

YAMPA VALLEY CLIMATE CREW

■ 2022 Annual Report



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About

The Yampa Valley Climate Crew (YVCC) is a volunteer-based program that connects passionate community members with natural climate solutions (NCS) projects in the Yampa Valley. YVCC engages participants in a number of different NCS projects focusing on habitat restoration, reforestation, and stewardship. These activities, hosted by local environmental organizations, address the threat of climate change by decreasing emissions and building resiliency. The YVCC is benefits both the community it serves and the organizations it partners with by taking a collaborative approach to climate action.

What We Do



Habitat Restoration: Reviving our ecosystems to reduce emissions and build resiliency



Reforestation: Regrowing our forests to increase carbon sequestration and promote healthy watersheds



Stewardship: Maintaining our landscapes to continue their role in mitigating climate change

2022 Impacts

PROJECTS

14

VOLUNTEERS

301

STREAM RESTORED

2 miles

RESTORATION POTENTIAL

888.5 acres

TREES PROTECTED

303

TREES PLANTED

2200

Yampa Valley Climate Crew

2022 Season - Project Map





Beaver Dam Analogs

Colorado Parks and Wildlife
Jensen State Wildlife Area
07/22/2022

Project Description

There was once an abundance of beavers and beaver dams on James Creek in Jensen State Wildlife Area. Now there are none, the consequences being fewer wetlands and increased water runoff. To amend this, we worked with Colorado Parks and Wildlife to construct beaver dam analogs (BDAs), or human-made structures that mimic the work of beavers. They are made by pounding posts into the streambed, then weaving trimmed branches in-between to create a "dam." The resulting water build-up creates wetland areas, which are vital to wildlife and are key to storing more water on the landscape. Wetlands also sequester and store more carbon per acre than forests, making them an essential tool in the fight against climate change.

Impact

- 7 volunteers
- 11 structures built
- 1/4 mile of stream restored



Tree Stewardship

Partners in Routt County
Stagecoach State Park
07/29/2022

Project Description

YVCC worked with Partners in Routt County to maintain tree seedlings at Stagecoach State Park. The trees were planted during the 2013 ReTree event, but their rain buckets, called Waterboxxes, needed repair. Six youth volunteers and three adult volunteers maintained a dozen seedlings, which will produce shade and sequester carbon as they grow. This was a great way to show youth the importance of stewardship and to teach them about the role we can all play in mitigating the impacts from climate change.

Impact

- 9 volunteers
- 12 Waterboxxes maintained



Beaver Mitigation

Rising Leaders in Sustainability
Rotary Park
08/13/2022

Project Description

YVCC worked with five youth volunteers from YVSC's Rising Leaders in Sustainability program to safeguard cottonwoods at Rotary Park from beaver activity. We protected 46 trees using both cages and a paint/sand mixture to deter beavers. The goal of this project is to protect healthy cottonwood trees along the Yampa River from future impacts. Their shade helps lower the water temperature, which has been rising due to the effects of climate change, impacting aquatic life.

Impact

- 5 volunteers
- 46 trees protected
- 845 feet of river shade



Wet Meadows Restoration

U.S. Forest Service
California Park
08/06/2022 - 08/07/2022

Project Description

Wet meadows are an important piece of California Park's watersheds and are vital for water storage and wildlife habitat, including sandhill cranes, boreal toads, and Greater sage-grouse. However, erosion has disconnected many of them from the floodplain, resulting in decreased water retention and loss of vegetation. They are at further risk of deterioration in coming years from drought and intense rainstorms. By using innovative restoration techniques called Zeedyk structures, Climate Crew volunteers helped raise the water table, decrease erosion, and re-establish wet meadows and riparian areas.

Impact

- 23 volunteers
- 31 structures built
- 6.5 acres restored



Post-Fire Regeneration Survey

U.S. Forest Service
Buffalo Park

08/24/2022, 08/25/2022, 8/27/2022

Project Description

The Routt National Forest in Buffalo Park was ravaged by the Silver Creek fire in 2018. Conifer forests are vitally important in the fight against climate change, as they both sequester carbon and store moisture in our watersheds. The U.S. Forest Service is planning to reforest the area in spring 2023 but must first determine priority sites. To help in this effort, we measured seedling regeneration and mapped future reforestation sites to determine where tree planting will be necessary.

Impact

- 18 volunteers
- 682 acres surveyed



Beaver Mitigation

Steamboat Mountain School
Hitchens Island
08/30/2022

Project Description

YVCC worked with eight students and two teachers from Steamboat Mountain School to safeguard cottonwoods on Hitchens Island from beaver activity. We protected 81 trees using both cages and a paint/sand mixture to deter the beavers. The goal of this project is to protect the healthy cottonwood trees along the Yampa River from future impacts. Their shade helps lower the water temperature, which has been rising due to the effects of climate change.

Impact

- 10 volunteers
- 81 trees protected
- 295 feet of river shaded



Seed Plantation Stewardship

U.S. Forest Service
Gore Pass
09/14/2022

Project Description

As wildfires increase in frequency due to a changing climate, it is more important than ever to reseed and replant our lost forests. 30 years ago, the U.S. Forest Service implemented a Greater lodgepole pine seed plantation to service the needs of future reforestation efforts. To promote the growth of this “seed factory,” Yampa Valley Climate Crew volunteers cleared slash (downed tree material) from the site. By opening spaces for these trees to grow, we ensured a successful seed harvest from this plantation that will reforest up to 200 acres per year. The regeneration of our forests will lead to increased carbon sequestration, improved water retention in our watersheds, and a more climate resilient Yampa Valley.

Impact

- 3 volunteers
- 2 acres thinned
- 200 acres of reforestation potential each year



First Creek Restoration

U.S. Forest Service
California Park
09/20/2022

Project Description

YVCC worked with the U.S. Forest Service to plant willows along First Creek in California Park. This is an ecologically important area in Northwest Colorado as it is part of the Upper Yampa River Basin and provides miles of stream habitat for native fish populations. However, vegetation loss and erosion threaten some of California Park's waterways. Currently, First Creek is undergoing a restoration process that will create a more climate-resistant ecosystem by reconnecting the stream to the floodplain. As part of this process, Climate Crew volunteers planted willows along the creek to provide bank stabilization and more resilient native fish habitat.

Impact

- 10 volunteers
- ~800 trees planted
- 3/4 mile of stream restored



ReTree – Weekend 1

Yampa Valley Sustainability Council
Hitchens Island
10/01/2022

Project Description

The 2018 Yampa River Health Assessment and Streamflow Management determined that the most effective way to manage rising river temperatures is to increase riparian shade cover to limit solar loading in the summer months. The Yampa River Forest Restoration Project launched in 2019 in response to this report, which aims to restore a cottonwood forest along the Yampa River. ReTree is the backbone of this project, where volunteers come together to do the most important work: putting trees in the ground! On the first day of ReTree, we planted 300 trees on Hitchens Island, which was identified as a high priority planting site using lidar data to find spaces along the river with little to no canopy cover.

Impact

- 100 volunteers
- 300 trees planted
- 1250 feet of river shade



ReTree – Weekend 2

Yampa Valley Sustainability Council
Chuck Lewis State Wildlife Area
10/08/2022

Project Description

In 2022, YVSC held two ReTree events to increase reforestation efforts along the Yampa River. On the second day of ReTree, we planted 220 trees at Chuck Lewis State Wildlife Area, where more tree coverage was needed along river restoration sites. Colorado Parks and Wildlife has been doing bank work along the river in this area to create a more natural streamflow. Revegetating these areas is vital to restoring the banks, and cottonwood trees in particular will create more fish habitat and lower water temperatures.

Impact

- 40 volunteers
- 220 trees planted
- 330 feet of river shaded



Trout Creek Planting

Trout Unlimited
Trout Creek
10/09/2022

Project Description

YVCC worked with Trout Unlimited to restore the riparian area along Trout Creek. The creek flows from Sheriff Reservoir in the Flattops down to the Yampa River at Milner. Along the way some of its stretches have experienced significant bank erosion, channel incision and riparian habitat degradation. Working with private landowners, Trout Unlimited teamed up with the Yampa Valley Climate Crew volunteers to restore Trout Creek on an upper section near Oak Creek. We planted native cottonwoods and willows that help stabilize the banks, decrease water temperatures, and revitalize the riparian area.

Impact

- 12 volunteers
- ~550 willows and cottonwoods planted
- 1700 feet of stream restored



Beaver Mitigation

Colorado Mountain College
Bear River Park
10/12/2022

Project Description

YVCC worked with students from Colorado Mountain College to safeguard cottonwoods along the Yampa River from beaver activity. At Bear River Park, we protected 65 trees using both cages and a paint/sand mixture to deter the beavers. The goal of this project is to protect healthy cottonwood trees along the Yampa River from future impacts. Their shade helps lower the water temperature, which has been rising due to the effects of climate change.

Impact

- 15 volunteers
- 43 trees protected
- 260 feet of river shaded



Tree Stewardship

Roots & Shoots Club
Hitchens Island
10/13/2022

Project Description

The Climate Crew worked with students from Sleeping Giant School's Roots & Shoots Club to water tree saplings planted during ReTree on Hitchens Island. The club is an environmental group for youth that better our community by helping people, animals, and places. The goal was to give the tree seedlings one last watering before they enter dormancy for the winter. When these trees are fully grown, they will shade the river and help lower river temperatures.

Impact

- 12 volunteers
- 121 trees watered



Elkhead Creek Planting

Trout Unlimited
Elkhead Creek
10/15/2022

Project Description

Since 2021, YVCC volunteers have been planting trees along Elkhead Creek near Craig. This year, we planted a mixture of willows, cottonwoods, chokecherries, and snowberries along the stream bank, which will stabilize the eroding bank and revitalize the riparian area. These trees will help cool the river with their shade, provide habitat for numerous species, and sequester carbon from the atmosphere as they grow.

Impact

- 36 volunteers
- 320 trees planted
- 650 feet of streambank restored

Thank you to our partners and sponsors!



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