US Army Corps of Engineers

US Environmental Protection Agency

Joint Public Notice

Notice of Availability of the Beta Streamflow Duration Assessment Method for the Western Mountains

Issue Date: December 15, 2021

The U.S. Army Corps of Engineers (Corps), Sacramento, San Francisco, Los Angeles, and Albuquerque Districts (South Pacific Division), the Corps Omaha District, and the U.S. Environmental Protection Agency (EPA), Regions 6, 8, and 9 jointly announce the availability of the Beta Streamflow Duration Assessment Method (SDAM) for the Western Mountains (dated November 2021). The method is a rapid assessment tool to help distinguish between ephemeral, intermittent, and perennial streamflow at the reach scale. The SDAM may help in providing technical guidance for identifying waters that may be subject to regulatory jurisdiction under Section 404 of the Clean Water Act; however, this method does not imply or represent a change in the definition of "Waters of the U.S."

The SDAM for the Western Mountains was developed for use in the mountain regions of the states of Arizona, California, Colorado, Montana, Nevada, New Mexico, South Dakota, Utah, and Wyoming by the Corps and EPA in 2021 (Figure 1). This beta method results from a validation study conducted at 149 stream reaches across the range of hydrologic landscapes of the western mountains (excluding the Pacific Northwest) from 2019 to 2020. Developed through statistical analyses of field data, it provides a data-driven approach using eight reliable indicators to provide information on streamflow duration class at the reach scale. The agencies are making this beta SDAM available for a one-year preliminary implementation period while we continue an expanded data collection effort into 2022 to inform the refinement of the final SDAM for the Western Mountains.

The beta SDAM for the Western Mountains can be applied whenever there is uncertainty regarding streamflow duration class and a rapid method of evaluation is desired. The method provides a scientifically supported, rapid assessment framework to support best professional judgment in a consistent, robust, repeatable and defensible way. Use of the method may result in timelier and more predictable jurisdictional determinations and is also useful where knowledge of streamflow duration class improves ecological assessment, management, and decision-making.

The method data forms, and training opportunities are available on the internet at: https://www.epa.gov/streamflow-duration-assessment/beta-streamflow-duration-assessment-method-western-mountains

Practitioners such as stream ecologists, aquatic ecologists, hydrologists, and wetland scientists are encouraged to provide comments on their experience using the beta method. Comments regarding the following specific topics would be especially useful:

- Problem situations encountered and possible approaches for addressing them.
- Apparently incorrect results, including the factors that suggest the method was inaccurate.

- Indicators that were particularly useful or not useful in identifying flow duration in different hydrological environments.
- Regional differences in the applicability of specific indicators.
- Potential uses of the method in the regulatory context, or in other watershed planning or management contexts.

Written comments can be submitted by email to the contact addresses provided below, or to:

Aaron O. Allen
USACE Ventura Field Office
60 South California, Suite 201
Ventura, CA 93001
Aaron.O.Allen@usace.army.mil

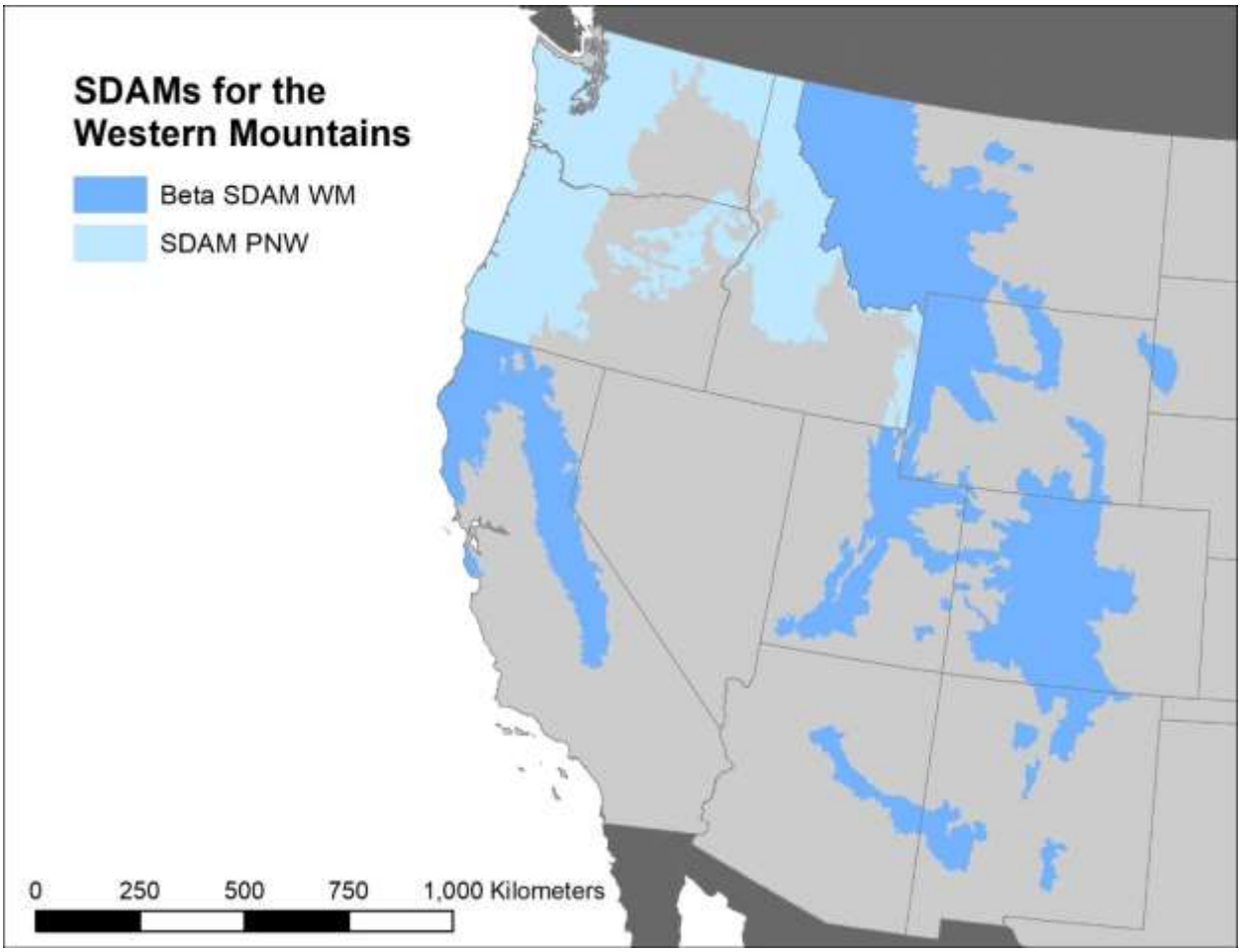
For additional information on the development of regional Streamflow Duration Assessment Methods for nationwide coverage, see: https://www.epa.gov/streamflow-duration-assessment

For additional information on the SDAM for the Western Mountains, contact the Corps or the EPA:

Corps:
Los Angeles District, Aaron Allen, 805-585-2148, Aaron.O.Allen@usace.army.mil
Sacramento District, James Robb, 916-557-7610, James.T.Robb@usace.army.mil
Omaha District, Jeremy Grauf, 402-995-2451, Jeremy.Grauf@usace.army.mil

EPA:
Region 9, Joe Morgan, 415-972-3309, Morgan.Joseph@epa.gov
Region 8, Rachel Harrington, 303-312-6870, Harrington.Rachel@epa.gov
Region 6, Loribeth Tanner, 214-665-8153, Tanner.Lori@epa.gov

Figure 1


SDAMs for the
Western Mountains
Beta SDAM WM
SDAM PNW
0
250
500
750
1,000 Kilometers