Project:

The 2017 Yellowstone River Salt Cedar Project began approximately around August 10, 2017, with a cleanup campaign that started on July 31, 2017, which consisted of revisiting prior year's project areas and surveying and spraying any Salt Cedar trees that were missed or new trees that established due to seed sources that were missed in prior years. The cleanup campaign commenced around August 7, 2017. On August 10, 2017 we kicked off the main project picking up where the 2016 project commenced which was just southwest of the Eaglebend area on the Yellowstone River near Shepherd, Montana. Mason Industries joined the fight this year by supplying 2 applicators, 2 atv's, 1 utv, and 1 jet boat. Yellowstone County Weed District provided one full time applicator, 3 seasonal applicators and the Centaur and John Deere Gator for the 2017 project. During the 2017 Salt Cedar Project approximately 550,000 Salt Cedar trees were sprayed within the acre project area. We treated approximately 210 acres with 548 acres covered and surveyed for salt cedar trees. The 2016 project covered 736 acres with 585 acres treated. We noticed that our acres covered are down but our tree populations definitely increased. The island areas were much smaller but the tree density was much higher than compared to the larger islands from the 2016 project year. The longer more slender islands that we are treating right now tend to be more catchalls or big nets for the seeds from the trees upriver. Some of these longer more slender islands are probably more prone to flooding than the larger wider islands of past project areas.

Conclusions:

The 2017 Yellowstone River Salt Cedar Project in Yellowstone County covered 5.63 new river miles with 548 acres surveyed with 210 acres of infested acreage being treated with a tree population of approximately 550,000 trees. Tree density definitely increased exponentially over the 2016 project. The drastic increase in tree density has increased the amount of herbicide used in order to obtain a 98-99 % mortality rate. The project commenced around Road 11 North in the Huntley Project Area. We do have a couple of islands in the project area that we were unable to access due to high water. We decided to put these islands on hold until next year and we moved down river to use what resources we had left wisely. These islands that were left out due to access issues will be top priority for the 2018 salt cedar project.

As we head eastward into the old oxbow areas of the Yellowstone River we are finding that these areas are becoming more concentrated with Salt Cedar trees. These old oxbow areas are a very important part of the floodplain of the Yellowstone River. If these concentrations of Salt Cedar trees continue to increase without any control efforts we are going to see an increase in flooding in areas downriver where the high-water is pushed due to choked off floodplain areas. We will also experience a river channel that will be cut deeper and deeper. These old oxbow areas act as relief valve during the high-water season. The number of Salt Cedar trees that we are finding in these areas is incredibly astronomic and require a large amount of herbicide and man hours to control. The island sizes are going to vary as we continue downriver but one thing for sure is that the density on the smaller islands is a lot larger compared to some of the bigger islands from past years. With this type of density starting to occur it really slows down the project and the amount of herbicide used increases drastically on these areas. Without this project and the funding that we receive through the trust fund grant we would be looking at some very detrimental effects from not controlling salt cedar along the Yellowstone River.

Opportunities for project continuation of expansion:

All cooperating agencies agree that this project needs to be continued for several years to insure eradication of the Salt Cedar infestation. Future treatment areas have been visited and the Salt Cedar population is growing at an alarming rate. With the kind of population increases and densities that we are encountering this project will continue to become more challenging in future years. Upstream and downstream counties are intending to use Yellowstone County's model for additional Salt Cedar



RIVER ISLAND INFESTED WITH SALT CEDAR TREES – 2017 PROJECT AREA



SALT CEDAR SEEDLINGS IN FLOODPLAIN AREA – 2017 PROJECT AREA



SALT CEDAR ALONG SHORELINE AREAS OF THE YELLOWTONE RIVER – YELLOWSTONE COUNTY



SALT CEDAR SEEDLINGS GROWING BENEATH 3-5 YEAR OLD SALT CEDAR TREES – YELLOWSTONE RIVER