



Water Sustainability Fund Summary Report for Project #4121

Western Water Use Management Model Update

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This is the summary report that outlines the work completed under the WSF Grant #4121 titled Western Water Use Management Model Update (WWUMM Update). The WWUMM Update completed every task that it set out to accomplish. Below is a list of the tasks that were completed:

- Completed a peer review of the modeling to determine if there are any issues or shortcomings that need to be corrected.
- Created a new database system to house the data for the modeling.
- Incorporated LiDAR surface elevations datasets into some of the modeling packages.
- Created a surface water operations model for Western Irrigation District along the South Platte River.
- Completed an evaluation of small tributary streams along the North Platte River.
- Refined the base of the High Plains Aquifer throughout the modeling area using an updated dataset provided through the Hydrogeology of Western Nebraska project.
- Completed an extended and updated land use dataset.
- Updated and extended the ground water, surface water, and regionalized soil water balance modeling through 2016.

The total project budget was \$392,500, which was paid out to consultants to complete the work. The project was completed in June 2020.

For additional questions about the project, please contact the project's coordinator, Thad Kuntz, Principal Hydrogeologist of Adaptive Resources, Inc. at thad@ari-water.com or 308-633-2890.