# Advancing Integrated Floodplain Management at the Local Level

# Discussion Draft - June 2016

#### **INTRODUCTION**

The purpose of the paper is to foster learning across the regional and local network of floodplain leaders and increase the capacity to achieve integrated floodplain management. To do so, this paper provides background information, summarizes efforts underway in the Puget Sound region to manage major river floodplains in a more integrated, collaborative manner and identifies some of the key elements and challenges facing local watershed processes alongside of lessons learned.

Floodplains by Design (FbD) is an ambitious public-private partnership, led by The Nature Conservancy, Department of Ecology and Puget Sound Partnership, focused on integrating and accelerating efforts to reduce flood risks and restore habitat across Puget Sound's major river corridors. By working together, we can coordinate state and federal investments with locally driven solutions that solve multiple floodplain management problems and serve a broad range of affected interests. The goal of FbD is to improve the resiliency of these floodplains for the protection and enhancement of human communities and the health of the ecosystem, while supporting values important in the region such as agriculture, clean water, a vibrant economy and outdoor recreation.

Floodplain managers and stakeholders are increasingly gravitating toward an integrated approach to floodplain management. FbD embraces a holistic and collaborative approach to decision-making that brings together multiple interests to find common agreement on local floodplain visions, strategies and actions. FbD believes that by working together we can better confront shared challenges, attempt to reconcile competing priorities and collectively identify tradeoffs. By integrating flood risk reduction, salmon recovery, agriculture, recreation and other floodplain management goals we can produce greater results — and do so more efficiently. We can also make wise capital investments that take into account projected climate impacts for the future. This collaborative, holistic approach to floodplain management can deliver more benefits (and fewer risks) to more people, and do so in a way that makes better use of limited public funding. Integrated floodplain management requires a tailored approach in each river reach to effectively address current conditions, stakeholder interests, and projected local climate impacts.

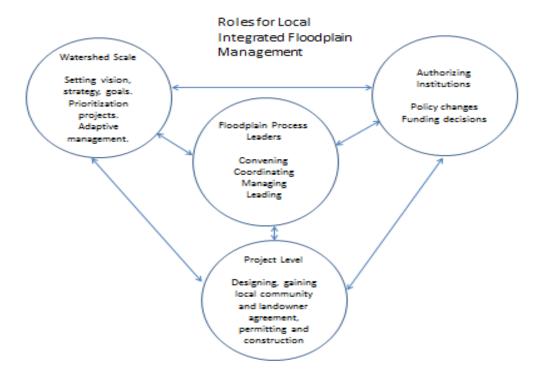
#### STATUS OF LOCAL EFFORTS FOR INTEGRATION

In the fall of 2015, in response to a request from the FbD team, leaders working in many of the local watersheds articulated the current status of their integrated floodplain management vision and efforts. Several of the findings are summarized below:

- Local leaders and partners in many watersheds have significant aspirations for improving the
  conditions of their floodplains for people and nature. There is an interest to significantly
  improve reaches of major rivers in over 40 percent of 800 miles of floodplain in Puget Sound as
  well as protect areas currently functioning naturally or for the continued production of
  economic or other social values.
- Currently, there is a process in the majority of Puget Sound major river floodplains to create a
  unifying, broadly-supported vision and action plan to transform their floodplains. There are
  strong commitments to advance local integration and develop stakeholder agreement to take
  significant action.
- However, only a few areas currently have specific agreements on the goals, suites of actions or
  costs associated with achieving their local vision, goals and strategies. Also, most of the local
  processes are led by local staff that have many other responsibilities and limited, formal training
  in leading community-driven collaborative processes involving diverse interests.

#### LOCAL STRUCTURES AND PROCESSES FOR INTEGRATED FLOODPLAIN MANAGEMENT

Integrated floodplain management is a continued and on-going process of reaching broad community goals through a variety of local structures by implementing suites of actions (projects and policies) that achieve results. This is accomplished by working with those having legal rights, responsibilities or a vested interest in the outcomes. Integrated management at the watershed level requires a sophisticated interweaving of processes involving multiple groups and the authorizing institutions and environments. In many areas, integrated management is a combination of processes that are distinct for salmon recovery and flood risk reduction. Although, the structures and processes may look very different across the major river floodplains in Puget Sound, there are some general similarities depicted in the figure below.



Watershed scale groups often consist of representatives or staff members from tribes, federal and state agencies and local governments. They also may include non-governmental organizations, other interest groups or individuals. These participants are critical to doing the work of integration; setting a vision, a strategy to achieve it, and prioritizing actions for available funding. This is also the right scale for tracking results and making changes to the vision, strategy and actions as needed to stay on course over time. These groups often include salmon recovery Lead Entities, tribal staff, flood management groups like dike and drainage districts, nonprofits, local governments and citizen and business representatives.

Authorizing institutions include those that through their political influence, programs, policies and funding affect actions from land use to on the ground projects critical to achieving goals established through a collaborative process. They include local, state, tribal and federal governments, as well as private and public funders. Decision-makers include, but are not limited to: city, county and elected officials, agency heads and tribal councils or leaders. There has to be coordination between the authorizing institutions and the watershed scale and project level groups to ensure plans and actions are mutually supported. It is also important to ensure that watershed level and project level groups are keeping decision-makers informed about the process, representing the decision-makers' viewpoints, and getting commitments to change institutional policies and programs. Reaching agreement on watershed wide goals and strategies with participants at the watershed scale will have limited benefit if there is no support from decision-makers to implement the agreed-upon actions or address the other policies and programs that are working counter to actions. This last point cannot be overstated and must be strategically and diligently planned for.

It should be noted that often those affected in the community and business sectors (this includes the agricultural and fishing industries) potentially lose time and money by participating in these processes, while staff are paid. This frequently creates a tension in designing effective processes at the local (see paragraph below) and watershed scales. Paid staff often predominates in each of the three areas (local, watershed and authorizing) and then community members are seen as "a barrier" as they often engage in the process once threatened by proposed actions because they don't have the time or resources to participate in lengthy, regular, daytime meetings. An effectively designed process will need to work with these dynamics in support of constructive citizen and business engagement.

**Project level** work is needed to implement actions in specific areas of the floodplain. This work includes designing projects, informing and getting agreement from landowners and other community interests, and managing the permit and construction processes. Reaching agreement on goals and actions for the watershed does not necessarily translate to the level of agreement needed for specific project actions. At the project level, the community and landowners directly affected also have a significant interest and authority that has to be addressed for a robust vision, set of strategies and actions and ultimately specific actions to move forward.

Floodplain process leaders are essential to convene various groups, coordinate across different parts of a local integration structure, manage the process consistent with schedule and budget, and provide and inspire leadership to address significant issues. One person who enlists the support of others as needed often provides this role.

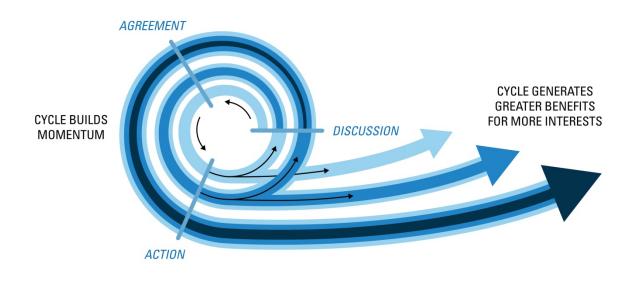
In establishing and maintaining a governance structure for integrated management at the local scale, it is helpful for the floodplain process leader(s) to chart out the various decision-making and authorizing environments necessary for success at the reach and project levels. It will not be possible to establish a structure that addresses all the linkages likely necessary for an idealized success. It is most important to determine what linkages can be solidly built and to clearly inform integrated management leaders of their role in articulating their goals, needs and actions with larger institutions or communities. All participating leaders will likely have similar issues bridging these gaps with authorizing environments; so creating an honest discussion about how to address well-known limitations is critical to maintaining trust and mutual respect within the group.

#### THE CYCLE OF INTEGRATED MANAGEMENT

Across Puget Sound, we see that areas working towards integrated management tend to move through a cycle similar to that depicted in the infographic below. The ever-enlarging arrows in the infographic depict a building cycle of "discussion-agreement-action-discussion." We see across Puget Sound that integrated management evolves as agreement and action build momentum, thus engaging either a broader set of stakeholders and interests or requiring a deepened and more specific discussion among already engaged parties. This cycle leads to a more robust discussion and agreement and larger, more significant, suites of actions over time. It is critical however, for integrated management efforts to ensure that they have the capacity to effectively broaden their efforts without becoming stretched too

thin to continue to ensure that the interests of participating groups are not diminished as a broader set of interests is incorporated. The addition of new interests should be done in order to improve the overall results that are generated and/or to ensure that a path of implementation can be achieved.

# The Cycle of Integrated Management Building Toward Greater Achievement



The description of the integrated management cycle described below focuses on work at the watershed scale, but the cycle is also pertinent to the work for engaging people at the project scale as well as the authorizing institutions.

<u>Discussion</u>: Integrated management often starts with discussion between interested parties at the watershed level. Discussion is intended to build trust and mutual respect and allow people to express their goals and needs. After discussion has led to a shared vision (which initially may be very general), the group is able to move to agreement and potentially action. In many cases, after watershed-scale agreement, there is still additional discussion needed on reach-scale plans and project-scale actions. It may be important during the discussion period for early actions or steps to be taken prior to reaching a full agreement. Many of these processes can take years to reach meaningful agreements. During this timeframe "landmines" can occur from existing but contrary policies or programs or actions taken by those outside of (or even within) the group. Sufficient resources during this timeframe to address these landmines as they arise or take positive actions where early steps can be found may be critical to maintaining participation and building trust while a fuller agreement is reached.

<u>Agreement:</u> Many groups start with general agreements. Over time these agreements, projects, and actions become more detailed and complex as the capacity, respect, and commitment of the group to the full body of work grows. Frequently, as more and broader interests are engaged there is the perception of a setback. Thus, the integrated management

process may not be perceived as a linear advancement even though these periods of setback are actually the opportunity to take the next step of engagement and thus lay the foundation for greater results. Therefore, it is important to encourage integrated management participants and funders to see that these moments of setback are a necessary step as broader interests and needs are incorporated, greater detail is strived for and broader results are sought. Similarly, as groups approach and reach agreement it is often a critical and vulnerable time as new visions and relationships are forged. This time period poses a critical opportunity for early seed money, resources to address programmatic or policy changes, or other indications that the agreement will indeed launch a new commitment. It is critical that resources are available for the most important tasks (not just ones that can be funded). This is a time period where trust is often either deepened or diminished.

Action: Actions can vary in scale. In some cases, once a group has agreed on a broad vision, they may take action by writing an integrated grant application. Another group further along in its process may take action by constructing a large levee setback project. Once a group has reached a stage of agreement, taking action together on small projects builds trust and momentum and attracts more participants. New stakeholders and new funding sources will require a new cycle of discussion and agreement but also lead to potential larger actions in the future. Maintaining steady momentum through actions (small or large) is critical to driving continued discussion and agreement. It is imperative that outside funders are willing to support the actions that the group has identified as being most important to maintaining trust and building momentum not just advancing a single interest. As many funding sources are single purposed, such as only funding projects benefitting salmon or funding projects that benefit agriculture. If money drives people back to their sole interest, then it becomes hard for the group to sustain trust if the actual actions do not represent their integrated vision.

It is also important to note that the infographic above over-simplifies progress to a "linear" cyclical process. Many leaders working on this issue note that frequently prior to reaching agreement or taking action there are periods of setback or struggle as people grapple with the idea of compromise and feelings of loss, fear, anger, distrust, or uncertainty.

Indeed, many communities resist the idea of compromise and collaboration for many reasons and in some situations compromise may not be possible. If values truly are in conflict and pathways that maximize benefits cannot be found, collaboration cannot be successful and other pathways are necessary. There are several consistent concerns communities appear to struggle with the concept of collaboration or compromise that must be understood and negotiated to determine if collaboration is a possible pathway forward or not. And if collaboration is the pathway these concerns need to be managed and addressed consistently through the process.

#### Consistent concerns:

- The ecosystem has already been significantly degraded and the pathway to sustainability in the face of other community needs seems daunting
- Similarly, agricultural communities have been greatly diminished over the last fifty years and feel their communities and lands are threatened

- The personal stakes may be very high for individual landowners whose property is coveted by other interests, and
- Many flood managers, responsible for reducing flood risk, see a system increasingly unable to be maintained or improved to address current flood risks while also knowing these risks are increasing both due to continued growth in floodplain areas as well as factors such as climate change.

In the face of all this pressure and concern, creating the space to step back and see a vision that includes the needs of others can be challenging. That said, many areas are moving in this direction as they see that their efforts over the last decade where they have been solely focused on their own issue of concern is not sufficient to achieve their needs and goals. It may indeed have been directly hampered from one of the other interest areas.

Floodplain leaders also noted that many outside forces are exerted on the group working through the process noted above. These forces may distort, delay, or temporarily destroy the smooth linearity displayed in the graphic and lead to a much more chaotic appearing process. However, increasingly there is awareness that this apparent chaos is indeed the true community work necessary to bridge and advance complex societal issues.

#### ELEMENTS FOR ACHIEVING WATERSHED LEVEL AGREEMENT AND LESSONS LEARNED

The following elements are common in most integrated floodplain management efforts in Puget Sound. While the elements below seem to represent a linear and logical progression to achieve agreement, in reality, this is often not the case as is noted in the integrated management cycle above. As shown above, integrated floodplain management is built in concentric stages and requires continuous nurturing and support as efforts are managed to achieve ever-clarified goals and suites of actions by broadening and deepening engagement. Floodplain leaders noted that qualities important to success on these elements were: persistence, flexibility and patience.

- Identify participants that hold an interest, legal right and/or management authority in the watershed and/or reach scales. Lessons learned: How a group is convened and who participates influences the process and where sticking points may occur. It may be more important to start small, not include all the stakeholders/issues and build momentum at a realistic scale relative to the staff and leadership capacity. Starting small is acceptable and often the best options for building relationships and trust.
- Convene participants. Leadership is essential and must ultimately serve as the bridge between the broader interests of the group and the authorizing environments of the communities or institutions of the representatives. Thus, it is important to identify who is not only willing to participate but those that are willing to lead or champion the process. Participants will vary by river system. Examples of participants include tribes, agencies, agricultural interests, fish interests, landowners, recreation, business interests, and the public. Lessons learned: Some processes start with authorizing or high level support for a shared vision, while others may have

authorizing and high level support but lack the skills or expertise to move the vision to the reach scale or project level. It is likely there will need to be a series of thoughtfully designed management structures and processes necessary to bridge interests with authorizing institutions and people in the areas on the ground. As these processes often take multiple years, or even decades, there is a constant shift of participants and a need to bring new participants up to speed. This must be done intentionally each time the group changes.

- **Identify the interests and values** of each group of participants. It is often easier for participants to express their position, a preconceived notion of a right answer, than to state their interest, which is a combination of needs, fears, concerns, and hopes. It often takes work within each interest group (for example, just the people interested in flood risk reduction or salmon recovery) to become clear about what is needed, where and why. Once participants are able to express their interests instead of their positions, it can open groups to seeing more options and uncommon partnerships, which may mean seeking mutually beneficial solutions will be successful. It is important to articulate interest specific goals, measurable where possible, at both the watershed scale and the reach scale. 1 Lessons learned: Groups tend to try to "integrate" before the work has been done within an interest area to articulate their own needs, fears, concerns, and hopes in a safe setting where others share many of the same viewpoints. Often there are differing views within a given interest group (i.e., not all "fish people" may have the same interests) that are important to be aware of as the broader discussions unfold. Facilitation needs to ensure that these meetings don't solidify positions but truly move the group to better articulating interests and even differences of opinion within the interest area. Also technical work may be necessary for groups to feel "equal" in their ability to collaborate or compromise. This technical work may need to happen specifically for one interest group and should not be lumped in with a compromise or collaborative approach if there are high levels of distrust, uncertainty, fear or resentment of other interest area needs. Lastly, as groups work to express their values this is a level of work and complexity that merits special attention focus.
- Build trust and mutual respect. Trust and mutual respect are a critical foundation to creative problem-solving. Trust and mutual respect must be developed at various levels for successful management. This includes between key individuals representing the principal interests as well as decision-making bodies and local communities. Trust is built through structured conversations that give voice to the interests within each of the interest areas (e.g., fish, farming and flood risk reduction) and help facilitate deep listening as well as sharing. Lessons learned: In most situations, a neutral and highly skilled facilitator or staff coordinator is helpful in building trust and mutual respect. Building trust and mutual respect does not mean seeking "success" too early. Conflicts in floodplain areas are often deeply emotional and historically rooted. They can often indicate fundamental differences in values and aspirations. Conflict and emotional release is a necessary and beneficial part of building trust and mutual respect when provided appropriate and protective boundaries and processes. Poorly handled conflict or emotional release can be damaging to the ability to move forward. Thus the establishment and

8

<sup>&</sup>lt;sup>1</sup> Roger Fisher and William Ury, Getting to Yes: Negotiating Agreement Without Giving In, (New York: Penguin Books, 1983.

- maintenance of clear roles of the facilitator and the ground rules is a critical part of the process. Often staff charged with facilitating these efforts belong to an organization that is one of the interested participants and are often not formally trained in facilitating collaborative processes increasing the challenge.
- Identify, document and celebrate success. Often these processes represent hard technical, emotional, and social work. Seemingly small steps actually require tremendous investments of time, energy and faith. These accomplishments should be identified, documented and celebrated. This could include a few moments at the start of a meeting, shared food, email congratulating those who participated in a successful step, a phone call, or something more time intensive and formal. Lessons learned: Many floodplain leaders noted projects that had taken 15-20 years to reach construction. Successes along the way need to be celebrated if we are to conduct this work in a manner that inspires continued work and leadership and doesn't result in a sense of depletion amongst staff and participants.
- Commit to a shared vision/goals and to the integrated group. Genuine commitment to a shared vision of the floodplain is a critical element. Depending on the situation this could be across an entire floodplain area or at a reach scale. The shared vision and goals may be very general to very specific depending on the level of trust, the ability of an interest area to describe and agree upon their interests, and the ability of interest areas to understand and respect the needs of others. The importance of this step cannot be overstated and will likely be revisited many times over the years. Lessons learned: The ability to move effectively from visioning to solutions and implementation is fundamentally rooted in:
  - a. Level of trust and mutual respect
  - b. Commitment to the group, the process and the outcomes
  - c. Effective linkages between interest area leaders, decision-makers and authorizing bodies, and on-the-ground affected parties
  - d. Solid understanding of the interests in each of the interest areas
- Actions. A package of actions will likely represent the ever evolving and deepening process. This means that some actions may be more "integrated" than others. Early in building trust it may be important to get reciprocal support for high priority actions for each interest group with limited integration as a critical trust-building step essentially verifying that different interest groups understand the needs of others and will support those needs. If the group is committed to learning and deepening their understanding of the needs of other interest areas, then as long as momentum is positively maintained and projects are not moving forward that break trust, imperfect actions can help. As trust is built, it will become possible to brainstorm a list of more creative solutions that may better meet the vision and goals at a watershed, reach and/or project scale. Solutions can be policy or on-the-ground actions. Given that past efforts have developed suites of single purpose solutions in Puget Sound, early solutions often include projects originally developed for just one purpose (such as projects in an existing flood plan). These are an excellent source of starting places, if they can truly be revisited in ways that expand possibilities and create projects that address a broader suite of interests. Many solutions should include policy actions if long-term results are to be achieved. Lessons learned: Early

success may be less innovative and not as integrated, but is still a huge advancement if trust in the group is being built. If a group is building off of an earlier "salmon" or "flood" project, it is critical to really ensure these projects are revisited in a manner that fully explores their potential to advance these and other needs. It is easy for other interest areas to feel that the addition of token "fish" elements to a "flood" project, for example, is disingenuous unless the project itself or the broader suite of projects truly addresses the needs of the given interest area. Lack of policy advancement, alongside project development, potentially undermines trust and the ability to achieve results over time.

As actions are developed new stakeholders may engage who are now affected, often negatively, by these actions but weren't involved earlier. This should not be seen as a negative, but a necessary part of the process as momentum and scale is built.

- e Develop simple and implementable metrics to help various interests ensure that their needs are being adequately addressed through the suite of projects and management actions that are being implemented. The point of the metrics is not to fully answer the question of success for each interest area, but to determine the success of implementing the shared goals of the partnership/collaboration. The metrics should be one means of helping the management effort refine its work to best achieve its goals. Lessons learned: Pick 2-3 measurable indicators per interest area as a starting place to track the general trajectory of the collaboration. These indicators may represent a mix of policy and project outcomes (i.e., increase in fish habitat in Reach 1; fewer structures at high repetitive flood risk) and are developed by the group. Ideally, the Puget Sound region will, over time, have a more broadly accepted set of indicators that can provide both a local and regional description of progress.
- Implement projects and management actions. Integrated management groups will have a variety of organizations seeking and implementing projects through both collaborative efforts (Floodplains by Design) and issue-specific processes (Flood Control Zone District or salmon recovery funding). For example, the salmon recovery groups will continue to solicit and receive salmon-specific funding for salmon projects. The highest functioning integrated management program will see a continuity of investment that brings the collective vision to bear as both traditionally issue-specific and multi-benefit funds are deployed. They will also see a dedication to changing and reforming policies and programs within the various interest areas and authorizing institutions to ensure the collective vision will be achieved over time. Lessons learned: It is critical that the collective vision is truly institutionalized within the organizations and agencies able to implement change. Integrated management cannot happen solely through a group disconnected from decision-makers and authorizing environments or through the limited funding sources that support multi-benefit efforts. Integrated management must be a suite of policy and project actions. Leaders must truly be collectively committed to achieving the broader goals.

Carol MacIlroy, Jim Kramer, Heather Cole, and Spencer Easton prepared this paper based on lessons learned through the Floodplains by Design program and comments and input from participants in the Floodplains by Design Reach Leaders group. The Floodplains by Design Reach Leaders group includes staff from local, state, and tribal governments, Conservation Districts, and nonprofits working on flood risk reduction, floodplain management, salmon and ecosystem recovery and agricultural issues.

# **PUYALLUP EXAMPLE**

## **Integrated Management**

## Steps Taken and Currently Underway to Integrate Floodplain Management

An integrated management team including representatives of various Pierce County departments, the Muckleshoot Tribe, the Puyallup Tribe, the Lead Entity, the Pierce Conservation District, PCC Farmland Trust, Forterra, and the Cities of Puyallup, Orting and Sumner meet monthly to manage the Puyallup Floodplain Reconnections Project, which is funded by Floodplains by Design, and continue to scope a larger vision for the five reaches in the Puyallup river system.

- Convene stakeholders. In order to develop a Floodplains by Design grant application, stakeholders in the Puyallup Watershed interested in flood risk reduction reached out to others interested in salmon recovery and in agricultural conservation to begin integrating their management. They leveraged the work of existing groups, including the Farmland Conservation Committee and the Lead Entity for Salmon.
- Begin conversations and build trust. After submitting a grant application, the group
  continued to meet monthly to articulate their goals and coordinate on their work. In recent
  months, the group has hired a full-time coordinator out of the County Executive's office
  focused on integrated management (both within and outside of the County government) by
  providing facilitation between the multiple interests.
- Identify interests and solutions. In August 2015, the integrated management group met for a two-day workshop to establish goals by interest for each reach of the Puyallup River and its major tributaries and explore potential solutions/actions. Additional work to further develop reach goals and actions is being planned for summer 2016 and part of a larger body of work to refine/further integrate goals by June 2017.
- **Develop metrics**. During the two-day workshop, stakeholders also identified metrics that could be used to measure success for each identified goal. Additional work to underway to develop an agreed upon set of metrics and monitoring plan by June 2017.

#### **Groups Engaged**

- WRIA 10/12 Lead Entity
- American Rivers
- Forterra
- King-Pierce Farm Bureau
- Muckleshoot Indian Tribe
- PCC Farmland Trust
- Pierce County
  - Executive's Office
  - Surface Water Management (Fish and Flood)
  - Planning and Land Services
- Pierce County Agricultural Community of Interest
- Pierce Conservation District
- Port of Tacoma
- Puget Sound Partnership
- City of Orting
- City of Puyallup
- Puyallup Tribe of Indians
- City of Sumner
- Washington State Department of Ecology

		shed Goals & Identified Me	etrics
Overall Goals for Ach	ieving Floodpla	in Resiliency	
Flood Reduction:  Reduce flood risk County infrastruct sewer system, fire protection)  Reduce flood risk homes by removing flood level to provide protection channel migration erosion  Manage sediment Reduce risk in citi	to Pierce ture (roads, e to private ng them or vels n from n and		<ul> <li>Agriculture:         <ul> <li>85% of ag lands conserved and in production</li> <li>Viable farming economy</li> <li>Maintain critical mass of farmland and farm businesses</li> <li>More farms implementing better BMPs</li> </ul> </li> <li>Areas of SWM properties still available for agricultural leasing programs</li> </ul>
Indicators to Measure	e Goal impleme	entation	
Flood Reduction:  Number of homes removed  Level of protection for public infrastructure  Flood losses  Insurance claims for flooding		Salmon Recovery:  Length and width of functional riparian corridor  Temperature  Channel width  Riparian corridor  Redd counts  Percentage canopy cover  Area of new "wet" habitat below bank full  Spawning density and distribution  Outmigrants	<ul> <li>Agriculture:</li> <li>Gross and net revenue for farming</li> <li>Number of farm businesses</li> <li>Acreage being farmed</li> <li>Number of farms implementing BMPs</li> <li>A metric that measures successful stewardship</li> </ul>
	Reach C	haracteristics, Goals and P	rojects
Lower Puyallup			
The following is an ex reach-scale in the Lov statements and a spe	<ul> <li>ver Puyallup Rivicific set of projecthat multiple between Extends from Includes Puag lands in Tidally influence</li> </ul>	ver. You will note increased speects that are still in discussion to benefits and needs are adequated on I-5 Bridge up to the confluency allup, Fife, Tribal lands, major the Clear Creek and surrounding uenced	ceally in regards to feasibility, bely being achieved. ce with the White infrastructure (Highway 167), and
Flood Reduction		tem for flood protection  00-year level of protection	
Goals		od risk to private property in the	Clear Creek area

plant, Sumner sewage treatment plant)

Protect infrastructure in the floodplain (Fife pump station, Puyallup treatment

Salmon Recovery	Establish intertidal habitat		
Goals	Provide more space for the river		
	Reconnect off- channel habitat		
	Protect and improve Tribal fishing at the confluence with the White River		
Agriculture Goals	Protect agricultural land in the Clear Creek and surrounding areas		
	Provide a net increase of agricultural land in the Clear Creek area		
	Integrate ag goals with the capital project in the Clear Creek area and use it as		
	a model for work in other areas		
Other Goals	Provide interpretive materials along the existing trail near the Linden site		
Projects	Clear Creek Floodplain Reconnection		
	Union Pacific Setback Levee		
	North Levee Road Setback Project		
	Fife Pump Station		
	Puyallup Treatment Plant Floodwall		
	Meeker Creek Channel Restoration		
	Dead Man's Pond		
	Linden Oxbow Setback Levee		