

**File Code:** 2620  
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Dr. Doug Cottam  
Wildlife Division Administrator  
Oregon Department of Fish and Wildlife  
4034 Fairview Industrial Drive SE  
Salem, OR 97302

Dear Dr. Cottam:

Thank you for the opportunity to provide ODFW with information on the existing beaver trapping ban associated with the Ochoco National Forest (NF) and portions of the Crooked River National Grassland (CRNG). We appreciate the summary and history of the existing closures that you provided. Although the Forest was aware of the closure that has been in place since 1986, we were unaware of the trapping ban put in place in 1975 associated with the eastern portion of the Crooked River National Grassland.

We know that ODFW is aware of the importance this keystone species plays in the health and function of our watersheds. In addition, with our climate getting warmer and drier, beavers play an important role in keeping water on the land year-round, and specifically important in hydrologically connecting these complex wet meadow and stream networks that cover the Ochoco NF and CRNG.

ODFW is also aware that beavers, beaver habitat, riparian and aquatic function has been a very popular topic in Oregon for several years now. Organized events such as the "State of the Beaver" conference have developed to showcase ongoing restoration and research efforts being conducted to improve beaver habitat and stream/riparian health. With that being said, there's an increasing awareness of the role beavers play in the hydrologic function and maintenance of riparian habitat across the NF and CRNG, thanks to the length of time these trapping bans have been in place.

With the amount of stream/riparian restoration work that is occurring on the NF and CRNG, and the use and maintenance of these areas by beavers, adjacent private land owners have also become more informed about the importance of beavers and their potential to help improve the highly degraded streams associated with their properties. A great example of private land restoration efforts surrounded by National Forest is the work being implemented along Marks Creek. Marks Creek is a major drainage that parallels US Highway 26. If you travel this route today you will see where the private landowner is actively placing logs in the stream, and has logs stockpiled and staged all along the stream. As you travel the route upstream you will also see beaver activity in and around the work that has already been accomplished. This landowner's objectives are similar to those of the Ochoco NF; they are raising their down cut degraded stream channel, restoring and recruiting hardwoods, and encouraging beaver occupancy throughout the stream reaches associated with their private land.



To provide some context to the history of the trapping ban between the Ochoco NF and ODFW State office, attached is a letter drafted in 1997 that the Ochoco NF provided ODFW, summarizing the past decade of benefits and the need to maintain the closure. The letter outlines the objectives of the closure, examples of success, quantifiable measures to determine success, and reasons to continue the closure.

Below is a summary addressing the questions submitted to the Ochoco NF: In addition, attached are two spreadsheets that describe and summarize restoration work that has been accomplished in the recent past, is ongoing, or is planned in the near future, along with stream survey/monitoring data that identifies beaver occupancy.

**Objectives of the closures?** The objectives of the closures have not changed since the last official correspondence with ODFW in 1997 - Restore degraded riparian habitat by creating more pool habitat, slowing surface runoff and storing more water for late season release and decreasing sediment transport.

**Have objectives been achieved?** The attached spreadsheet (Ochoco Aquatic Restoration) summarizes the most recent restoration projects and associated improvements. Although many streams have been restored there are many needing varying degrees of restoration, as well as adaptive management changes. Specifically, from a hardwood recovery perspective, due to the number of conifers that have encroached these riparian areas, over-shading and outcompeting of riparian vegetation continues in many areas.

**What ongoing empirical monitoring data has been collected and how is it used to evaluate these closures?** Data is collected through stream inventory monitoring, some of which is conducted in partnership with ODFW. This information is kept in a stream inventory database to monitor biological and physical changes over-time. For restoration projects specifically, pre and post monitoring data is collected. Data is collected by stream reach and information includes but is not limited to; number of pools, width/depth ratios, degree of stream entrenchment, conifer to hardwood ratios, changes in sediment regime, amphibian numbers (i.e. Columbia Spotted Frogs), redband trout and other native fish species presence/abundance, and beaver occupancy.

**Change in policies and practices to accommodate and/or accompany closures?** Policy has remained relatively unchanged, whereas practices surrounding aquatic and riparian restoration has changed greatly since 1997 and our last official correspondence with ODFW on this topic. Historically, riparian areas and specifically Riparian Habitat Conservation Areas have had very strict limitations on what kind of restoration activities and related short-term disturbance were permitted. Most restoration actions were limited in their scope of in-stream restoration work and therefore primarily focused on channel stabilization through coarse wood placement and riparian planting along streams that were historically altered and channelized when the Ochoco's were settled, to improve utilization and forage production for domestic livestock use. In recent years, a significant new riparian restoration methodology has emerged with the implementation of the "Stage Zero" restoration process, better supporting beaver and related ecosystem benefits than solely traditional restoration methods. This process has allowed the FS to "lift and fill" down cut stream channels and redefine the historic braids associated with these systems to redistribute the flow of water into its historic path. This restoration method involves a large amount of in-stream work in depositional areas often preferred by beaver, reestablishing the historic condition of

stream channels and floodplains, providing the best opportunity for beaver to be successful and help maintain the function of these systems (see enclosed photo). Additionally, the NF has increased the use of Beaver Dam Analogues to further complement these traditional and new restoration techniques, recognizing this as an important “stop gap” measure while the NF continues to treat conifer overstocking, until riparian hardwood densities increase and provide adequate forage for beaver re-establishment.

**Beaver populations increasing and empirical data supporting this determination?** It is very rare that the USFS conducts a population census for wildlife species that fall under management by ODFW. With that said, the FS does often support efforts to assist ODFW with population census efforts that would benefit specific habitat work or focus our management where it is needed. Although no population estimates have been developed for beavers on the Ochoco NF and CRNG, our stream inventory data documents beaver occupancy by stream and reach. Stream surveys are replicated over time and data is entered into our corporate database. This data can be referenced to display changes in beaver occupancy over time, based on the numbers of surveys completed. This data can be queried and provided to ODFW upon request. The enclosed spreadsheet, Stream Inventory Database, displays our stream survey/monitoring data, as well as beaver occupancy information.

As mentioned before, beaver occupancy is important to the health and function of the stream/wetland systems on the Ochoco NF and CRNG. We look forward to continuing our work collaboratively with ODFW. Based on our monitoring efforts and the successes we share with ODFW, we welcome input on improving our data collection methods, and assisting ODFW with population densities/ beaver occupancy over time. In addition, as we continue with our restoration efforts, we know that it is also important to continue the trapping closure, to allow us to fully restore these systems, and reestablish all native species.

Sincerely,



A. SHANE JEFFRIES

Forest Supervisor

Enclosures (4)

cc: Derek Broman