: Opportunity for participants to provide input regarding other action programs
2. Fill in template sheet (use template sheets from above)

11:15 am – 11:25 pm Summary of group discussions on template sheets (10 mins)

11:25 – 11:30 am Return to plenary (5 minutes)

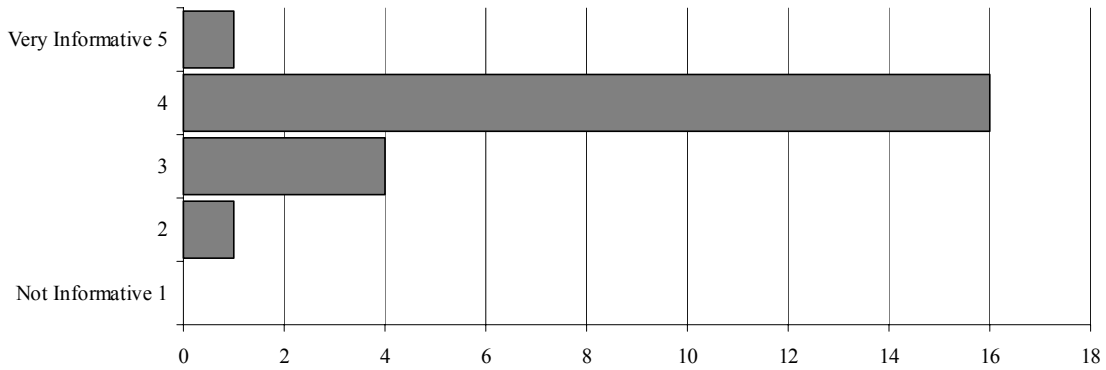
11:30 – 11:45 am Report back from breakout groups to plenary (2-3 minutes per facilitator)

Appendix 6. Workshop Evaluation Summary

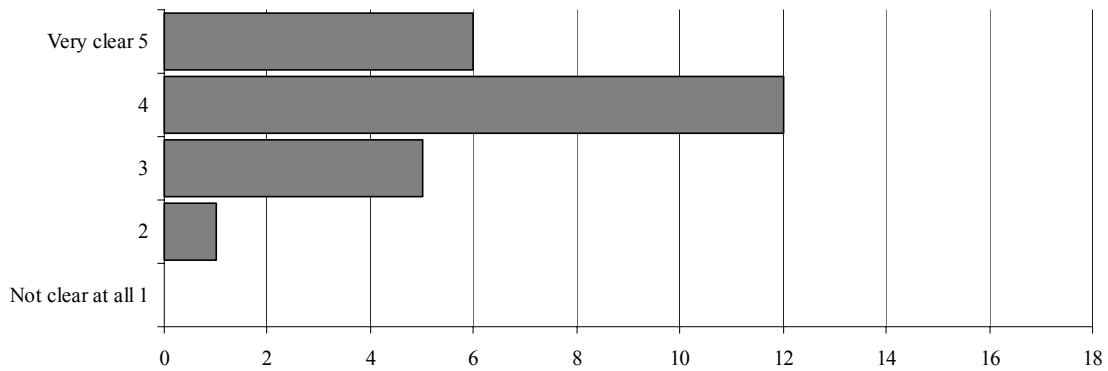
November 28, 2002 – Updating the EMP

Q1. How many people attended both this workshop, as well as the workshops in the spring? 9

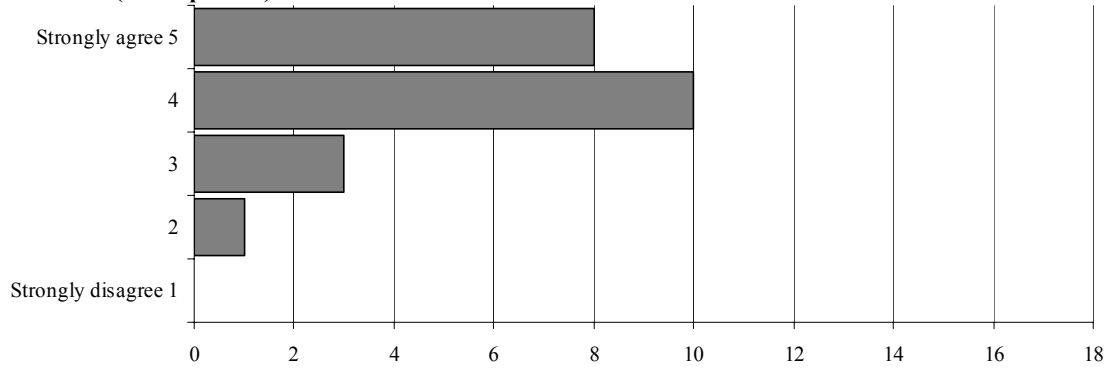
Q2. The information provided in advance of the workshop was: (22 responses)



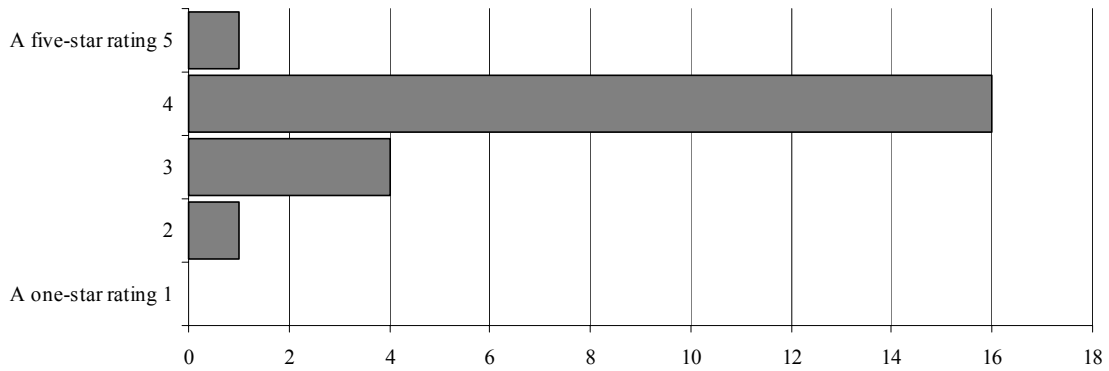
Q3. The goals of the workshop were: (24 responses)



Q4. The break-out groups allowed me an opportunity to raise and discuss my issues and ideas: (22 responses)



Q5. Overall, I would give this workshop a: (24 responses)



6. What did you like about this workshop?

- informative and thought provoking
- gave opportunity to express views
- informative
- good, seemingly fairly diverse participation (f)
- facilitation and discussion opportunities
- strong facilitation of general presentation and breakout groups
- break-out group: intense discussion, almost enough time to tackle objectives of group
- good group of participants – well facilitated
- the “big picture” thinking considering a large variety of integrated issues
- opportunity to discuss issues with people from many sectors
- the ability to find out what the current status of FREMP is in specific areas
- the facilitator was very articulate
- the group discussions were relaxed
- the setting was quite comfortable
- good variety of public/agency
- good topics and good focus
- mix of public and agency talking about issues
- moved along well
- short reports back
- friendliness and an excellent group of participants

7. What things could be improved about the workshop?

- better representation from private business
- timing at 11:30 deadline not enforced well
- need to focus on more clear actionable objectives
- a full day would have been good
- very difficult to get the specific input you were asking for (f)
- better timeline commitments for deliverables
- probably worth lengthening to accommodate more ‘large group’ discussion time
- full day – attend 2 break-out groups
- more thorough background information would have been helpful (first time participant)
- more specific discussion on issues
- more drinks – would like more water offered
- need Environment Canada representation on work groups, especially Water Quality
- more interaction of the various groups
- larger timeframe for discussion of the issues and opportunities to discuss more than one issue area
- not enough time. need a microphone – the Discover Centre’s acoustics are not very good

(7. What things could be improved about the workshop? cont'd.)

- **breakout sessions:**
 - a bit noisy, as close to each other
 - not enough time, very rushed
 - time challenged
 - timeline too short – a lot to cover. perhaps limit focus in future to get more out of discussion?
 - due to limited time, needed more structure
 - very difficult time constraints. I'm not convinced my group felt happy about their opportunity to give input (f)

8. Other comments:

- good discussions throughout
- avoid overly broad planning platitudes
- looking forward to “new” draft plan (FREMP)
- good job guys – difficult thing to accomplish (f)
- I got the sense from the group that they would have liked more opportunity to discuss things, both within each group and for other action items (f)
- strongly agree with need for education, especially of stakeholders such as municipal staffs, on FREMP's role and their project review process. The pamphlets I picked up look helpful and should be distributed more widely.
- generally, it would seem FREMP needs to focus their scope, recognize their jurisdiction and set goals that are achievable and valuable without simply adding a layer of bureaucracy
- great location
- the level of discussion was impressive. the knowledge the participants displayed on the overall issues was appreciated
- good workshop!
- had a sense that discussion groups were productive
- overall, very worthwhile, but I think people should be allocated to the break-out groups, so that each group would have a mix of interests and we would all learn from each other

Appendix 7. List of Participants

List of Participants

Donna Bartel	Fraser River Port Authority
Tom Bell	Min. of Water, Land & Air Protection
June Binkert	Fraser River Coalition
Adam Blades	Fraser River Discovery Centre
Jessica Bratty	Fraser Basin Council
Bert Brink	Fraser River Coalition / Federation of BC Naturalists
Ken Brock	Environment Canada
Clay Brown	Coast Forest Lumber Association
David Brownlee	City of Richmond
Glen Carlson	MWLAP
Sherry Carroll	CRWS, ARC, Artforms
Jim Charlebois	District of Maple Ridge
Brian Crowe	City of Vancouver
Blair Baignee	JJM Group
Heather Deal	David Suzuki Foundation
Ian Fisher	City of Vancouver
Jeffrey Flemming	Wreck Beach Preservation Society
Sharon Folkes	City of Port Coquitlam
Tom Gibson	Lehigh Northwest Cement Ltd.
Nathan Gregory	Dillon Consulting Ltd.
Susan Haid	Greater Vancouver Regional District
Wendy Hales	Douglas College
Ken Hall	Institute for Resources & Environment, UBC
Gary Haukeland	Goddard & Smith International Realty
Jack Hobson	Council of BC Yacht Clubs
Ralph Howatt	EBCO Industries Ltd.
Karen Hutton	Fisheries & Oceans Canada
Bruce Kay	Environment Canada
Hugh Kellas	GVRD
Gordon Kibble	Richmond Advisory Committee on the Environment
Jim Mattson	
Brian Naito	Fisheries & Oceans Canada
James Neville	City of Coquitlam
Robert Pearson	Grosvenor Canada Ltd.
Lou Pelletier	City of Burnaby
Bob Purdy	Fraser Basin Council
Bruce Reid	Fisheries & Oceans Canada
Simon Robinson	Vancouver International Airport Authority
James Schaefer	Wreck Beach Preservation Society
Stephen Scheving	City of New Westminster
Olga Schwarzkopff	BCEN Water Caucus

Jennifer Simpson	Fisheries & Oceans Canada
Paul Skydt	GVRD
Terry Slack	Fraser River Sturgeon Conservation Society
Gary Smith	Canadian National Railway
Dick Stace-Smith	Fraser River Coalition
Councillor Harold Steves	City of Richmond
Joe Sulmona	City of Coquitlam
Karyn Thomson	City of Vancouver
Chris Underwood	City of Vancouver - Engineering Services
Andrew Upper	Land & Water BC
Albert Van Roodselear	GVRD
Christianne Wilhelmson	Georgia Strait Alliance
Gary Williams	GL Williams & Associates
Judy Williams	Fraser River Coalition
Councillor Elect Lorrie Williams	City of New Westminster
Pamela Zevit	Min. of Water, Land & Air Protection