Partnering with the Lower Brule Sioux Tribe for Ecosystem Restoration and Natural Resources Preservation near Lower Brule, South Dakota

Joel Bich[1] *and* ***Greg Johnson***[2]

[1]Lower Brule Sioux Tribe, Lower Brule, SD, USA

[2]United States Army Corps of Engineers, Omaha, NE, USA

The construction of Big Bend Dam (1964) and Fort Randall Dam (1953) irreversibly altered the thousands of acres of native riparian forests, plant communities, and natural landscapes that were vital to the everyday lives and traditions of the Lower Brule Sioux Tribe. For centuries the landscape and native trees, plants, and animals along the river provided shelter, food, medicine, and many other uses. The dams inundated all of the historic islands and landscape features significant to the Tribe, and destroyed approximately 95 percent of the native cottonwood forests (Federally significant resource and dominant floodplain community pre-dam) on the Reservation. Continual erosion has destroyed another 2,000 acres of Tribal reservation lands and remnant natural landscape features and habitats, and is threatening critical Tribal infrastructure.

Omaha District has partnered with the Lower Brule Sioux Tribe to construct one project and complete an approved feasibility report for a second project to address the degraded habitats. These were developed in close coordination with Tribal Elders and staff to integrate Tribal indigenous knowledge and perspectives on lost and degraded resources and goals for each project. When completed, the two projects will restore a sustainable ecosystem corridor along almost five miles of shoreline including a total of 102 acres of riparian cottonwood forest and 49 acres of wetlands (both scarce along this reach of the Missouri River). The first project also incorporated recreational features including a boat ramp, swim beach, and other amenities to reestablish safe access for Tribal members to interact with the river. The second project will incorporate focused reestablishment of native and heirloom plants that are used by Tribal members as food and medicine and in ceremonies. This restoration will serve as a natural "classroom" enabling Tribal Elders to pass on traditional cultural knowledge to future generations regarding uses for these native plants.

Contact Information: J. Greg Johnson, United States Army Corps of Engineers, Omaha District, 1616 Capitol Avenue, Omaha, NE 68102, Phone: 402-995-2701, Email: greg.johnson@usace.army.mil