Key Principles from the Northwest Power Act

Mainstem river survival improvements, habitat and production measures, and harvest regulations all must work toward rebuilding healthy fish and wildlife populations. Drawing a blueprint for these changes ultimately requires a judicious consideration of all the standards of the Northwest Power Act. Within this framework, however, several points deserve emphasis:

- **System approach:** In developing the Columbia River Basin Fish and Wildlife Program, the Council must deal with the Columbia River and its tributaries as a system. This system touches a broad range of human activities: hydropower production, navigation, flood control, agriculture, recreation and many other land and water development activities. Opportunities for improved coordination and cooperation, as well as for increased conflict, are enormous. Building a fish and wildlife program that properly accounts for these activities requires the broadest possible involvement of the public and affected interests.

- **Regional power supply:** While the fish and wildlife program must "protect, mitigate and enhance fish and wildlife affected by the development, operation and management" of Columbia River Basin hydropower facilities, it must do so in a way that ensures the region "an adequate, efficient, economical and reliable power supply." This concept is discussed further in Section 1.8. The Council has called for aggressive exploration of structural changes to the hydropower system, such as reservoir drawdown strategies, as well as non-structural changes, such as innovations in system operations, seasonal power exchanges, water use efficiencies and the like. These non-structural innovations in particular will require careful integration of power system, fish and wildlife, and other water needs.

- **Federal responsibilities:** The Northwest Power Act explicitly gives Bonneville the authority and responsibility to use its legal and financial resources "to protect, mitigate, and enhance fish and wildlife to the extent affected by the development and operation of any hydroelectric project of the Columbia River and its tributaries in a manner consistent with ... the program adopted by the Council ... and the purposes of this Act." The Act further requires Bonneville and the federal hydropower project operators and regulators to take the program into account to the fullest extent practicable at each relevant stage of their decision-making processes.

- **Public involvement:** The Council is required to consult with a variety of groups in the Northwest and to maintain comprehensive programs for public participation. This program reflects those requirements.

- **Fishery management:** The region's fish and wildlife agencies and Indian tribes (often described collectively in this program as the "fishery managers") play a special role in the program. The program must complement the agencies' and tribes' existing and future activities, and also must be consistent with the legal rights of Columbia Basin tribes.

- **Best available scientific knowledge:** In considering fish and wildlife recommendations, the Act requires the Council to rely on the best available scientific knowledge. Because that knowledge often is incomplete, future research, particularly regarding salmon, should focus on critical uncertainties. The region must take pains to monitor actions and make adjustments where advisable.

- **Lowest cost alternatives:** Where equally effective means of achieving the same sound biological objective exist, the Council chooses the alternative with the lower economic cost. The Council is

committed to finding ways to do such analysis. In addition, the Council expects that Bonneville will do additional work on cost-effectiveness in its implementation of habitat measures.

- **River flows:** The Act specifically recognizes that salmon depend on "suitable environmental conditions substantially obtainable from the management and operation" of power generating facilities of the Columbia River Basin. The Council is directed to adopt measures to "provide flows of sufficient quality and quantity between such facilities to improve production, migration and survival of such fish as necessary to meet sound biological objectives."

- **Equitable treatment:** The Act requires federal implementing agencies to manage and operate hydropower facilities to provide "equitable treatment for fish and wildlife with the other purposes for which such system and facilities are managed and operated." Therefore, the Council's determinations regarding salmon and fish and wildlife survival in the main bodies of the Columbia and Snake rivers, where the major federal dams are located, aim to meet the needs of salmon with a level of certainty comparable to that accorded the other operational purposes.