

SHEEP MOUNTAIN AUGMENTATION RESERVOIR STABILIZATION

- 2017: Gravel operations and reservoir excavation.
- 2018: Access road and pipeline installation.
- 2019: Reservoir construction began.
- 2020: Reservoir construction complete; diversion and pump station under construction.
- 2021, July: Pump station completed. Reservoir began filling.
- 2021, Oct: First release of augmentation water.

Project Summary

The Sheep Mountain Augmentation reservoir was completed in 2021 as an important supporting structure under the HCWCD Huerfano Basin Regional Augmentation Plan. Located approximately two miles west of Gardner in Huerfano County, it has been used for storage and water releases since September 2021.

Abnormally high winds and wave runup have impacted the top ten feet of the reservoir, threatening the stability of the reservoir liner and the reservoir's storage capacity. The reservoir now requires ballast stabilization.

The ballast stabilization project will fortify the embankment of Sheep Mountain Augmentation reservoir in two phases.

Phase 1

Importing and placing 12-inch D50 riprap in a band from the high-water line down about ten vertical feet for erosive protection of the reservoir liner. Bedding/filter material will consist of ¾-inch rock that will be placed on top of the liner and below the riprap.

Phase 2

After the reservoir level drops seasonally, the phase 1 process will be repeated in an additional band that continues down another ten vertical feet.



Engineer's Opinion of Probable Cost

Total project: \$2,100,768

Funding being sought: \$2,040,768



Panoramic view of Sheep Mountain Augmentation reservoir, November 2021

Project Benefits

In this water-short region of southern Colorado, the benefit to the community of the reservoir stabilization project is a water storage structure that can be relied upon and used to its full potential in the decades to come.

Through augmentation, the water stored in this reservoir provides the only domestic water available to the residents of Gardner and the Gardner School. It also serves homeowner associations, pond owners, commercial businesses, and Huerfano County Road & Bridge. The storage gives HCWCD a means to provide critical augmentation water supply throughout the winter and spring months, when HCWCD's other water supplies are unavailable.

From a statewide perspective, fortifying Sheep Mountain Reservoir plays a part in securing water storage and drought resiliency, both called out in the Colorado Water Plan as critical strategies toward a sustainable water future for Colorado.