

## CHALLENGE COST SHARE PROPOSAL – Fiscal Year 2009

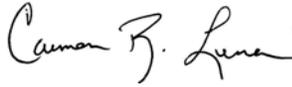
**Station:** Bowdoin NWR

**Date:** 09/24/2008

**Phone:** 406-654-2863

**Submitted by:** Carmen Luna

**Project Leader Signature:**



### **Project Description:**

Removal of approximately 10 linear miles by 40 ft wide (20 ft on each side of the fence) of Russian olive trees along shared Refuge boundary and the Dodson South Irrigation Canal, managed and maintained by the Malta Irrigation District (MID). The project would entail partnering with the MID and using their personnel and heavy equipment (two excavators) to rip out and remove Russian olive trees along the shared boundary. It will take approximately 80 hours to remove 10 miles of Russian olives along this boundary. The trees will be removed along both sides of the fence using two excavators and operators, and then piled for burning at a later time. Refuge staff would be responsible for the removal and repair of the boundary fence. Any re-growth of Russian olives in the summer would be chemically treated with an approved herbicide such as Habitat. Removal of the Russian olives along the boundary fence would reduce the number of invasive trees along our shared boundary, improve habitat conditions for native bird species, allow for maintenance of the fence by refuge staff and prevent cattle trespass from neighboring lands, allow access for maintenance along our boundary, and allow for access and maintenance of the canal by the Malta Irrigation District.

Russian olive is very invasive and has taken over along most of the north boundary of the Refuge and the banks of the Dodson South canal. Maintenance of the refuge boundary fence by refuge staff and maintenance of the banks of the canal by the Malta Irrigation District has become nearly impossible. Over the years the shared boundary has become a forest of Russian olive trees. In many places the trees are brush-like and act as a solid hedge, growing on top of and on both sides of the boundary fence, damaging the fence, and making it virtually impossible for refuge staff to maintain. The long thorns of the tree also make it difficult and dangerous for workers to cut the trees down with chainsaws. In addition, the root system of the trees growing along the canal create holes in the banks, creating water leaks, soil erosion, and a nightmare for the Malta Irrigation District to maintain. The canal is the life source of water for irrigated crops and for wetland management on the Refuge. Failure of the canal due to needed maintenance would be economically catastrophic to landowners and disastrous to wildlife management on the Refuge.

Until recently, Russian olives went un-checked by refuge staff and were allowed to spread throughout Refuge lands because for decades they were promoted as good windbreaks and shelterbelts, and as a source of food and cover for some wildlife species. Recent studies have shown otherwise and proven Russian olives to be extremely invasive and have the ability to displace native plant and animal species such as migratory upland nesting birds and native species such as sharp-tailed grouse. The trees act as perch sites for birds of prey and parasitic species of birds such as the brown headed cowbird, egg

predators such as the black-billed magpie, and den sites for mammalian predators such as raccoons and skunks. The trees also attract no-native species of migratory birds which compete for resources with resident species. In addition, native plants have become non-existent where these trees flourish.

Russian olives are a non-native tree from southern Europe and Asian introduced to North America in colonial times. The trees prefer to grow in wet-saline environments as well as certain riparian environments, hence the invasion of these trees along the Dodson South Canal, which mimics a riverine system. Because the trees prefer wet environments they have taken over much of the banks of the Dodson South Canal, the Refuge boundary, as well as other waterways and wet areas of the Refuge.

In cooperation with our partner, the Malta Irrigation District, it is our intent to eliminate the Russian olives along our shared boundary and improve habitat conditions along this area for migratory birds and resident wildlife, eliminate the possibility for further encroachment of Russian olives onto refuge lands, and improve access and maintenance capabilities for the Refuge and the Malta Irrigation District along this boundary.

**Funding Proposal: FWS \$30,000**

For two excavators, fuel and two operators

John Deere 200 @ \$200/hr for 80 hrs = \$16,000

Linkbelt @ \$175/hr for 80 hrs = \$14,000

Total = \$30,000

Identified and Potential Partners – and their contributions in dollars or in-kind

**PARTNER CONTRIBUTIONS**

**1) US Fish and Wildlife Service**

Carmen Luna

Bowdoin NWR

194 Bowdoin Auto Tour Rd.

Malta, MT 59538

406-654-2863

The Service will provide \$30,000 to Malta Irrigation District for removal of Russian olives along our shared boundary.

**2) Malta Irrigation District**

PO Box 1340

Malta, Montana 59538

406-654-1440

**In-kind services:**

Technical assistance and project oversight \$40/hr x 80 = \$ 3,200

transport John Deere 200 excavator = \$75/mile x 48 mi = \$ 3,600

transport Linkbelt excavator = \$75/mile x 48 mi = \$ 3,600

transport Dozer = \$75/mile x 48 mi = \$ 3,600

Dozer and operator to pile trees = \$100/hr x 80 hrs = \$ 8,000

Burn tree piles (vehicle, fuel, worker) = \$50/hr x 120 hrs = \$ 6,000

Chemically spray any re-growth of trees using two ATVs with sprayers and two operators @ \$30/hr x 80 hrs = \$ 2,400  
Total = \$30,400

**Special considerations:** N/A

IF MULTIPLE PROPOSALS ARE SUBMITTED – PRIORITY OF PROPSAL: 1