



How Science Benefits Our Community

Key Peninsula-Islands Basin Plan: Using Data to Make Decisions

Water Programs is a division of the Pierce County Public Works & Utilities Department. As a public agency, we need to make decisions in a way that includes the public and makes sense to our ratepayers. Generally, this means collecting and analyzing data, comparing options, communicating our findings with others, and gaining approvals. The following is a case study explaining how these actions occur in the course of developing a basin plan.

Key Peninsula-Islands Basin

The Key Peninsula-Islands (KI) Basin Plan covers an area of approximately 114 square miles. It is rural in nature and hosts 169 miles of saltwater shoreline and includes 7 islands. Population for the area is estimated at 21,000. There are at least 57 streams in the area and 28 lakes.



Data collection and basin characterization are key components of the basin characterization report. The assessment tools used to develop the report include:

- *Modeling* – to predict flood event impacts
- *Stream habitat surveys* – to assess instream and riparian habitat conditions
- *Water quality sampling* – to identify streams which are not meeting standards
- *Macroinvertebrate sampling (B-IBI)* – provides a measure of the health of instream aquatic organisms
- *GIS* – this computerized mapping system supports all of the other disciplines but also helps identify potential trends based on current and future land uses

Developing Recommendations

Upon completion of the characterization report, Water Programs develops a list of actions that might be taken to improve conditions in the basin. Since these actions will be implemented by Water Programs, they must be consistent with the mission and authority of the organization. The KI basin plan will include recommendations for the following types of actions:

- *Capital Improvement Projects* – constructing or repairing stormwater facilities
- *Stream Restoration* – identifies sections of area creeks which would be good candidates for improvements
- *Floodplain Habitat Acquisition* – identifies floodplain areas where Water Programs may wish to consider buying property to either preserve or restore floodplain habitat.
- *Programmatic* – these measures provide Water Programs with policy or management direction. For example, a programmatic

recommendation might include encouraging the use of Low-Impact Development techniques.

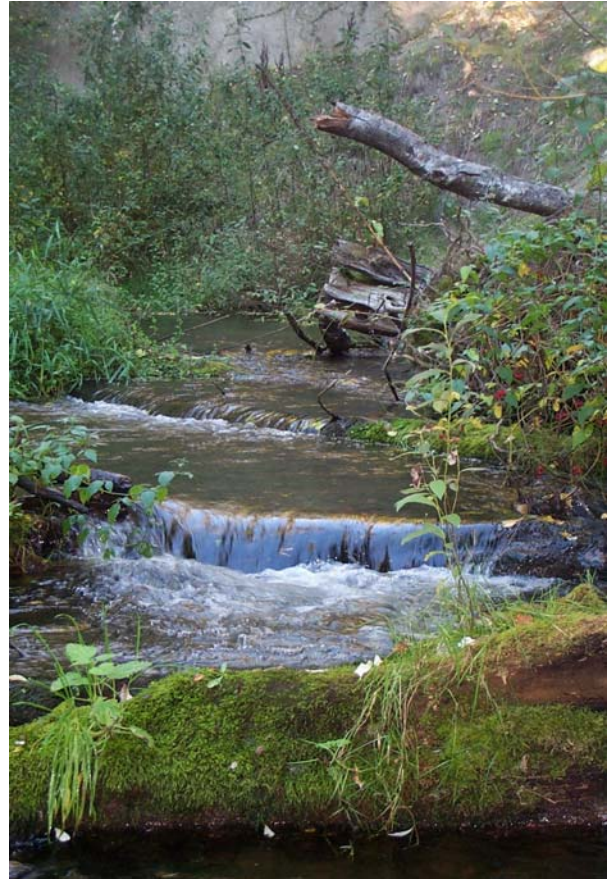


A capital improvement project

Public Input

Public involvement is the key to a successful basin planning program, so we try to communicate with area residents in a variety of ways and get their feedback. All of this input allows us to create a plan that addresses the issues and priorities of area residents. For example, flooding in the KI basin is not as big a problem as it is in other parts of Pierce County. But almost all of Pierce County's shellfish growing areas are in the KI basin and they require excellent water

quality. These priorities will be reflected in the KI basin plan.



Minter Creek



Rocky Creek

For more information, contact Water Programs at 253-798-2725 or www.piercecountywa.org/water