

I am writing on behalf of the Western Section of The Wildlife Society (<http://tws-west.org>) to provide our expert opinion about the ecological impacts of the Administration's proposed changes to the definition of Waters of the United States (WOTUS) (84 FR 4154) and, therefore, what is federally regulated under the Clean Water Act.

The Wildlife Society (TWS; <https://wildlife.org>) is an international non-profit scientific and educational association, dedicated to excellence in wildlife stewardship through science and education. Our mission is to ensure that wildlife and habitats are conserved through management actions that take into careful consideration relevant scientific information. The Western Section of TWS represents approximately 1,000 wildlife managers, biologists, ecologists, botanists, hydrologists, geologists, and students from California, Nevada, Hawaii, and Guam.

We are writing to express our concern over the 2018 proposed changes to the Clean Water Act. These proposed changes overlook and are inconsistent with scientific knowledge and ecological research that supports the Clean Water Act's goal of protecting the physical, chemical, and biological integrity of our nation's waters. These waters provide essential function for commerce and support the nation's wildlife that are held in the public trust.

To maintain the health of our nation's waters, protection of ephemeral features is essential. Ephemeral streams are particularly common in the Arid West - which includes much of California and Nevada - where waters often flow only in direct response to precipitation. Though these features may be short-lived, they provide significant connection to downstream waters that contribute directly into traditional navigable waters. Desert arroyos (i.e., dry washes), seasonal wetlands, and vernal pools, are common in the Arid West, with as much as 39% of the streams being ephemeral, and flash floods in these systems carry large amounts of water and sediment to downstream traditional navigable waters during flood events.

We are also concerned that the EPA is still seeking comment on the definition of intermittent waters and we recommend that the definition is not limited to a set number of months of flow. Like ephemeral streams, intermittent waters are also important contributors to traditional navigable waters, even though their connection may be limited to very short periods of flow, particularly in the Arid West. The loss of protections for ephemeral and intermittent features would have negative impacts on the health of our nation's waters.

Lastly, adjacent waters that do not touch at a point or share surface flows ignores scientific knowledge and ecological research that shows the connectivity of waters and wetland habitats through groundwater and sub-surface flows. Isolated wetlands in

California, particularly vernal pools, provide important habitat for threatened and endangered wildlife species. Over 90% of CA's vernal pools have already been lost to development. In addition to contributing to the integrity of our nations' navigable waters, these ephemeral systems also provide essential habitat for western wildlife adapted to short-term flows, including the federally listed vernal pool fairy shrimp (*Branchinecta lynchii*), vernal pool tadpole shrimp (*Lepidurus packardii*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), arroyo toad (*Anaxyrus californicus*), and desert pupfish (*Cyprinodon macularius*), as well as species under consideration for listing, such as western spadefoot toad (*Spea hammondi*). The western United States and countless wildlife species - including game animals (such as wild turkey and deer), common predators (such as coyotes and bobcats), and migratory birds (many of which are also federally listed, such as least Bell's vireo and southwestern willow flycatcher) would be impacted should the proposed changes to the definition of WOTUS be adopted. Removal of isolated wetlands would result in significant impacts to federal endangered and threatened species. Wetlands and waters that do not "abut" traditional navigable waters due to separation by a levee are still connected through groundwater and sub-surface flow.

The integrity of waters is more complex than just hydrological surface connectivity, which is most evident in the Arid West, where many connections are through sub-surface flow. Excluding adjacent waters that do not have an obvious surface connection ignores scientific knowledge and ecological research that shows these waters and wetland habitats are connected through groundwater and non-surface flows. The western United States, and therefore it's wildlife, would be disproportionately impacted should these changes be adopted.

The health of the nation's waters, especially in the Arid West, depend on ephemeral aquatic features and aquatic features that share connections other than direct surface flow. We urge the Environmental Protection Agency and the Department of the Army to include ephemeral features and to Not Limit the definition of "adjacent" features in this proposed rule. These aquatic features need to be retained in the Clean Water Act, to maintain the economic and ecological value of our nation's waters.

Sincerely,

Kelly Holland

Conservation Affairs Committee Chair

Western Section of The Wildlife Society