



Marias River Watershed

NEWSLETTER

Website: www.mariasriver.com

Picture by Roger Zentis

Protecting and Improving The Land and Resources

Russian Olive Removal Demonstration Proved Successful

By Marlene Moon, MRW Coordinator

A public demonstration of Russian olive removal was a project highlight for the Marias River Watershed (MRW), and co-host, the Bureau of Reclamation. The demonstration was held October 20 at a site just below the Tiber Dam spillway on an approximate 220 acre riparian area along the Marias River across from Sanford Park. A range of 20-250 trees per acre were removed, including seedlings found after larger Russian Olive trees were removed.

Russian olives decrease forage production for livestock and wildlife because the branches extend to the ground and thorns make forage inaccessible. Russian olives were native to southern Europe and western Asia and introduced in the western US as an ornamental for windbreaks, erosion control, and wildlife enhancement. The tree can grow to 16 feet or larger and are tolerant

of salty soils, but must be 10 years old before producing seed. Large seeds are not wind blown, but float in streams and remain viable for 1 to 3 years. Although Russian olive provides food and cover for many wildlife species, few insects are present in solid stands of the tree, which results in fewer bird species. Russian olives are tolerant of shade and will establish under mature cottonwoods and

willows. The seedlings will eventually crowd out most native plants over time. (Note: the above information was taken from an article *Ecology and Management of Russian Olive* by Jeff Mosley and Brent Roeder, MSU Extension Service)

Russian olives compete for moisture and nutrients and eventually cause the demise of native riparian habitat. Some encroachments have already wiped out many native species along some Montana rivers (i.e. Musselshell and Yellowstone).



Photo courtesy of Dan Picard

The purpose of the demonstration was to address the growing infestation of Russian olive that have spread along the Marias River channel, providing a seed source for other infestations downstream.

The MRW contracted with Gary Wiest of Git 'Er Done Wiest, LLC in Brady to demonstrate various methods of control and eradication of Russian

olive. Wiest used a Gyro-trac (a large version of a mower/mulcher) which shredded and mulched trees up to 15 inches in diameter as well as a Hot Saw (a large saw mounted on a tractor for cutting the tree and leaving a 10-14 inch stump).

Following cutting and mulching, members of the Liberty County Weed Department provided chemical treatment on stumps and small seedlings not cut. Chemicals used included Remedy® and bark oil.

Additionally, a few trees were cut with chainsaws in areas too wet or soft to support the equipment. Others were left standing but sprayed with Remedy and bark oil as another treatment to evaluate.

The initial cutting/mulching/spraying was completed in 1 ½ days, but additional spraying continued until October 23 and will be followed up with more chemical treatment on the sprouts in the spring.



Photo courtesy of Dan Picard

The Board & Regional Chairs:

Paul Kronebusch-Chairman
Barb Cole-CoChairman
Lawrence Bold
Joe Weatherwax
Ken Augare
Ramsey Offerdal
John Rappold
Gary Arnst

The next regular MRW Meetings will be held Tuesday January 6 at 1:00pm, Marias River Electric, Shelby

Conservation District Contacts:

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Glacier 406-873-5752 ext. 101
Liberty 406-759-5778 ext. 102
Toole 406-434-5234 ext. 113
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This newsletter was compiled and edited by Kody Farkell, PCCD Administrator

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Russian Olive Demonstration Con't...

A close inspection of the demonstration area showed that, except for a few wet spots, disturbance was minimal. The equipment tires rated 3 pounds per square inch, but reversal and forward movement matted the area, making the area appear more disturbed.

Weed monitoring and control will be conducted by the Liberty Co. Weed Department over the next few years. The scattered disturbed areas were sprayed, flagged, photographed, and GPS'd (pinpointed using Global Positioning Systems) to document their positions for future treatment.

A Special Use Permit was issued by the Bureau of Reclamation for the demonstration project. Funding for the project was provided by a grant from the Montana Department of Natural Resources and Conservation (DNRC).

Watershed To Address Erosion At Pugsley Bridge

Marlene Moon, MRW Coordinator

The MRW has received funding to address an erosion concern on the north bank of the Marias River at the Pugsley Bridge site south of Chester that threatens the roadway to the bridge. The bridge serves as the only crossing of the Marias for residents in that area.

An assessment of the erosion was conducted by Great West Engineering of Helena and several alternatives were suggested. MRW Executive Board made a preliminary selection from these alternatives. Phase II calls for the selection of an engineer and development of a design. Funding for this phase of the project is provided by a Renewable Resource Grant from the DNRC.

The project is anticipated to manipulate the geometry and flow of the water by installing rock vanes called *thalwegs*. These structures are laid into the stream, pointed upstream to a 20-30 degree angle and direct water away from the bank and the adjacent roadway.

The Pugsley Bridge has a significant history. According to an account by Jon Axline, Montana Dept. of Transportation Historian, the innovative braced chain-type suspension system as designed by engineer Tom Hurdle in 1949. The bridge was completed in July 1951 and named for local rancher, Leonard Pugsley. The bridge consists of three spans with the main 290 ft span supported by cables suspended from two 51 ft. tall anchor towers. The steel cables are anchored to concrete blocks 32 ft. long and 6 ft. thick at each end of the bridge. The Pugsley Bridge is the only one of its kind in the US, and the Hurdle Company was so proud of it that a profile of the bridge graced the company's stationery for many years.



Marias River Watershed Projects Update

Sara Shepard, Toole Co. CD

The Marias River Watershed (MRW) has had a lot going on this past year. With the resignation of our Technical Coordinator, Roger Zentzis, Marlene Moon, Administrator for the Liberty County Conservation District (LCCD) has taken on the position of interim coordinator.

One main goal the MRW has had since its inception is finally completed and the Marias River Assessment findings are published. Conservation Districts (CDs) within the watershed have copies of the assessment available at no cost.

Other projects near completion or in the works are:

- 1) The Russian Olive Removal Demonstration project was completed in early November. A DNRC 223 Grant awarded for this project provided funds in the amount of \$15,000.00.
- 2) A Department of Environmental Quality (DEQ) 319 Grant sponsored by the Pondera County Conservation District (PCCD), and working with the Pondera County Canal & Reservoir Company, is providing repair work to the "AN" Wasteway and is nearly complete. Total grant funds for this project were \$69,000.00.
- 3) The PCCD was awarded a Renewable Resource Grant (RRG) from the 2007 Montana Legislature to further assess the Marias River and its tributaries. Total grant funds received were \$100,000 and the assessment is underway.
- 3) Glacier County Conservation District (GCCD) was also awarded a \$100,000 RRG which will address the erosion at the Pugsley Bridge in Liberty County. The project is not yet underway, but final plans are in the works. LCCD will be administering this grant.

The MRW is on the move and working hard. If you would like to be a part of this locally led group please attend our next meeting on January 6, 2009. New minds, fresh ideas, energy, and enthusiasm are always welcome to make our group the best that it can be, one that works for all its members.