

Partnerships build new bridges on Bateman Creek

This spring (2007), native winter steelhead trout and native cutthroat trout on Gales Creek will have access to additional spawning and rearing areas on Bateman Creek. Two new bridges, eliminating fish passage barrier culverts were constructed in September 2006 on Bateman Creek, a tributary to Gales Creek. One bridge was constructed by Oregon Department of Transportation (ODOT), the other by cousins Steve and Dave Bateman, with help from Paul Johnson, NW Steelheaders member, Bernadette Graham-Hudson, Oregon Department of Fish and Wildlife (ODFW) stream restoration biologist and April Olbrich, Tualatin River Watershed Council coordinator. Bateman Creek enters Gales Creek, a prime winter steelhead and cutthroat stream, on the east side of Highway 6, immediately adjacent to the new bridge.

The Bateman family has owned and been involved with forested lands in northwestern Washington County since 1885. Currently, the family owns 170 acres of forested lands through which Bateman Creek runs. There are four stream crossings, all culverts, of Bateman Creek on the property. In 2005, the Bateman Tree Farm received the Washington County Small Woodlands Association's (WCSWA) Tree Farm of the Year award for its management practices.

When ODOT began its construction of a bridge over Bateman Creek on Highway 6 near Glenwood, the Bateman family's ears perked up. The new ODOT bridge replaced a culvert and a nonfunctioning fish ladder that were blocking fish passage from Gales Creek into Bateman Creek.

Steve Bateman, a family member, had a vision to replace culverts with concrete bridges over the stream crossings on the family property. This vision included providing fish passage by eliminating a fish passage barrier culvert as well as eliminating future culvert maintenance and providing sustainable road crossings for the family's future timber harvesting operations. Bateman met Graham-Hudson in 2005 when the two discussed Bateman supplying large wood for in-stream habitat projects. Graham-Hudson works with private landowners, watershed councils and other entities to identify and implement habitat restoration projects.

The opportunity presented itself when he and Bernadette Graham-Hudson, learned of the ODOT bridge replacement. "Because ODOT was removing the fish passage barrier at the mouth of Bateman Creek, it made sense to replace the next upstream barrier, which was a set of culverts on the Bateman property. These two projects complement each other and together, open up additional spawning and rearing habitat for native fish in this area", Graham-Hudson said.

The pair joined up with April Olbrich, coordinator of the Tualatin River Watershed Council. The watershed council is composed of diverse multiple stakeholder groups in the Tualatin Basin, who work together to promote and improve watershed health in the basin. Olbrich said, "Gales Creek watershed is one of the basin's best streams for native cutthroat and federally listed native winter steelhead trout. The Council is also focusing

its efforts downstream to work with private landowners, on improving stream habitat and water quality in a five mile stream reach between the Gales Creek community and Watts Bridge (Stringtown Road). Working to remove the culvert and replace it with a bridge on the Bateman property at the same time that ODOT was building the bridge complemented the Council's work downstream."

The three wanted to complete the closest culvert replacement in the same time frame as the ODOT bridge project in order to maximize the benefits of both projects. They began looking for funding sources and at the costs of concrete span bridges. The price for a new concrete span bridge was beyond the project budget, but an opportunity to purchase three used concrete slabs came about. J.W. Fowler Co. was overseeing the construction of the ODOT Bateman Creek bridge, but was also replacing a bridge over the Columbia Slough in Portland. Bateman and Fowler's construction supervisor talked. The concrete slabs needed to have at least a 30-year useful life and be able to handle weighs of 45 tons required for logs trucking for future harvesting opportunities. The team needed helping in evaluating the concrete slabs and making sure that the bridge could handle the necessary weights.

Enter Paul Johnson, former ODFW chief engineer and a retired surveyor and structural engineer, who volunteers with the Association of Northwest Steelheaders – Tualatin Valley Chapter. The Tualatin Valley Chapter of the Association of Northwest Steelheaders, is a fishing and restoration organization that works on projects throughout northwestern Oregon that improve stream conditions for steelhead and cutthroat trout. Paul and Dennis Rychlik, another Tualatin Valley chapter Steelheaders member, evaluated the concrete slabs and provided drawings and oversight on the bridge footings. Bateman owned some of the necessary heavy equipment and could provide much of the labor required, including removing the existing culverts, building the bridge footings and placing the concrete spans on the bridge footings. Oregon Department of Forestry regulates this type of activity on forested lands working with ODFW.

The trio sought funding an Oregon Watershed Enhancement Board (OWEB) Small Grant program. This program provides funding for up to \$10,000 for on-the-ground restoration projects approved by the local OWEB small grant team and OWEB. These grants require a 25% cash or in-kind match by the landowner. The team and OWEB evaluate grant applications based on its watershed criteria and priorities, and if approved, funding is generally available within 60 days. The OWEB grant would provide funds to purchase and transport the concrete slabs, as well as to build the bridge footings. It would also pay for numerous materials necessary to implement the project including erosion control materials and additional heavy equipment needed to lift the 12,000 concrete slabs onto the bridge footings. A grant application was submitted in mid-April 2006 and approved in June 2006.

The work began in late July when the concrete slabs were delivered to the site. Dave Bateman, Steve's cousin and a surveyor, participated in surveying the bridge location and helped build the forms. Paul Johnson and Bernadette Graham-Hudson were on-site working with the Bateman cousins starting in August. Prior to the culvert

removal, Graham-Hudson isolated the work area by re-routing the stream through a temporary culvert. Nets were placed around the work area to prevent fish from entering the work site and fish were removed from the project area by electrofishing. Twenty-two cutthroat trout were removed and relocated out of the impact area.

In mid-September, Doug Ranes, NW Thinning Systems, owner of a large track log loader was hired to place the three bridge slabs on the bridge footings. The two large machines worked in tandem to align the slabs once placed on the footings. The work finished up in September with the bridge guardrails to be installed by Bateman this coming spring. Bateman will also be planting trees in February near the bridge crossing. A fish survey will be conducted in 2007 and future years to determine the success of both projects.

All those participating were pleased. The partners hope to tackle other upstream crossings in the future.

For more information about the OWEB Small Grant program and types of projects it funds, see http://www.oweb.state.or.us/OWEB/GRANTS/smgrant_main.shtml.