

Cooperative Noxious Weed Management Efforts at Fort Peck

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Scenario: Fort Peck Dam was the first dam built in the Upper Missouri River Basin. The area surrounding Fort Peck was first charted by Lewis and Clark in 1804, and the pristine natural condition of the river and surrounding area awed the renowned explorers. Unfortunately, Salt Cedar has become established in several remote locations.

Challenge: Salt cedar was documented in the Seven Blackfoot drainage area up to 18 miles from the high water mark of the reservoir. Ten of those miles were accessible by backpack only due to rugged terrain. A 12 mile boat ride required to the nearest access point. The infestation was spread across lands managed by USACE, Bureau of Land Management, USFWS, and private entities.

Effort: To tackle this invasive plant, Fort Peck staff worked diligently with cooperating organizations to ensure the effort expanded across the landscape rather than stopping at property and political boundaries. This proved to be an excellent example of leveraging resources to accomplish a common goal. Total contributions exceeding \$100,000 and cooperators included:

- US Fish and Wildlife Service (\$35,000 through Inter-Agency Agreement)
- USACE (\$77,500)
- Bureau of Land Management (\$50,000)
- Montana Natural Resource Conservation Service
- Missouri River Conservation Districts' Council,
- Garfield County Conservation District
- Montana Department of Natural Resources
- Montana Salt Cedar Management Team,
- Montana State University
- Seven Blackfoot Ranch

To implement this effort, USACE completed an Environmental Assessment, with a signed FONSI (Finding of No Significant Impact), obtained a Pesticide Discharge Permit for the application, and utilized a BPA (Blanket Purchase Agreement) contract for portions of the application. Areas identified for ground application targeted plants established outside of the main infestation. In areas of aerial application, many of the plants were 25 feet tall and extremely dense, where use of helicopter is the only option for control. Treatment of the infestation on USACE lands totaled 389 acres of which:

- 45 acres were treated from the ground in the Seven Blackfoot Drainage
- 219 acres were treated from the air in the Seven Blackfoot Drainage
- 125 acres were treated from the air in the Billy Coulee Drainage.

Benefits of the Project: An effort of this scale has resulted in many benefits to the Project which have included: reducing invasive species re-infestations on and adjacent to Project lands, leverage resources with cooperating partners, and protection of high quality natural areas. Additionally, this project allowed adjacent landowners to support a landscape level approach.

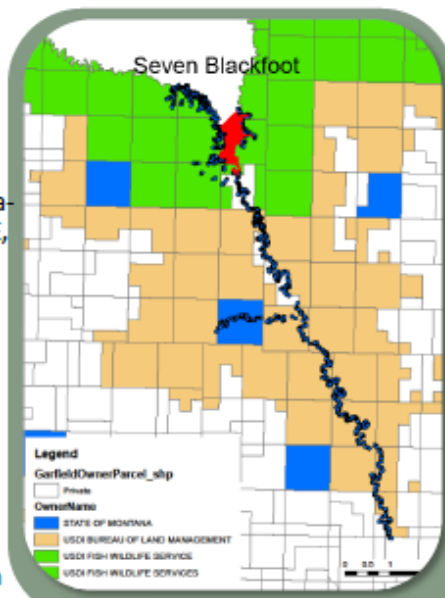
Did You Know: In the United States, Fort Peck is the largest hydraulically filled dam and the 5th largest reservoir!

SALT CEDAR

Tamarix ramosissima, commonly known as salt cedar, is a deciduous shrub with reddish stems, feathery, pale green foliage, and characteristic small pink flowers. Native to Asia, this species was introduced in the 1800's and was used as an ornamental plant, to establish wind breaks, and to stabilize soil in riparian areas. Salt cedar produces massive quantities of tiny seed that can germinate quickly in a broad range of conditions. As part of its survival strategy, the shrub develops a deep tap root (as deep as 5 meters) to access groundwater. Once developed, the root system will allow the plant to survive extended periods of drought.

Utilizing large volumes of water, salt cedar has replaced large tracts of native cottonwood/willow stands.

As the name implies, the species tolerates high levels of salinity, which accumulates among leaf scales during evapotranspiration. The resulting leaf litter increases salinity of the soil over time, making it unsuitable for native vegetation. Although it is listed as noxious weed in 11 states, it can be purchased for \$35.95 online as an outstanding accent in your landscape under the names "Pink Cascade" and "Summer Glow"!



Map Above: Salt Cedar infestation within the Seven Blackfoot Drainage Area of Fort Peck Dam.

Photo Above: Aerial herbicide application to treat Salt Cedar.