



US Army Corps of
Engineers



US Environmental
Protection Agency

Joint Public Notice

Notice of Availability of the Beta Streamflow Duration Assessment Method for the Arid West

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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 Arid West (dated February 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 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 Arid West was developed for use in the arid regions of the states of Arizona, California, Colorado, Montana, Nevada, New Mexico, Texas, Utah, and Wyoming by the Corps and EPA in 2020 (Figure 1). This beta method results from a validation study conducted at approximately 90 stream reaches across the range of hydrologic landscapes of the arid west from 2017 to 2019. Developed through statistical analyses of field data, it provides a data-driven approach using five 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 the agencies continue an expanded data collection effort in 2021 to inform the refinement of the final SDAM for the Arid West.

The beta SDAM for the Arid West 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-arid-west>

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:

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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 Arid West, contact the Corps or the EPA:

Corps:

Los Angeles District, Aaron Allen, 805-585-2148, Aaron.O.Allen@usace.army.mil

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Figure 1

