Westslope Cutthroat Trout Conservation in the Pend Oreille Basin:
Cee Cee Ah Creek Pilot Project Provides the Framework for Future Success
Public Information Sheet I: April 28, 2015

Why are conservation efforts in this area focused on native Westslope Cutthroat Trout?
Westslope Cutthroat Trout (WCT) are native to the Pend Oreille Basin, historically occupying over 99% of the tributary streams. Today, WCT are present in only 35% of these streams.

What are the likely impacts of not locally restoring native Westslope Cutthroat Trout?
WCT have already been proposed twice for listing under the Endangered Species Act (ESA). Continued decreases in population size and range may lead to ESA listing. By re-establishing local WCT populations, managers will expand overall WCT distribution to occupy a larger portion of their historical range, thereby contributing to the conservation of this important native species and aid in avoiding a potential ESA listing.

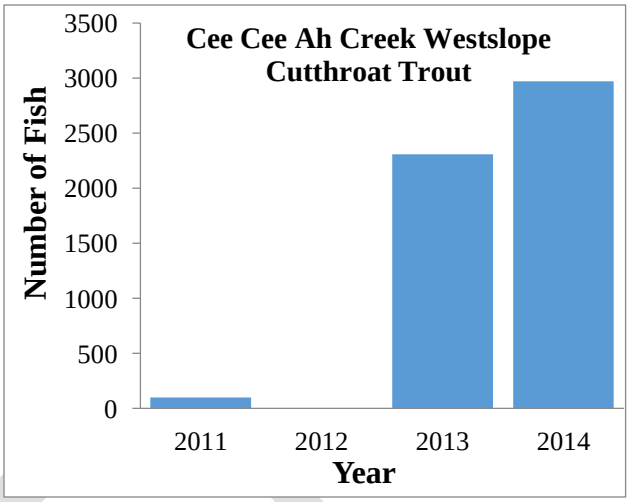
Who is responsible for monitoring and managing fish populations in Washington?
As a state, Washington is committed to preserving natural ecosystems and resources. As an extension of that commitment, the Washington Department of Fish and Wildlife (WDFW) is charged with the mission "to preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities" on a state-wide level. Individuals and other entities such as the Kalispel Tribe of Indians' Natural Resources Department (KNRD) working alongside WDFW can greatly contribute to this effort. To meet this commitment, the WDFW and KNRD have conducted a pilot project to examine how best to restore WCT at a tributary population scale.

Why is removal of non-native fish necessary prior to restoring native Westslope Cutthroat Trout?
Competition for resources, predation, and interbreeding with non-native fish species are among the greatest contributors to the decline of native fish species such as WCT. If WCT were introduced to a stream containing non-native species such as Brook Trout, the WCT would be unlikely to establish a population capable of long-term persistence due to competition. Therefore, full removal of non-native species in select reaches of tributaries is crucial to the successful recovery and conservation of WCT populations in local streams.

What methods are available to remove the non-native species?
Widely used in the United States as a conservation tool, piscicide (pesticide for fish) applications have been demonstrated to be a cost-effective and low-risk fish removal technique. Rotenone is one of the only two piscicides approved by the EPA for use in streams, and it has been used safely and successfully throughout the world. Alternative methods of fish removal include electrofishing, netting, dewatering, and traditional angling techniques. These methods can be expensive, impractical and with the exception of complete dewatering, largely ineffective for complete removal of fish populations from a stream.

What was the Cee Cee Ah Creek pilot project?
Beginning in 2007, resource managers conducted extensive public engagement to develop a plan for WCT conservation efforts. Resource managers, interested organizations and stakeholders were interviewed and asked for their viewpoints, ideas for conservation, and concerns. Public meetings were held in the summer of 2007 to share the information garnered during interviews, discuss action on that information, and to address any further concerns about the pilot project. Based on this process, a pilot project was designed and carried out in Cee Cee Ah Creek. The project included three successive years of piscicide treatment from 2008-2010 in 5.2 miles of upper Cee Cee Ah Creek, followed by reintroduction of WCT in 2011 and ongoing monitoring to assess the recovery of WCT populations.

Was the pilot project successful?
The pilot project successfully removed non-native trout species (Eastern Brook Trout) from the upper reaches of Cee Cee Ah Creek with no negative impacts to local property, livestock, water, or wildlife. Protected by Cee Cee Ah Falls, a natural fish passage barrier, re-invasion by non-native fish has not occurred. Genetically pure Westslope Cutthroat Trout were successfully reintroduced from local sources in 2011 and have since expanded in population size and distribution within the project area (see figure). The WCT population successfully repopulated a large portion of the newly available habitat in Cee Cee Ah Creek from 2012 to 2014. Source: WDFW



What monitoring is in place to evaluate success of the Westslope Cutthroat Trout restoration?
Since 2013, WDFW and KNRD have conducted annual electrofishing surveys in Cee Cee Ah Creek to monitor the restored WCT population. Biological information is collected from captured WCT to monitor population size, distribution, health, demographics, and to document continued successful reproduction. Genetic sampling is conducted to ensure that sufficient genetic diversity exists in the restored population, evaluate reintroduction techniques and sources, and to assess the need for any additional future supplementation.

What are the next steps for continued progress in conserving Westslope Cutthroat Trout?
The Cee Cee Ah Creek WCT population is increasing. This pilot project established the effectiveness of the process. Beyond the increasing numbers of native fish, partnerships and understanding between the public, state agencies, and tribal governments have been established. These developments and project successes are important steps toward collaborative, scientifically sound, and effective conservation efforts going into the future.

Where can I find more information about the methods used for fish conservation?
The American Fisheries Society, WDFW, and the EPA are all good sources of information (links below) about how and why methods such as chemical fish removal are used in conservation efforts. Extensive research has been conducted concerning the best methods of native fish conservation and there are many examples of successful conservation efforts all over the world that employ similar methods to the Cee Cee Ah Creek pilot project. Links to additional information are provided below.

http://wdfw.wa.gov/licensing/sepa/2010/10064_ceecee.pdf (More information about the Cee Cee Ah Creek pilot project from WDFW)
http://www.fisheriessociety.org/rotenone/EradicatingIASFishNA.pdf (Overview of fish conservation using rotenone and detailed answers to common questions about its use and utility in fish conservation)
http://www.epa.gov/oppsrrd1/reregistration/REDs/rotenone_red.pdf (Technical information about the EPA approval of rotenone as a piscicide)
http://www.azgfd.gov/h_f/documents/ROTENONE%20FAQ%20committee%20final%20report%20section%201-6-12.pdf (Maintaining North America's Healthy Native Aquatic Ecosystems" by the American Fisheries Society on invasive species management.)