Due to the lack of properly designed trails, Drain Dips are required. Drain Dips not designed for a 20 year service life. They fail seasonally. This bridge failure resulted in significant sedimentation transport deposits. Abutment erosion compressed the headwalls snapping the railings. Bridge 19 relocated a few hundred feet east would have increased service life. Ultimately moving the trail to the ridge avoiding fall line would eliminate bridge thus maintenance.







Volunteers not only repair the rail but mitigate the ongoing erosion from managing the water. Two Drain Dips were installed with Sedimentation traps.

Several Bridges have been replaced in Leveraging Donations with RTP grant funds. 42 Bridges exist. \$2.8 million is needed to replace the remaining. Volunteers ensure the service life untill funds are awarded but once new bridges are installed the service live is 20

years +

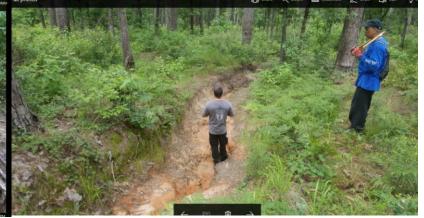


Although the Forest Service Enterprise Unit implemented Drain Dips January 2016, the rainfall by June approached 30 inches. The rains in the region is significant and ongoing. 50 inches on average recently more. (https://en.wikipedia.org/wiki/Climate_of_Houston) Reconstruction of trail in this region provides a unique opportunity solved when blending funds. Fund requests increase the pace addressing the increased maintenance backlog. Reconstruction of the sedimentation traps seasonally is vital. This leads to sustained motivation and ownership of water management ongoing for generations.























The Hiking element implemented Drain Dips in the Wilderness by hand. MUT volunteers applied the classroom training and dove into hands on reconstruction of drain dips in an attempt to stop erosion. Shoveling tons of soil has instilled a lasting appreciation for the impute of the drain dips.

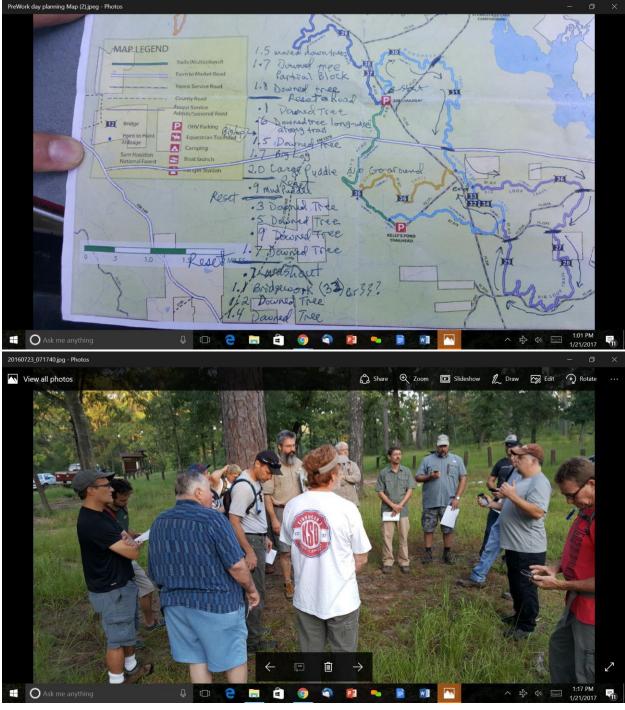
The following activities are permitted under this trail funding program

Trail restoration, rehabilitation, or resurfacing.

Includes rerouting or repair of areas damaged by trail use, flooding, or erosion; rehabilitation of trail tread and facilities that have deteriorated over time as well as Americans with Disabilities Act upgrades.

http://people.tamu.edu/~sshafer/documents/pwd_1067_p4000_trails_grant_application.pdf

ELIGIBLE PROJECT ACTIVITIES



Volunteers reviewed the damaged trail across the 84 miles of MUT on foot. The Forest Service also reviewed and surveyed via 4 wheelers. A discovery of priority areas overlapped and this illuminated the focus area. The Forest Service supports the effort with guidance on compliance and safety.

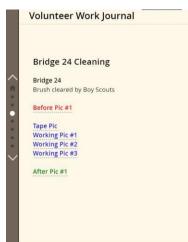
Of pride is our Scouts and the ability to match projects to the size and capability of the Volunteer. A



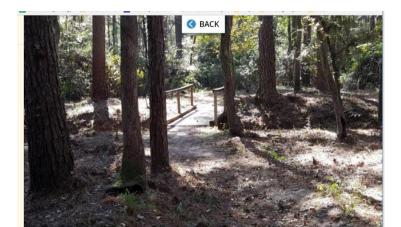
troop leader called and sought a project for Boys camping in nearby Cagle campground. In 24 hours, we extended the map with options: Easy, Intermediate, Hard. The leaders choose hard and Bridge 24 was transformed. These boys followed a system. They cleared 50ft in all directions. In 180 minutes, the boys were finished and walking out of the woods. We call this a "treatment of the bridge". Next we'll seed for habitat targeting RCW.













Initially when the tails were closed to all foot traffic the volunteers were not put off. They

doubled the effort and started to enhance the Trail Heads. The before and after impact of a fewweekends at Kelly's Pond produced pay receipts that is commensurate with the increased appearance.





Community outreach established the necessary sharing of perspective. Transparent objectives combined with training affords all to collaborate absent the debate over the impact of trail. All agree we impact and thus we all agree to come together in sustaining action to serve the public.

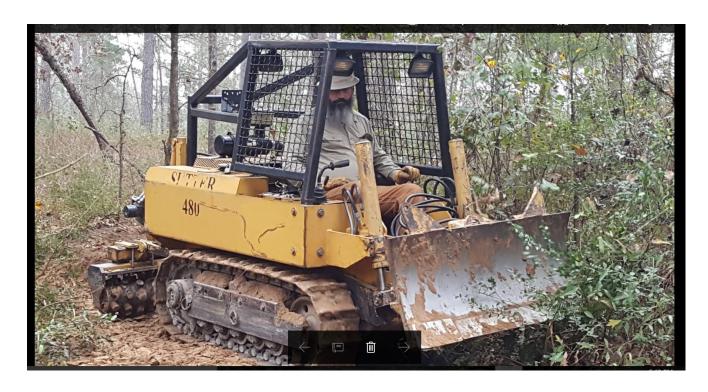


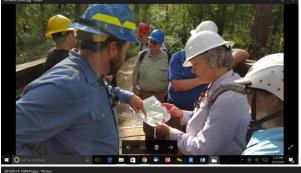






150 hrs of coursework to obtain the certificates to load, haul and operate FS equipment in compliance with the US FS. 20 Sawyers were recertified to operate Chainsaws and 7000 hrs of volunteer time was captured in an effort to get the trail backopen for Thanksgiving holiday.







With little resources Volunteers did volumes of work to regain the preliminary access to the trails. Volunteers placed signs and opened a portion of trail and then continued the weekly discipline to expand the trail length. Methodically cycling volunteers and affording all types of forest dwellers to participate in the collective reward of sustaining and serving the public.

