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Tackling nebulous ideas: building a shared monitoring plan for tracking outcomes of integrated floodplain management in the Puyallup River watershed

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Monitoring Integrated Floodplain Management Actions and Progress

Salish Sea Conference
April 4, 2018

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Floodplains for the Future Partners

| American Rivers                         | Pierce Conservation District               | South Puget Sound Salmon Enhancement Group |
| City of Orting                         | Pierce County                              | The Nature Conservancy                    |
| City of Puyallup                       | Pierce County Agricultural Program          | UW Climate Impacts Group                  |
| City of Sumner                         | Port of Tacoma                             | Washington State Department of Ecology    |
| Floodplains by Design                  | Puget Sound Partnership                    | WRIA 10/12 Lead Salmon Recovery Entity    |
| Forterra                               | Puyallup Tribe of Indians                  | WSU Extension                              |
| King-Pierce Farm Bureau                | Strategic Conservation Partnership          |                                            |
| Muckleshoot Indian Tribe               |                                            |                                            |
| PCC Farmland Trust                    |                                            |                                            |

FFTF Partners understand that a 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.
Purpose of FFTF Monitoring Effort

- Integrate individual stakeholder issues and goals
- Observe progress toward shared goals
- Evaluate the success of various strategies
- High-level indication of whether or not capital and programmatic investments are contributing substantially to achieving shared goals
- Inform and direct future efforts
Building the Shared Monitoring Plan

- Stakeholder Input
  - Understanding stakeholder perspectives

- Synthesis of Existing Monitoring
  - Gather and synthesize data and existing monitoring efforts

- Defining Floodplain Health
  - Set goals
  - Define key terms
  - Identify preliminary list of metrics or indicators
  - Review, test, and select indicators to move forward

- Floodplain Health Index
  - Organize indicators into index of floodplain health

- Monitoring Metrics
  - Research, review, discuss with experts protocols for monitoring metrics
  - Establish baselines

- Craft Monitoring Plan
  - Compile monitoring framework and methods and protocols into plan
  - Secure partner support and commitments
## Monitoring Metrics

**THEME**

- **We are learning how our communities interact with land in the floodplain**
- **We are making capital investments in integrated floodplain management and making progress toward our goals**
- **We are tracking outcomes and benefits in the floodplain**

**DESCRIPTION**

- Group of metrics that tracks the cumulative impacts of policies, programs, and capital investments coming together in the floodplain.
- Group of metrics that tracks investments by FFTF partners along with progress toward goals identified by FFTF partners.
- Group of metrics that tracks trends in the quality and quantity of things we value (farm viability, salmon recovery, flood risk reduction) in the floodplain.

**INTEGRATED METRIC**

- **Amount (acres) of functional floodplain (Tier 0)**
- **Amount (dollars) of FFTF investments in integrated floodplain management**
- **Overall status of floodplain health and condition**

**INDIVIDUAL METRICS**

- **Amount (acres) of reconnected or restored floodplain**
- **Number and status of floodplain restoration projects**
- **Amount (dollars) of farm revenue**
- **Number of farm businesses**

- **Amount (miles) of publicly-accessible trails in floodplain**
- **Number of at-risk structures removed from flood risk**
- **Changes in farm drainage**
- **Changes in water temperature**

- **Type and extent of agricultural land use changes**
- **Amount (acres) of conserved farmland**
- **Cost of flood damages (dollars)**
- **Amount (acres) of restored riparian habitat**

- **Number and amount (acres) of floodplain development permits and other specific developments**
- **Number of SCP Properties conserved**
- **Amount (acres) of restored estuary habitat**
- **Status of salmonid abundance**

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**Stakeholder Input**

**Synthesis of Existing Monitoring**

**Defining Floodplain Health**

**Floodplain Health Index**

**Monitoring Metrics**

**Craft Monitoring Plan**
Compile Monitoring Framework and Methods and Protocols into Plan
Communicating the Plan and FFTF Program

www.floodplainsforthefuture.org
Implementing the Plan

- Process and timelines for reporting by partners:
  Annual Calendar

- Adaptive management:
  State of the Floodplain Summit
Expected Outcomes of Shared Monitoring

- FFTF Partner collaboration for integrated efforts and mutually reinforcing individual projects and initiatives
- Recovery of Puyallup, White, and Carbon River floodplain functions
- Protection of floodplain community health and safety
- Reduced flood damages
- Improved habitat for salmon
- Support for sustainable and viable farming
- Deliberate and adaptive management to ensure progress and address shared challenges
Thank you!

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