



Lakeside Estates Preserve Homeowners Association, Inc.

PROJECT STATUS REPORT #8 FINAL-POGG1, PDAA, 20180000855

PROJECT SUMMARY

REPORT DATE	PROJECT NAME	PREPARED BY
December 10, 2021	Ice Lake Preservation & Augmentation Project	Gracy Goodwin Project Manager
	Grantee: Lakeside Estates Preserve Homeowner Association	Lindsey Muller

STATUS SUMMARY

The Ice Lake Preservation & Augmentation Project has been completed. We have completed Task 1- Bathymetric Survey & Engineering Stage Capacity Analysis. A link to the survey can be found in the conclusion/ next steps section of this report. Task 2 the telemetry station has been installed, calibrated, and integrated into the UAWCD data management system. The augmentation agreement between Lakeside Estates Preserve Homeowners Association and the Upper Arkansas Water Conservancy District is complete and contracts are signed. The engineering report on the historic use analysis has been finalized.

While making a water release, we discovered the ditch near the outlet structure was full of sediment and overgrown. We were able to get an excavator to clean the ditch and noticed the culverts on the ditch had been raised due to the installation of a gas line, thus causing water to back up in areas and disrupting flows to the stream. We purchased new culverts and had a contractor replace and lower them to the original height. This significantly helped flows and water getting back to the creek.

After looking at the existing control structure and spillway which was deteriorating, Lakeside HOA and UAWCD decided to replace the whole outlet structure and spillway, instead of only rehabilitating the outlet portion. This created a solid structure that will last many years, instead of only fixing a small portion that may not last as long. All costs above and beyond the grant were be split between the two entities. The old outlet structure and spillway were removed and replaced with a new structure made of extra thick concrete to hold up to the ice. Lastly the measuring weir was installed and integrated into the telemetry system.

PROJECT OVERVIEW

Task	% Complete	Funding Source	Notes
1-Bathymetric Survey	100%	WSRF	Complete
2- Telemetry Station	100%	WSRF	In Progress
3- Lake Releases & Control Structure	100%	WSRF	Complete
4- Augmentation Agreement	100%	WSRF	Complete
5- Historic Use Analysis	100%	Cost Share	In Progress
6- Project Management	100%	Cost Share	In Progress
Total Project	100%	WSRF/ Cost Share	In Progress

BUDGET OVERVIEW -WSRF ONLY

Total WSRF Budget	= \$ 28,910.00
Reimbursement Request #1	= \$19,497.83
Reimbursement Request #2	=\$442.50
Reimbursement Request #3	= \$4,186.20
Final Reimbursement Request	= \$4,783.12
WSRF Remaining Balance	= \$0

CONCLUSIONS AND NEXT STEPS

- **Engineering- Colorado River Engineers & River Science**
 - **Completed/ Current Tasks**
 - The Bathymetric Survey was conducted by River Science, LLC. in partnership with Colorado River Engineering who has prepared topographic drawings, area capacity Table, Below is a link to the documents.
 - <https://app.box.com/s/uhngs2ogy82hhv8drj42x0qgo4sgimr5>
 - A site visit has been completed for design investigations.
 - Engineering report for the Historical Use Analysis (documentation attached)
 - Finalized the design of the control structure and spillway.
- **Hydrology- Source Water Consulting**
 - **Completed/ Current Tasks**
 - Task 2 -Source Water Consulting has received all telemetry equipment. The telemetry station installation has been completed.
 - Staff gages have been installed for reservoir elevation and Stage Storage relationship
 - The Ice Lake telemetry has been integrated into the UAWCD's data management system. The web data connection was activated. Reservoir data collected from the telemetry station is now available on the UAWCD website with login access.
 - Stillwell and measuring box installation and integration completed.
- **Project Management- UAWCD**
 - **Completed/ Current Tasks**
 - UAWCD Project Manager has coordinated surveys, engineering, and hydrology tasks. Project Manager continues to work with the fiscal agent and partner Lakeside Estates to manage grant tasks.
 - Augmentation agreement completed and executed.
 - Cleaning and maintenance of existing outflow ditch.
 - Worked with local utility company, contractor, and landowners to lower and replace 4 culverts on the outlet ditch.
 - Coordinated and oversaw contractor for removal of old structure and replacement of a new outlet and spillway structure.
 - Management of match (cash/in-kind). 100% of the match requirement has been met so far.
 - This is the final progress report for this project.
 - Pictures attached.

Thank you for your time and continued support of water projects in the Upper Arkansas Valley. Please contact Gracy Goodwin at (719) 539-5425 with any questions.

Sincerely,



Gracy Goodwin
UAWCD Project Manager

Before



During



After



ICE LAKE OUTLET AND SPILLWAY

Before, During, After



BEFORE





DURING







Cleaned outlet ditch



Measuring weir

Outlet

AFTER



