PART III: SUMMARY

2. Conclusions

2.1 PRINCIPLES TO GUIDE SALMONID RECOVERY

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The Technical Committee recognizes that habitat management itself cannot recover depressed salmonid populations, but it is one of the necessary steps of recovery. The salmonid populations of the Green River Basin (WRIA 9) evolved in an environment that itself was shaped over the last 10,000 years. Over the last 150 years, the environment of the Green River Basin has been highly modified. Many of the ecosystem processes that were historically present and are necessary for successful salmonid production have been interrupted. The protection of existing properly functioning ecosystem processes and restoration of essential degraded processes in the freshwater, estuarine and marine environment is necessary for successful salmonid recovery. These efforts will reestablish the ecosystem processes that helped shape salmonid evolution and should maximize the chances for salmonid recovery. Without these changes, the successful recovery of naturally producing salmonid populations is highly unlikely.

Over the last several decades, scientists across the Pacific Northwest had been learning about the needs of salmonids and the role of the freshwater and nearshore habitats in their life histories. While still growing, the resulting body of knowledge has produced a number of well-accepted ecological principles and goals regarding salmonid conservation needs. The authors of this report have drawn from this accumulated wisdom a set of principles relevant to salmonid recovery in WRIA 9. The sources of these principles, shown below, include a number of widely accepted documents. The references in brackets indicate the pages that list the principles/goals:

- Coastal Salmon Conservation: Working Guidance for Comprehensive Salmon Restoration Initiatives on the Pacific Coast - National Marine Fisheries Service (1996) [pages 12-13]
- An Ecosystem Approach to Salmonid Conservation, Spence, Lomnicky et al. (1996) ("ManTech Report") [pages 191, 202-203]
- Return of the Kings: Strategies for the Long-Term Conservation and Recovery of the Chinook Salmon – King County's Response Report to the proposed Endangered Species Act Listing (March 1999) [Chapter 2; page 3]
- Initial Snohomish River Basin Chinook Salmon Conservation/Recovery Technical Work Plan, Snohomish Basin Salmonid Recovery Technical Committee (October 1999) [Chapter VI; pages 76-77]
- Ecological Principles, Christopher Frissel, 1997. In Williams et al., Watershed Restoration: Principles and Practices. American Fisheries Society. [Chapter 7, pages 96-115]

The following is a <u>non-prioritized</u> list of the principles that the Technical Committee believes should underlie the proposed strategy for WRIA 9 and specific action recommendations:

- Protect and maintain existing physical, chemical, and biological processes and the habitats they form as well as restoring those that have been degraded or lost;

    - Protect and restore the natural ecosystem processes responsible for creating habitats required by salmonids;

- Protect and restore those habitats that are necessary during all life stages of salmonid development;

- Maintain quality habitats that function as refugia from which salmonid populations may expand;

- Maintain the corridors (connectivity) that link habitats and emphasize the (re)connection of freshwater, estuarine, and saltwater habitats and their associated zones as required by salmonids during all life stages;

- Adopt an ecological approach to maintaining, improving, and restoring freshwater, estuarine, and saltwater habitats and their associated zones;

- Emphasize self-sustaining runs of naturally-spawning salmon when developing protection and restoration strategies;

- Preserve protection and restoration/rehabilitation opportunities of critical habitats; and

- Employ scientifically rigorous adaptive management techniques to all elements of recovery activities for WRIA 9.