PugetSoundPartnership
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LEADERSHIP COUNCIL DISCUSSION DRAFT – July 9, 2009[1]

Floodplains in Puget Sound

In April 2009, the Puget Sound Partnership began a project relating to floodplains in the Puget Sound basin in order to increase its understanding of the significant policy issues involved in managing floodplains, and to begin to identify key actions that could be taken to further the goals of the Action Agenda. Working with a consultant, the Partnership interviewed key stakeholders, both individually and in groups, to gain firsthand insight into the competing goals of people interested in protecting and restoring floodplains and those who manage floodplains for certain uses of that land. Those stakeholders contributed a great amount of their time and knowledge about the use of lands in floodplains for this study, and we thank them for their contribution.[2] As a result of these interviews and additional background research, we compiled a list of issues and perspectives that the Partnership should consider about the use and management of floodplains, and what appears to be driving the use of those lands.

EDITOR'S NOTE: We found that there are widely varying perspectives on the use and management of floodplains in Puget Sound. We also heard many opinions about what should be done in the future. The Section below addresses only the issues and perspectives portion of what we heard, so that the Leadership Council gains a full understanding of where the community is today and what the issues are that we must resolve if we are to protect and restore floodplains as called for in the Action Agenda. It is anticipated that the recommended opportunities for future action by the Partnership and others will be presented at the Leadership Council's Fall meeting.

A. COMMUNITY PERSPECTIVES ON THE USE OF FLOODPLAINS

There are many different views about the use and management of floodplains. Those perspectives include:

ECOLOGICAL PERSPECTIVES

[1] This draft is a slightly modified version of the Review Draft that was circulated to the interviewees on July 1, 2009. A small number of modifications were made to add clarity and correct minor text errors.
[2] A list of those persons participating in the interview process is included at the end of this document.

1. The land in floodplains is important for providing flood storage and for the habitat-forming processes, structures and function ("floodplain functions") that occur there. Rivers and their floodplains are important places in the life stages of salmon, bull trout and other species of fish and wildlife.

2. Many people believe we are not adequately protecting river and floodplain functions.

3. The natural floodplain of rivers presents great opportunities for recreation (fly fishing, hiking, camping and other uses). When rivers are constrained, this recreational opportunity may be lost.

4. Floodplains are important for recharging streams and groundwater, and filtering water pollution.

5. The protection and restoration of floodplain function is essential for the recovery of ESA-listed salmon species such as Puget Sound Chinook Salmon, which is a primary food source and important to the recovery of listed Orca whales in Puget Sound.

6. Puget Sound Tribes have already significantly modified their Treaty-protected harvest rights to support recovery of listed Chinook salmon. This is a cultural and financial sacrifice for these Tribes, and they expect that similar sacrifices will be made by non-tribal members of the Puget Sound community to protect and restore the ecological systems, including floodplains, needed to achieve recovery of these species.

HUMAN USE PERSPECTIVE (People, Infrastructure, Farms and Businesses Uses)

7. Floodplains and rivers should be, and have always been, controlled to protect against risks to life and property.

8. Restoring habitat can take away areas for recreational use and sometimes is dangerous to people (e.g. placing large woody debris back into rivers and in floodplains can be dangerous to swimmers, boaters and rafters).

9. There is already development in many Puget Sound floodplains and some cities and counties are actively planning for more urban growth in floodplains. There is also a significant amount of public infrastructure (such as transportation systems, sewage treatment plants, water and gas pipelines, and electrical power transmission lines) in floodplains. As a result, the alteration and impairment of floodplain function is necessary to protect the built environment.

10. Continued farming in floodplains is essential to ensure the economic viability of the Puget Sound agricultural industry and to ensure the availability of local food sources. If farming is to continue, the alteration and impairment of floodplain function is necessary to protect it.

11. The Growth Management Act (GMA) requires counties to designate agricultural lands of long-term commercial significance, depending on soils and other considerations. Many of these lands are in floodplains. Once designated, the law requires that the land is used for farming and not other uses. This means that it is likely that dikes and levees will be built, managed and repaired in floodplains to protect those lands over time. It also means that the conversion of those lands to conservation uses is difficult and discouraged by state law.

B. PROBLEMS WITH FLOODPLAIN MANAGEMENT

There was general agreement within the group of stakeholders we interviewed that there are some systemic problems with the current way floodplains are managed under federal, state and local laws and policies. Common themes expressed include:

1. Apart from the broad goals stated in the Action Agenda and Puget Sound Chinook Salmon Recovery Plan, there is no statewide or regional overarching policy or strategy for protecting and restoring floodplain function across Puget Sound.

2. Management of floodplains in Puget Sound is accomplished in a piecemeal fashion because of the structure of our legal and regulatory system. As a result, there is little opportunity to consider the ecology of an entire river system or the constraints placed on it by levees and alteration of the floodplain.

3. Current floodplain management efforts do not adequately account for changes that are occurring as a result of climate change. These effects include larger, more frequent storms which cause increasingly severe flooding and risk to people and property.

4. In addition, current floodplain management regulations and programs do not adequately take into account the cumulative impacts – including those from hydrologic alteration and increased stormwater-borne pollution – on floodplains that result from upland development and the accompanying loss of forest cover and increases in impervious surfaces.

5. There are a variety of incentive programs designed to achieve protection of habitat areas across the landscape, including floodplains (e.g., purchase of development rights, transfer of development rights, conservation easements, flooding easements, flood protection districts, tax classifications such as open space taxation), but there is no "silver bullet" approach that appears to be extremely successful at limiting further alteration of floodplains or causing large numbers of landowners to remove structures from floodplains.

6. Federal and state agencies believe they individually lack the sufficient breadth of regulatory authority that would be required to manage floodplains in a way that would achieve protection and restoration of full floodplain function.

7. Federal and state agencies believe that cities and counties are the units of government in the best position currently to regulate floodplains through local land use controls. However, they recognize that this is complicated and there are often multiple local governments (and other agencies) regulating and managing portions of any single floodplain.

8. Most cities and counties adopting critical areas regulations provide exemptions and variances from the protection standards to allow construction of infrastructure, residential development, utilities and other uses in the floodplain.

9. The Shoreline Management Act applies in some areas of floodplains, but has competing policy goals that call for recreational access to shorelines, the support of water-dependent uses (such as industry) and conservation. It also has exemptions and allowances for alteration of habitat in flood plains.

10. Many people view FEMA's National Flood Insurance Program (NFIP) as the regulatory tool with the most potential for achieving consistent floodplain habitat protection across Puget Sound, if those standards are amended to meet the requirements of the Biological Opinion issued by NMFS.

11. Existing conservation regulations (such as development regulations including critical areas, shoreline master program, and flood hazard regulations) adopted by local governments are not consistent across Puget Sound, and are not adequately enforced.

12. Some federal agencies have regulatory policies that are inconsistent with the Puget Sound Partnership's stated floodplain goals in the Action Agenda. An example of this includes the U.S. Army Corps of Engineers levee maintenance standards.

13. All federal agencies located in Puget Sound are supportive of regulations or incentive programs that result in better floodplain protection or restoration. However, as to changing their own programs, federal employees are prohibited from lobbying Congress to change federal law. In addition, some federal agencies may need to overcome internal opposition to new floodplain approaches from their agency colleagues or leaders in other parts of the country. Internal opposition may arise out of opposition to the floodplain conservation policy objective, concern about how changes made here would impact the agency's programs across the country, or the need to carry out other priorities in the agency's mission.

C. OTHER CONSIDERATIONS THAT IMPACT FLOODPLAIN MANAGEMENT DECISIONS – Unseen Drivers

Beyond the desired uses of floodplains discussed above, there are other factors (including financial issues) that play a role in shaping and driving the decisions that are made by floodplain managers. These issues can be easily overlooked by those proposing solutions to floodplain conflicts because they are indirectly related to floodplains. Those considerations include:

1. Local governments are in the business of balancing competing interests and this means they don't always prioritize conservation as their highest goal. There are external drivers that influence whether cities or counties prioritize ecological protection or restoration over other goals. These drivers include such things as the desire to ensure that tax revenues are available to support needed municipal services, community support for new legal and policy approaches, a desire to support the needs of local agriculture, and competition from other jurisdictions to attract new business.

2. Some people believe that decision-makers are not adequately accounting for the full cost to society of allowing structures to be rebuilt in the floodplain after a flood loss. They call this the "cycle of repetitive loss." They believe that if full cost were taken into account (including the sociological, economic and ecological cost) of repeatedly operating, maintaining and repairing flood protection facilities before, during and after flooding events, people would see that the cost is simply too high and demand that government stop paying to maintain floodplain structures.

3. The lack of consistency that exists in floodplain regulations across Puget Sound creates uncertainty and risk to developers, businesses, utilities, and transportation agencies, which tends to drive up project costs in floodplains.

4. Some people believe that the way we spend money on infrastructure in floodplains may result in driving new development into those areas. For example, constructing new, high occupancy rapid transit systems (bus or rail) across and in floodplains may drive new urban residential development and businesses into those areas).

5. Federal, state and local governments and Tribes lack adequate resources (funding and staff) to focus on the floodplain management policy issues presented above. For example, most city council members are only part-time elected officials, and many cities have small staffs that are expected to run all of the city's operations. However, all of the agencies cited appear willing to participate in the development of policies or new floodplain management approaches if resources were provided.

D. PEOPLE DESIRE MORE INFORMATION ABOUT FLOODPLAINS

Most stakeholders saw a need for new information that could be used to guide floodplain regulation and management decision-making. This information includes:

1. The completion of the watershed characterization study is widely seen as a necessary tool to identify the areas within river systems and floodplains that are essential to protect habitat-forming processes, structures and functions, and the impact that climate change has had, and will have, on floodplain function. Many believe that this information will be very useful in helping decision-makers reach well-informed policy decisions about the future use and protection of lands in floodplains.

2. Local governments and others need more up-to-date flood maps and predictive models to understand today's high-risk areas for flooding (floodplains, channel migration zones, and flood hazard areas).

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