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| **Region:** | Sheridan |
| **Habitat Priority Area Name:** | Prairie Stream and Riparian Corridors |
| **Habitat Area Type (s):** | **Aquatic  Terrestrial  Combined**  Prairie stream, riparian, wetland, cottonwood, willow |
| **Habitat Values:** | Riverscapes that are interconnected and support fish migrations to complete their life histories; and riparian floodplains connected with their channels that resist flood damage, contribute woody debris, store water, resist noxious species expansion, support water quality, and provide food and cover for fish and herpetofauna. |
| **Reason Selected:** | The prairie stream corridors identified represent the most intact prairie stream communities in the Sheridan region with numerous species of greatest conservation need. Opportunities exist to rehabilitate some corridor segments modified by flow withdrawals, in-channel barriers, invasive species, plant community type conversions, and channel confinements. |
| **Area Boundary Description:** | *Tongue River watershed*: Tongue R. from the Montana line to its confluence with Wolf Ck, and Goose Ck.  *Clear Creek watershed*: Clear Ck. to its confluence with Rock Ck.  *Crazy Woman watershed*: Crazy Woman Ck to the mouths of its north and south forks.  *Powder River watershed*: Powder R. from the Montana line to the mouths of its north and middle forks.  *Little Powder River watershed*: Little Powder R. from the Montana line to its confluence with Cottonwood Ck.  *Little Missouri River watershed*: Little Missouri R. and Prairie Ck.  *Cheyenne River watershed*: Indian Ck from the Nebraska line, Cheyenne R. from the South Dakota line to its confluence with Antelope Ck; Antelope, Black Thunder, Lance, and Lightning creeks. |
| **Focal species or species assemblage(s) (limit 6):**  **SWAP Tier 1 species:** | Western silvery minnow (NSS2), sauger (NSS3), plains minnow (NSS3), goldeye (NSS3), shovelnose sturgeon (NSS3), and flathead chub (NSS4)  sturgeon chub, Yellowstone cutthroat trout |
| **Solutions or actions:** | * Restore stream connectivity at barriers to facilitate fish passage. Maintaining or creating some barriers may be warranted to control the distribution of non-desirable aquatic species. * Screen irrigation diversions where significant fish or aquatic organism losses are known. * Promote efforts and support cooperators to manage invasive plants and passively rehabilitate riparian habitats by applying grazing management strategies to enhance riparian area functions including stream channel shading and streambank stabilization. * Promote active channel habitat rehabilitation when passive rehabilitation measures are considered inadequate. * Retain and manage beaver where the potential for nuisance situations can be mitigated to enhance channel and floodplain connectivity, augment water tables, enhance riparian habitat development, and increase pools and shallow wetlands. * Reconnect abandoned oxbows to moderate erosive gradients, raise water tables, enhance riparian plant communities, and improve food and cover available to aquatic and terrestrial wildlife. * Work with local entities to improve water management and instream flows when opportunities for win-win scenarios arise. * Recommend measures to avoid or mitigate development impacts to stream and riparian habitat when opportunities arise. * Promote maintaining the free-flowing nature of the Powder and Cheyenne rivers and major tributaries. * Promote conservation easements or public/private land exchanges where practical to preserve the nature and functions of these stream and riparian corridors. |
| **Additional Information:** | Land uses along riparian corridors include livestock grazing, wildlife herbivory, irrigation diversions, irrigated and dry land crop production, recreation, and residential and commercial uses. Energy development and mining are variable, but high in portions of some watersheds. The potential for residential and ranchette-style subdivision developments is high around population centers.  Some barriers associated with irrigation, travel corridors, and commercial developments fragment these aquatic communities. Irrigation withdrawals and ground water discharges have altered the naturally variable flow regimes. Restoring connectivity at barriers would allow fish to seek seasonal habitats and support their abilities to complete their annual cycles. Diversion screening would minimize fish entrainment and loss within ditches.  Native riparian communities include narrowleaf and plains cottonwood, green ash, boxelder, and mixed shrub and herbaceous types. Transportation corridors, residential, commercial and agricultural type conversions, heavy ungulate herbivory, and invasive plant community type expansion have reduced native riparian communities and confined segments of the riparian corridors. Sometimes, these reductions and confinements have reduced riparian and stream functions (e.g., reduced shade, woody debris contributions, and channel meandering; steepened channel gradients increasing bed and bank erosion, loss of water tables) and food and cover available for various life stages of fish. Some potential exists for reducing confinements by reconnecting abandoned oxbows, which would help moderate steepened stream gradients, raise local water tables, increase riparian and channel habitat development, and increase food and cover for various life stages of fish.  Recent surveys supporting the importance of the identified prairie stream communities include:  Barrineau, C., B. Bear, and L. Tooker. 2007. Status of habitat and native species in northeast Wyoming prairie streams. Wyoming Game and Fish Department Administrative Report. Cheyenne, Wyoming.  Bear, B. 2006. Prioritization of eastern Wyoming prairie streams for conservation. Wyoming Game and Fish Department Administrative Report. Cheyenne, Wyoming.  Edwards, Gordon P Jr. 2013. Crazy Woman Creek fish community and habitat assessment. Wyoming Game and Fish Department Administrative Report. Cheyenne, WY.  McGree, M. M., C. A. Moan, A. Lickteig, and G. P. Edwards, Jr. 2010. Prairie stream fish communities and habitat associations in the Belle Fourche, Cheyenne, Little Missouri, and Little Powder river drainages of Wyoming. Wyoming Game and Fish Department Administrative Report. Cheyenne, WY.  Patton, Tim. 2001. Application of a modified index of centers of density to four drainages within the Missouri River drainage, Wyoming. Completion report submitted to the Fish Division, Wyoming Game and Fish Department, Cheyenne, Wyoming.  Peterson, D.A., Wright P.R., Edwards, G.P., Jr., Hargett, E.G., Feldman, D.L., Zumberge, J.R., and Dey, Paul, 2009, Ecological assessment of streams in the Powder River Structural Basin, Wyoming and Montana, 2005–06: U.S. Geological Survey Scientific Investigations Report 2009–5023, 139 p.  Wyoming Game and Fish Department. 2010. State wildlife action plan. Cheyenne, WY. |
| **General land ownership and surface area:** | BLM: 27,463 ac (4%),  USFS: 0 ac (0%),  Other Federal: 26,192 ac (4%),  State: 49,047 ac (8%),  Private: 507,868 ac (83%),  Water: 144 ac (0%),  Total area: 610,714 ac |