

## **Water Supply and Watershed Protection in the Teanaway Community Forest**

Goal #1 as defined by the legislature for the Teanaway Community Forest (TCF) is: *“to protect and enhance the water supply and protect the watershed”*. The legislators did not stop with Goal #1, but also referenced watershed function and values in Goals #2 (working lands) and #3 (recreation). Given the emphasis of water and the watershed, it is important we have a common understanding of these values as we begin developing objectives and strategies to enhance water supply and protect the watershed.

The public acquisition of the TCF was a key forest habitat conservation element of the Yakima Basin Integrated Plan (YBIP). Understanding how the YBIP defines or references water enhancement and watershed protection is important. However, it is more informative to dig deeper and go to the original federal legislation that made development of the YBIP possible. The Yakima River Basin Water Enhancement Project (YRBWEP) was originally enacted by Congress in 1979. Subsequent to this first Congressional action, in 1984, legislation was passed to promote fish passage improvements, and in 1994 the YRBWEP Phase II legislation was passed to promote water conservation, water supply, habitat, and stream enhancement improvements in the Yakima River Basin.

**Water supply:** The objectives of the YRBWEP and YBIP include providing tangible improvements in instream flows, habitat and fish passage, and increased security for existing out of stream water supplies. Protection through acquisition of the TCF was not intended to be direct mitigation for other YBIP actions, but instead adds to the overall ecosystem benefits of the YBIP. Now that the TCF is protected, we have the opportunity to implement future restoration that could mitigate for some YBIP projects occurring elsewhere in the basin. Future restoration projects in the TCF that result in increased aquifer storage and contribute to a return to seasonal instream flows that are closer to historical conditions (i.e., normative hydrograph) could assist in counter balancing other future activities in the basin. Restoration of both terrestrial and aquatic systems will be required to achieve this goal.

In the terrestrial environment, the trees and understory can be managed to increase the retention time of snow through shading and through reduction of runoff, thus enabling more absorption into the soil and replenishment of ground water supplies.

In the aquatic environment, reconnecting streams to their historic floodplain, slowing the rate of spring runoff through large wood replenishment, and recovery of beaver will all contribute to water absorption and contribute to ground water recharge and a more normative hydrograph.

**Watershed protection** will require the Teanaway Advisory Committee to make recommendations to guide management of the terrestrial and aquatic environments to enhance water retention. Watershed protection management will include both direct restoration work and also managing land use in a manner that is compatible with that restoration work. Achieving this balance between enhancing water supply, watershed protection (Goal 1) and land use (Goals 2 & 3) will also set us on a path to achieving restoration of vital fish and wildlife habitat (Goal 4). Figuring out how to achieve this balance is the challenge before us for the next year and is also our reward!