



Lake County Conservation District  
64352 US Highway 93  
Ronan, MT 59864

WMG-18-0039-Big Sky Watershed Corps Host Site  
Total Project Cost: \$16,595.78  
Total Grant Awarded: \$6,000.00  
Total Match: \$10,595.78

Copies of the report can be found at:

<https://lakecountyconservationdistrict.org/big-sky-watershed-corps/>

For more information or any questions on this grant please contact:

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## **Introduction:**

The Lake County Conservation District (LCCD), located in Ronan, MT, has been a western Montana host site for the Big Sky Watershed Corps since 2016. Each year since then, a member has served a 10-month term and helped LCCD develop and implement high quality conservation education and outreach initiatives, school programs and grazing and pollinator habitat improvement studies that continue to be popular in our community and throughout the region.

The purpose of LCCD hosting a Big Sky Watershed Corps (BSWC) member in 2018 was to expand and improve our capacity for delivering effective outreach to the public on soil and water conservation topics. Other goals included completing long-term monitoring of prior BSWC projects and pollinator plots and expanding soil health outreach efforts in our Conservation District.

Our 2018 member, Lauren Odom, was a great addition to the team and worked very hard to complete an impressive amount of tasks in just 10 months.



**Figure 1: (Left) Lauren Odom in action at the 2018 National Bison Range Roundup pollinator education themed activities tent.**

## **Discussion and Results:**

- A. The project goals that were part of the grant agreement are listed under each activity below. On top of these goals, Lauren made personal professional development goals for grant writing and outreach program management and added to the work goals of this project by writing and securing grant funding and successfully running a pilot Soil Health program on cover crops. She also finished up her term helping launch a youth outreach program called the Lake County Junior Conservationists.

Lake County Conservation District (LCCD) organizational objectives that the Big Sky Watershed Corps (BSWC) members work directly supported were; to increase effectiveness of youth programs by designing curriculum and creating outreach templates to share with educators, completing long-term monitoring and creating publications to share data with landowners and partners and finally, to play a leading role in our capacity for offering outreach and education opportunities, especially for youth.

Activity 1- BSWC member outreach and management

- Maintain active work plan.
- Assure all BSWC program paperwork and reports are done on time.
- Assist with the 2018 Western MT Grazing and Ag Conference (WMGAC) and finding funding for the 2019 WMGAC.
- Launch Lake County Junior Conservationists Program

Activity 2- The Lake County Watershed Visualization Project

- Host five (5) youth watershed education events with the Augmented Reality Sandbox.
- Develop new outreach materials.
- Host trainings for interested partners.

Activity 3- Lake County Pollinator Initiative

- Outreach to 50 landowners over the spring and fall with technical assistance and free pollinator seed.
- Assist with year 3 of monitoring 130 acres of pollinator habitat improvement plots planted on US Fish and Wildlife Service management units.

Activity 4- Lake County Forage Improvement Study

- Monitor the final year of a 5 year pasture improvement study.
- Complete soil health testing on forage improvement sites for ranchers implementing improved grazing management techniques.
- Identify new opportunities to partner with landowners on forage improvement trials.
- Manage and implement Cover Crop Cost share and soil health reporting to local ag producers.

Activity 5- Lake County No-Till Seed Drill Project

- Create user guides for our new no-till seed drill rental program
- Assist with No-Till Seed Drill Workshops

- i. The 2018 BSWC member completed and surpassed all grant and organizational goals that were set for the year. For each of the grant activities the member was part of, LCCD exceeded target numbers. Lauren directly outreached to 500 people, and helped with events that reached over 500 more, she created critical documents that assisted LCCD implement and share outreach resources and solidified community partnerships with schools and local conservation related organizations. Please see accomplishments below:

Activity 1: These tasks were related to properly running the position to stay in compliance with BSWC program requirements and setting professional development goals. Her goals included grant writing and youth program development. Lauren began her term helping at the 2018 Western Montana Grazing and Ag Conference (WMGAC) and from that experience she was able to write a grant and secure a \$5,000.00 grant from the National Grazing Lands Coalition to support funding for the 2019 WMGAC. Additionally she spearheaded a youth outreach program LCCD Supervisors envisioned called the Lake County Junior Conservationist's. Near the end of her term she helped create Soil and Water Conservation 101 lessons and interactive educational tools and helped bring the program to 90 Ronan 4<sup>th</sup> Graders.



Figure 2: (Left) Lauren demonstrating how much water there is on earth and educating 4<sup>th</sup> grade Junior Conservationists on water conservation. (Right) Interactive living soil replica, handmade by Lauren Odom.

Activity 2: LCCD's goal was for the BSWC member to lead 5 augmented reality sandbox (ARS) sessions. Lauren, LCCD staff and LCCD Supervisors offered 15 sessions for kids from 3<sup>rd</sup> to 6<sup>th</sup> grade and showcased it at the LCCD 4<sup>th</sup> Grade Ag Days. Lauren directly outreached to 320 youth and another 350 kids interacted with it at 4<sup>th</sup> Grade Ag Days. Additionally, Lauren created curriculum documents on lessons she helped develop that can be shared with educators from other Conservation Districts that utilize an ARS for youth watershed outreach.

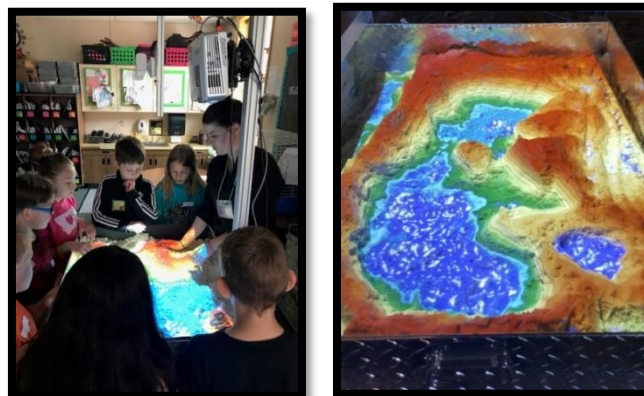


Figure 3: (Left) Lauren discusses topography and how the Sandbox works with Arlee 3<sup>rd</sup> graders. (Right) The Augmented Reality Sandbox at work.

Activity 3: The Lake County Pollinator Initiative began in spring 2017. The popular program offers site prep technical assistance and free pollinator seed for spaces up to 2,500 sq.ft. Along with this assistance we offer follow-up monitoring to help landowners identify plants and make management plans for the longevity of their plots. Lauren assisted with monitoring 20 plots and added capacity for LCCD by creating self-monitoring guides in response to participant requests. She also assisted with ongoing monitoring of wildlife habitat pollinator plots for the USFWS.

Another goal of the BSWC members work towards the 2018 Pollinator Initiative was to assist 50 people establish pollinator plots, we recorded assisting 55 landowners who received almost 5 acres of pollinator seed. On top of this, Lauren and LCCD staff attended 6 different community events including the 2018 National Bison Roundup and tabling at our local farmers market. Our member and LCCD staff outreached to a total of 320 people with basic pollinator education. Lauren also helped lead a mason bee house building activity with 120 2nd graders and created a kid friendly presentation on mason bees.

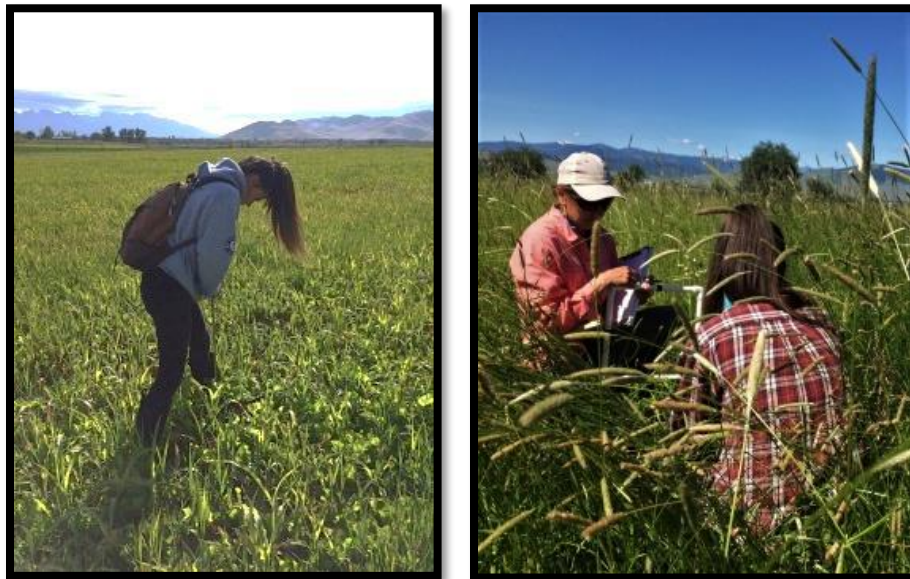


**Figure 4: (Top Left) Lauren and Karli, LCCD staff, present on mason bees to 2nd graders. (Top Right) Ronan 2<sup>nd</sup> grader admiring his new mason bee house. (Bottom) Lauren monitoring a landowner's pollinator plot.**

Activity 4: LCCD in partnership with NRCS and a local Soil Health working group, made up of Lake County farmers and ranchers, have been working on Forage Improvement Trials since 2015. Lauren was able to assist in



monitoring the final year of a legume interseeding trial and helped expand LCCD capacity by working to offer a cover cropping for soil health trial. She wrote the grant that assisted LCCD offer a cover crop cost share, outreached to interested producers, gathered soil samples and monitored plots for 7 different producers on 450 acres of pasture and cropland. LCCD will use the information gathered to supply each of the producers with a Soil Health Report and forage value numbers. This pilot program is critical for LCCD because it engages with large scale crop and livestock producers who are interested in conservation agriculture practices specifically to conserve soil and water health.



**Figure 5: (Left) Lauren taking soil sample at a cover crop field. (Center) Monitoring legume interseeding with NRCS Plant Specialist Monica Pokorny.**

Activity 5: In fall of 2017 LCCD, in partnership with Mission Valley Pheasants Forever and the Lake County Weed District, secured a grant from DNRC-CARDD to purchase a No-till Seed Drill to assist small landowners renovate and/or improve pastures for grazing and wildlife habitat. This need was identified by several local landowners and in spring 2018 we began our No-Till Seed Drill rental program. Lauren created an easy to follow landowner guide for operation and calibration protocols that we hand out to every renter and helped promote the drill at a workshop held in March that was attended by 50 people.

Finally, LCCD was able to encourage our 2018 BSWC member to explore other opportunities to participate in soil and water conservation efforts in our community and beyond. Lauren was able to partner with fellow BSWC members serving in Lake County at the Flathead Lake Biological Station (FLBS) and the Milk River Watershed Alliance (MRWA) to complete water conservation related tasks. At FLBS, they completed early detection and prevention aquatic invasive species (AIS) testing at shoreline and boat sites across Flathead Lake. This increased FLBS capacity to complete adequate AIS sampling in a timely fashion and gave Lauren the added experience of

talking with the public about AIS prevention efforts. For the MRWA she traveled to Sidney and helped plant thousands of willows for a riparian restoration project.



**Figure 6: (Left) Lauren completing shoreline sampling and discussing AIS with Polson youth. (Right) Lauren working with FLBS AIS sampling on Flathead Lake.**

- ii. Project goals and objectives mirrored actual project results for the 2018 BSWC member term at LCCD. Our member, Lauren Odom, also created additional helpful documents without being asked and constantly shared innovative ideas that engaged youth and adults. The only goal we were not able to complete was holding a regional Augmented Reality Sandbox training. We were unable to find a date that worked for all interested participants.
- B. LCCD had a productive term with our BSWC member and she went above and beyond the expectations we set forth in the grant and additional organizational expectations of members. She enjoyed her experience as well and will be returning to serve another term in 2019.

### **Capacity Building Benefits:**

The Lake County Conservation District (LCCD) in partnership with Natural Resources Conservation Service (NRCS) started offering limited outreach events in 2013. Total participation was 470 people for 2013/2014 fiscal year events, in 2014/ 2015 the number more than doubled to 1,033 participants. At this time LCCD began to prioritize building outreach capacity and secured a Big Sky Watershed Corps (BSWC) member in January 2016 to assist in these efforts. Hosting 2017 and 2018 members continued to help us build capacity and in the 2017/2018 fiscal year we outreached to 1,683 people more than tripling our capacity in just under 5 years. This would not have been possible without the addition of BSWC members to our team.

Capacity, for our Conservation District (CD), is related to how many employees we have to support the work load. Since LCCD operates on minimal funding it employs just one permanent full time employee. That employee's work is centered on general CD administration, with a secondary focus on outreach and programs. The addition of a Big Sky Watershed Corps member has allowed us to significantly increase our capacity and energy for conservation education outreach, especially to youth. Another way our members assist with capacity is by developing high quality materials and content to support our community programs. This allows Conservation District (CD) staff tools to engage with landowners as well opportunities to share information with other CD's regionally and statewide who are interested in offering similar programs.

The overall watershed impact of our 2018 BSWC member can be quantified by numbers of people reached with soil and water conservation education, over 1,000, AIS water samples taken in Flathead Lake, 31, and acres being managed for soil health conservation practices, 900. It can also be quantified by the partnerships formed, relationships created and information shared on natural resources issues with interested community members. This year's member excelled on all levels and this experience was definitely viewed as a success by LCCD Board members and staff and we are excited for our member to return in 2019.

#### **Grant Administration and Project Costs:**

- A. Work schedule: At LCCD we try and set realistic goals for work accomplishments. This year we succeeded in implementing a large work load by working as a team and having mandatory weekly meetings where we covered work schedules and timelines. This helped keep us on track and we didn't have any delays in work or progress.
- B. Budget: There were two categories in our budget that we requested DNRC funding from for this grant. The first is assistance with the Host site fee for the BSWC member, \$5,000.00, and then \$1,000.00 for travel expenses. The project was completed according to the budget and there were no overruns or savings.
- C. List any funds from other sources or in-kind services that were used to fund the project: LCCD received a \$5,000.00 grant from the Soil and Water Conservation Districts of Montana to help offset the cost of the Pollinator Health work that our BSWC member completed. In addition to this, LCCD contributed 190 hours of member supervision totaling \$4,750.00 for in-kind services and spent an additional \$845.78 in professional development opportunity costs and outreach travel and materials.

**Thanks to everyone that made this project a success!!**

