

### **Sun Creek Project: Bull Trout Restoration in Sun Pass State Forest**

Bull trout, a fish species listed as threatened under the federal Endangered Species Act, are native to Sun Creek within Sun Pass State Forest, but decades of competition with two non-native trout species, brook trout and brown trout, resulted in extirpation of the native species from the state forest during the past century.

Oregon Department of Forestry, in cooperation with Oregon Department of Fish and Wildlife, US Fish and Wildlife Service, and Crater Lake National Park, has recently taken a major step toward restoring bull trout to their former distribution within the state forest. Following a restoration approach that was successfully implemented by the National Park Service in upper Sun Creek over the past two decades, the agencies first built two “exclusion barriers” or small dams on the state forest to prevent future immigration of non-native species. One of the barriers is equipped with a fish trap so that managers can allow native fish to move upstream while excluding non-natives. Once the barriers were in place, the agencies electrofished the area of Sun Creek upstream of the barriers in an effort to find and move any native bull trout that might have persisted in the state forest. Then in August 2012, the agencies applied the chemical piscicide antimycin-A to Sun Creek. This chemical kills fish but does not harm mammals or birds that use the stream water. Sentinel brook trout were held in cages within the stream to monitor effectiveness of the chemical, and all sentinel fish died during the treatment. To ensure complete removal of non-native fish, the agencies plan to conduct a second chemical treatment during summer 2013. Once the non-native fish are eliminated, bull trout will be allowed to recolonize from the recovering population upstream in Crater Lake National Park. State and federal agencies will continue to work collaboratively to monitor recovery of Sun Creek bull trout, one of few bull trout populations that remain in the upper Klamath basin.



One of two barriers constructed on Sun Pass State Forest during 2010 and 2011 to exclude non-native fish (photo: Dave Hering).



A native Sun Creek bull trout captured in Crater Lake National Park (photo: Lee Webb).