



## Native Plant Society of New Mexico

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US Environmental Protection Agency and US Army Corps of Engineers:

Re: Docket ID No. EPA-HQ-OW-2018-0149, Revised Definition of Waters of the United States

NPSNM is a non-profit organization with approximately 900 members in seven chapters located around the state and in El Paso, Texas. Our mission is to educate the public about native plants by promoting knowledge of plant identification, ecology, and uses; foster plant conservation and the preservation of natural habitats; support botanical research; and encourage the appropriate use of native plants to conserve water, land, and wildlife. Our interest in the reach of Clean Water Act coverage stems from the damage that native plant communities will suffer without the protections of the Act. Because plants are important mediators of water quality, the degradation or loss of native plant communities will in turn have significant deleterious effect on the integrity of downstream navigable waters.

The 2015 WOTUS Rule was informed by the findings of an EPA Office of Research and Development report called "Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence". The report reviewed the findings of over 1200 peer-reviewed publications and demonstrated the physical, chemical and biological influences of streams and wetlands on downstream waters. The report states that "ephemeral and intermittent streams perform many of the same functions in a watershed as perennial streams" and that "downstream waters are the time-integrated result of all waters contributing to them".

Since all water in a watershed is connected to some degree, there is a practical necessity to draw a line identifying where the effects on downstream navigable waters become insignificant. While it is possible for reasonable people to disagree with the precise limits drawn by the 2015 Rule, the new rule, as noticed February 14, 2019, in the Federal Register, errs very far on the side of excluding waters with obvious major impacts to traditional navigable water bodies, and the agencies have offered no scientific justification for their conclusions. For example, limiting wetland "adjacency" to those wetlands with abutment or a

continuous surface water connection, is arbitrary and does not reflect the potential for a functional relationship. If a rule is adopted that is not based on science, adverse impacts to water quality will in fact result, despite the agencies choosing to selectively ignore findings of the connectivity report.

Here are some of the major categories of NM waters which would be excluded under the proposal, their typical vegetation, and the water quality services they provide:

a. perennial waters above ephemeral stretches – typically support cottonwood/willow riparian forests – often the location of population centers and, hence, wastewater treatment discharge – provide habitat refugia for aquatic organisms – deliver organic material to downstream reaches - shade reduces water temperature – canopy and ground cover slow runoff velocity and reduce sedimentation

b. high altitude wet meadows – a form of wetland - typically support sedges and grass-like species – store large quantities of water below ground and keep it cool – can take up and sequester excess nutrients, metals and other chemicals – root systems retain productive organic soil that would otherwise wash away

c. ephemeral headwaters networks – very extensive in NM, convey a high percentage of flow during precipitation events - typically support an increased density of upland plants, also more specialized species adapted to sub-irrigation of the root zone- canopy and ground cover slow runoff velocity and reduce sedimentation – recharge shallow aquifers that support the baseflow of perennial streams

The proposed definition will fail to offer the “certainty” that is claimed by its proponents. An estimated 88% of New Mexico streams are non-perennial. In addition, many streams exhibit abrupt changes in flow regime caused by underlying geology. There is no universally applicable method to distinguish “ephemeral” and “intermittent” streams. The Federal Register notice devotes a full 3-column page to listing potential sources of information that might be useful in making a decision as to category, stating that “often multiple data points and multiple sources of information could be used to determine flow regime”, and cites the necessity of “supporting information, as well as fieldwork” in making the determination. Likewise, the definition of a “typical year” (a phrase used repeatedly in the proposed rule) could be problematic in a state such as New Mexico which experiences characteristic huge between-year climate variability and episodic precipitation. In most cases, this is not a process that could be completed casually by a landowner, but would require the expertise of trained professional consultants and/or agency staff. There would be no significant process efficiency improvement as compared to the case-by-case “significant nexus” analysis. Greater clarity regarding jurisdiction could instead be achieved by generating regional guidance for the 2015 Rule, which would result in practices better suited to regional conditions.

The only certainty here is, that if this proposed definition is adopted by the agencies, the biodiversity and the water quality of the waters of the United States (by any definition) will decline together, especially in the arid or semi-arid Southwestern states. These effects will only increase over time as climate change pushes more and more water bodies toward the ephemerality end of the spectrum (a very important consideration which is not addressed whatsoever in the Federal Register notice). In summary NPSNM recommends that the agencies *not* adopt the proposed definition of Waters of the United States.

Sincerely,

Rachel Jankowitz, Conservation Chair  
Native Plant Society of New Mexico

April 11, 2019