



**International Boundary and Water Commission  
United States and Mexico**

**FACT SHEET:**

**MINUTE 319 ENVIRONMENTAL FLOW**

- Minute 319 provides water for environmental flows for the Colorado River Delta and to gain important scientific information on the effectiveness of the flows.
- Minute 319 provides a volume of 158,088 acre-feet (195 million cubic meters) for environmental benefits during the 5-year term of the Minute.
- The 158,088 acre-feet (195 million cubic meters) will be provided by means of the participation of Mexico, the United States and Non-Governmental Organizations in both countries.
- The environmental flows stipulated in the Minute are called Pulse Flow and Base Flow.
- The Pulse Flow is the release of 105,392 acre-feet (130 million cubic meters) of water for a one-time event that is to be delivered to the environment in the Colorado River Delta in conformance with Minute 319. Consistent with the Minute and with the advice from scientific experts, both countries agreed to implement the pulse flow March 23 through May 18, 2014.
- The volumes of water to undertake the Pulse Flow will come from a joint effort and investments for water conservation projects by the governments of the United States and Mexico in accordance with Minute 319.
- The Base Flow is 52,696 acre-feet (65 million cubic meters) of water that will be delivered at lower flow rates within Mexico and during a longer period of time. The Base Flow will be contributed by the Non-Governmental Organizations through the operation of the Water Trust for Restoration of the Colorado River Delta.
- The Pulse Flow and Base Flow are expected to provide for the restoration of approximately 950 hectares of habitat, allowing for seed germination for native willow and cottonwood trees and water to sustain their growth.
- The Pulse Flow planning was accomplished through workshops that included the participation of scientific experts from various universities in both countries, including the Autonomous University of Baja California, the College of the Northern Border (COLEF), the University of Arizona, the University of Montana, Environmental Defense Fund, Pronatura Noroeste, Sonoran Institute, and The Nature Conservancy, as well as from governmental institutions like the International Boundary and Water Commission, United States and Mexico (IBWC), U.S. Bureau of Reclamation, U.S. Geological Survey, U.S. Fish and Wildlife Service, Mexico's National Water Commission (Conagua), and the National Commission of Natural Protected Areas (CONANP), among others.
- The Pulse Flow design contemplates a flow rate of 706 cubic feet per second (20 cubic meters per second) at the March 23, 2014 start with a gradual increase until reaching a peak of 4,238 cubic feet per second (120 cubic meters per second) on March 27, 2014, with a duration of 3 days. Later, a gradual decrease in flows will begin that will continue over time until the event concludes on May 18, 2014.