



CLEAN, FLOWING WATERS FOR THE WEST

The Center for
Environmental Law & Policy

November 29, 2010

Albert Roberts, Chair
Okanogan County Planning Commission
c/o Office of Planning and Development
Via e-mail to planning@co.okanogan.wa.us

Re: Draft Critical Area Ordinance for Okanogan County

Dear Chairman Roberts and Okanogan County Planning Commission Members,

Thank you for the opportunity to review and provide comments on the County's proposed Critical Areas Ordinance.¹ The Center for Environmental Law & Policy is a non-profit, membership based organization that works to protect and restore instream flows and drinking water aquifers in Washington and throughout the Columbia Basin. Both aquatic and wildlife species depend on water for survival. This is the case for the threatened species Sharp-tailed Grouse. Through this comment letter, CELP seeks to integrate required and recommended protections for Sharp-tailed Grouse with the County's land use policies.

Sharp-tailed Grouse

The draft Critical Areas Ordinance (CAO) does not adequately identify and propose protection for water resources in the Tunk Creek basin and consequently fails to provide adequate protections for the Sharp-tailed Grouse, a state threatened species.² Sharp-tailed Grouse (STG) populations depend on Tunk Creek and the surrounding thousands of acres of steppe shrub for survival.³ Riparian zones along Tunk Creek provide essential breeding and survival habitat. Although the Washington Department of Fish & Wildlife has successfully purchased some of the land required for STG survival, much of the remaining land is privately owned. Because this land is not yet developed, great care should be taken to ensure that the CAO adequately and properly prevents fragmentation of Sharp-tailed Grouse habitat, and development of water resources that would deplete flows in Tunk Creek.

Tunk Valley ("Valley") is approximately 63 square miles and covers roughly 43,000 acres in Okanogan County. It is located east of the Okanogan River and provides critical habitat for the Sharp-tailed Grouse, a threatened species in Washington State. Tunk Valley is home to

¹ Draft October 15, 2010, accessed on Okanogan County website (October 7, 2010).

² See WAC 232-12-011.

³ Mike Schroeder, et al., Re-establishment of Viable Populations of Sharp-tailed Grouse in Washington: Progress Report (WDFW & CCT 2009), available at <http://wdfw.wa.gov/publications/00408/wdfw00408.pdf>

the largest population of Sharp-tailed Grouse in Okanogan County, numbering approximately 188 individual birds.⁴ It is imperative that the County protect this presently healthy STG population by preserving the habitat – both waters and land -- needed for species survival.

We agree with the Washington Departments of Fish & Wildlife (WDFW) and Ecology that Alternative 3 listed in the CAO, which would adopt the WDFW Priority Habitat System (PHS), is the optimal alternative to ensure that the Sharp-tailed Grouse and habitat are adequately protected.⁵ Currently, under the draft CAO "Classification—Rating System," the Sharp-tailed Grouse is listed as a Level II species, meaning that they are only of "Local Concern." Because the STG are a threatened species, designated as such in 1994, the classification should be amended to reflect Article III "Fish and Wildlife Habitat Conservation Areas." The draft CAO also fails to describe in detail the species that fall into each of the three classifications-rating system. Instead, it uses vague terms, such as "etc.," to describe species that are listed in any of the three categories. We request that you edit this portion of the CAO to indicate those species that are currently endangered, threatened, of local concern or otherwise important in Okanogan County.

We recommend that the Planning Commission also detail the habitat needs for each listed species that could be affected by land use development, along with a description of mitigation activities that would be required prior to development. We further recommend that the CAO explicitly state that SEPA documentation is required for all development proposed in the Tunk Valley, particularly along Tunk Creek. In addition, the setback requirements for mitigation purposes appear to apply only streams and tributaries that fall under the jurisdiction of the Shoreline Management Act. Tunk Creek does not qualify as a shoreline of the state due to its low flow, however the critical habitat it provides for Sharp-tailed Grouse must be protected. The CAO is the document to provide such protection.

Water Adequacy and Availability

The current designation of Tunk Creek basin as a Minimum Requirement District, with a zoned parcel size of one-acre, will not provide adequate domestic water needs if the current zoning remains at one-acre parcels. During heavy rains (which are infrequent) and snowmelt, Creek flow increases, but there is little to no water discharge during the remainder of the year. In 1974 the Department of Ecology published a Water Supply Bulletin focusing on water supply in Okanogan County.⁶ This assertion is confirmed by the data supplied by Department of Ecology's stream gage on Tunk Creek. First installed in 2002, the gage has monitored stream flow nearly continuously since that time. Flows range between 0.1 cubic feet per second (cfs) and 49.8 cfs.⁷ Low flows occur during summer and fall season, and impact habitat for Sharp-tailed Grouse.

There have been two primary studies conducted on water availability in the Tunk Creek Basin, the first completed by the Department of Ecology in 1974 and the second by the USGS in 2009. Although there is a 35-year gap between the two studies the, overall

⁴ See Rohan Report 2010

⁵ See WDFW and Ecology, Joint Comments submitted to Okanogan County (9/27/2010).

⁶ See Walters, Kenneth L., "Water in the Okanogan River Basin, Washington," Water Supply Bulletin No. 34 (Dept. of Ecology, 1974), at:
http://www.ecy.wa.gov/programs/eap/wsb/wsb_all.html#p34.

⁷ Excel spread sheet provided by Tyler Burks, Department of Ecology (10/7/10).

conclusions are the same: Tunk Creek Basin has limited groundwater supply and Tunk Creek surface waters and local groundwater are likely connected.

The 1974 study reports that one Tunk Valley well did not yield enough water for domestic use. The authors state that of the few wells already in use, most had yields barely adequate for both stock and domestic use⁸. The Department estimates (and the USGS 2009 study agrees) that approximately 60,000 acre-feet of groundwater is present. (To put this number in perspective this number would support no more than twelve (12) 5,000 gallon per day permit-exempt wells, assuming the users are not claiming unlimited use for lawn and garden or stockwater purposes).

The more recent study published by USGS in 2009,⁹ focused on four subbasins in the Okanogan River Basin of which Tunk Creek is one. The report states that limited groundwater storage is present in the Tunk Creek due to the subbasin's hydrology and geology. The study also points out a high potential for groundwater withdrawals to affect Tunk Creek streamflow.¹⁰ A critical observation that the study provides is that overall groundwater availability is limited and provides just enough water for *current* domestic uses.¹¹ Due to limited groundwater storage, any withdrawals from existing shallow wells will decrease Tunk Creek stream flows.¹² The authors recommend a more detailed and thorough study be conducted to determine whether deep confined aquifers exist, although the likelihood of finding deep confined aquifers seems unlikely.

The Department of Ecology has also recognized hydraulic continuity between Tunk Creek and subbasin groundwater, as set forth in the approval of a transfer of a surface water right (withdrawing directly from Tunk Creek) to a groundwater right.¹³ The new wells were located approximately 10-15 feet from the Creek. The Washington Water Code requires that approval of a water right transfer from surface to ground water may only occur if the withdrawal comes from the same body of water. Ecology's hydrogeologist found hydraulic continuity exists between ground and surface waters, and therefore approved the transfer to groundwater withdrawals.

The conclusions to be drawn from these reports are that groundwater is in short supply in the Tunk Creek basin and insufficient to support domestic use. Withdrawals of groundwater, including those that occur pursuant to permit-exempt wells are likely to deplete flow in Tunk Creek and affect riparian habitat. The County's CAO should account for these conclusions in providing protections for Tunk Creek.

Zoning & Habitat

Based on the current zoning of Tunk Creek basin (one-acre parcels) the County has failed to adequately protect STG. The potential growth associated with one-acre parcels is contrary to designating the Tunk Creek and surrounding land as a habitat conservation area. We

⁸ Water Supply Bulletin No. 34, p. 46

⁹ U.S. Geological Study, "Groundwater/Surface-water Interactions in the Tunk, Bonaparte, Antoine, and Tonasket Creek Subbasins, Okanogan River Basin, North-Central Washington," Scientific Investigations Report 2009-5143, at: <http://pubs.usgs.gov/sir/2009/5143/pdf/sir20095143.pdf>.

¹⁰ USGS Report, p. 23

¹¹ USGS Report, p. 5

¹² USGS Report, p. 24

¹³ WA Department of Ecology, Transfer Application CS4-SW9216.

urge the County to follow WAC 365-196-185, which requires counties to use the best available information to avoid directing new growth to areas with a high probability of conflicts between new development and protection of critical areas. There is little doubt that allowing residential homes based on one-acre zoning will negatively impact habitat for Sharp-tailed Grouse.

Historically, Tunk Valley has primarily been utilized for agricultural purposes. However, with the current zoned parcel size and the new comprehensive plan map, the Valley is now considered a potential area for residential growth. As noted above, water supply is uncertain in this area. Due to the hydraulic continuity between Tunk Creek and groundwater, increased groundwater pumping will adversely affect Tunk Creek during low flow periods.

Additionally, Tunk Creek is currently listed as a 303(d) water body for pH and fecal coliform, water pollution problems that can be affected by flow.¹⁴ As a waterbode on the Category 5 list, Tunk Creek will require preparation of a plan to improve water quality by limiting pollutant load. The CAO should acknowledge the need for further studies and planning prior to County approval of additional growth in the basin, creating potential for increased water withdrawals that will affect Tunk Creek water quality and habitat.

Even a change from one-acre parcels to 20-acre parcels would raise concerns due to the inadequacy of water supply, particularly when balanced with the habitat needs of the STG. Because Sharp-tailed Grouse depend on the creek's riparian zone and surrounding area for survival, impacts on its designated habitat must be considered by the County prior to development approvals.

Thank you for the opportunity to provide comments. We incorporate by reference the documents referenced in our footnotes with associated URL's and would be happy to provide hard copies upon request.

Yours very truly,



Rachael Paschal Osborn
Excecutive Director

¹⁴ See <http://www.ecy.wa.gov/services/gis/maps/wria/303d/w49-303d.pdf>.