



EM Nevada Program Reaches 75% Completion of Groundwater Mission



Aerial images of craters in Yucca Flat including Sedan Crater, located at the north end of Yucca Flat.

The U.S. Department of Energy (DOE) Environmental Management ([EM Nevada Program](#)) recently reached the final stage of groundwater activities — regulatory closure — at the third of four underground test area corrective action regions at the [Nevada National Security Site \(NNSS\)](#).

With the closure of the Yucca Flat and Climax Mine groundwater area, EM Nevada's overall groundwater mission at the NNSS is now 75% complete.

"The successful closure of our second groundwater corrective action area in 2020 alone is a testament to the hard work of dedicated professionals with the EM Nevada Program, as well as our lead contractor, Navarro Research and Engineering, over the course of many years," EM Nevada Program Manager Rob Boehlecke said. "With this accomplishment, we are now three-quarters of the way toward completing our overall groundwater mission in Nevada, an effort that promises to come in both ahead of schedule and well under budget."

The Yucca Flat and Climax Mine corrective action region is located in the northeast portion of the NNSS, about 85 miles from Las Vegas, and contains groundwater impacted by historic nuclear weapons and device testing at the site. The area was host to 750 underground nuclear detonations from 1951 to 1992, Three of which occurred at Climax Mine, with the remaining 747 occurring at Yucca Flat.





A groundwater well at the Yucca Flat and Climax Mine corrective action unit.

The closure of the Yucca Flat and Climax Mine groundwater area represents the second such accomplishment for EM Nevada this year alone. In April, the program earned regulatory approval for closure at the Rainier Mesa and Shoshone Mountain groundwater area, a milestone reached three years ahead of schedule, saving \$5 million in federal funding.

Combined, these dual successes cap off more than 35 years of testing, analysis, and modeling work in the Rainier Mesa, Shoshone Mountain, Yucca Flat, and Climax Mine groundwater areas, which has led EM Nevada to an even better understanding of the nature and movement of groundwater under the NNSS. Based on these extensive, expert observations, it is understood that radiologically contaminated groundwater at the NNSS will likely never pose a threat to the public.

To safely and successfully accelerate its groundwater mission, EM Nevada has broadly adopted the use of risk-informed decision-making, which prioritizes the protection of human health and the environment, while considering future land use, in the development of cleanup strategies. As a result of this approach, the accelerated closure of all groundwater areas at the NNSS is anticipated to result in \$80 million in savings under initial baseline estimates, with the timeline expedited by two full years.

In addition to Navarro Research and Engineering, EM Nevada also thanks and recognizes the Lawrence Livermore National Laboratory, Los Alamos National Laboratory, the United States Geological Survey, the Desert Research Institute, and Mission Support and Test Services, LLC, the management and operations contractor to the NNSS, for their contributions.

Click [here](#) for more information on EM Nevada's groundwater mission at the NNSS.