Working forests benefit the citizens of Snohomish County in many ways. In addition to producing jobs and revenue, sustainably managed forest lands provide a wide range of ecological values. These values, called “ecosystem services,” include the natural regulation of stormwater. Healthy forests are excellent stormwater managers. They act like giant sponges, absorbing water from rain and snow and slowly releasing it into streams. Scientific studies show that intact forests play a key role in stabilizing stream flows, thereby helping to reduce downstream flood risks and protect water supplies for drinking, fish and wildlife habitat, and irrigation.

Given the importance of working forests and the ecosystem services they provide, Snohomish County’s Surface Water Management Division (SWM) has partnered with the Washington Department of Natural Resources (DNR), the Tulalip Tribes, Forterra, and others to develop and implement an innovative payment-based program for the maintenance and restoration of forest cover within the Snohomish River watershed.

Under this program, organizations such as Snohomish County (“buyers”) will reward private forest landowners (“sellers”) for implementing actions that may protect or enhance the provisioning of forest ecosystem services. Potential actions include increasing the amount of time between timber harvests, extinguishing development rights, altering harvest activity in environmentally sensitive areas, and enlarging riparian buffers.

To support market development for forest ecosystem services in the Snohomish River watershed, SWM will lead a pilot project aimed at completing a transaction in the Upper West Fork Woods Creek sub-basin. The target ecosystem service for this transaction will be stream flow attenuation. The pilot project will benefit local rate payers by contributing to the County’s efforts to prevent flooding and improve water quality in local streams, rivers, and lakes.

Snohomish County Forest Ecosystem Services Pilot Project

Intact forests stabilize stream flows, helping to reduce downstream flood risks, and helping to protect water for drinking, irrigation, and fish and wildlife habitat

Our Goal
Support the development of a payment-based program to protect forest functions across the Puget Sound region
Pilot Project Phases

- **Phase 1**
Prioritize privately owned parcels based on their importance to stream flows, their risk of conversion to non-forest uses, and budget constraints.
(April-September 2012)

- **Phase 2**
Evaluate current stream flow hydrology to forecast potential effects of varying levels of forest cover protection on peak flows, flood flow duration, and flows that support fish habitat.
(December 2012-January 2013)

- **Phase 3**
Explore viable payment-based incentives to encourage landowners to adopt forest protection and restoration actions. Possible incentives include fee simple purchases, conservation easements, forest stewardship plans, and managed harvest agreements.
(October-November 2012)

- **Phase 4**
Conduct a buyer-side economic feasibility analysis. Compare the estimated costs and benefits to the County (“buyer”) of various ecosystem services transactions to those of alternative projects that would offer similar results to ratepayers.
(October-November 2012)

- **Phase 5**
Select the ten highest-priority parcels in the sub-basin and conduct outreach to determine which private forest landowners are interested in participating in the pilot project.
(October-December 2012)

- **Phase 6**
Conduct a seller-side economic feasibility analysis. Determine the amount of compensation a landowner (“seller”) would agree to collect from the County in exchange for a secured commitment to adopt forest cover protection and restoration actions.
(December 2012-January 2013)

- **Phase 7**
Target one high-priority parcel for a forest ecosystem services transaction.
(December 2012-January 2013)

- **Phase 8**
Formalize the intention of Snohomish County and the landowner to complete the transaction. Produce a summary report and present results for all phases of the pilot project.
(January-March 2013)