

Missouri River Livestock Watergaps on Sterling Ranch and Blackman Ranch, Craig, Montana.

Status Report for Northwestern Energy FERC Project 2188 MoTAC project 2015-6

Prepared by

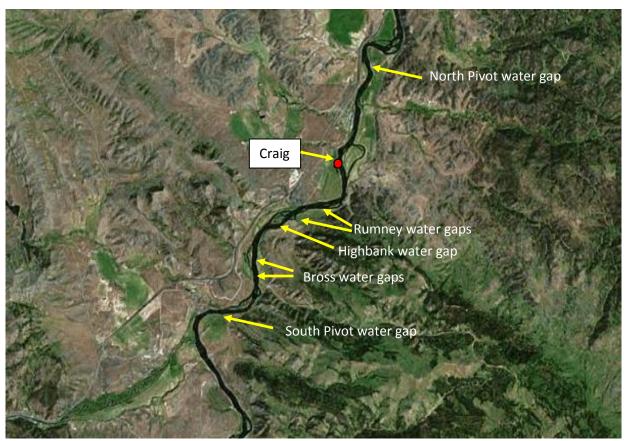
Grant Grisak, Montana Fish, Wildlife & Parks

In 2015 Montana Fish, Wildlife & Parks was awarded \$8,545 from Northwestern Energy to develop 5 livestock watergaps on the Missouri River at Sterling Ranch, between 3 and 6 miles downstream of Holter Dam. During the negotiations of this project, the landowner indicated rock for the project could be donated from a quarry near the site, but that offer changed. As such, the cost of the project increased \$1,655 to purchase rock for the water gap landings. In addition, Montana Fish, Wildlife & Parks (MFWP) biologists negotiated construction of another livestock water gap on the Missouri River on the Blackman Ranch located 1 mile downstream of Craig. Construction of that water gap was funded by Montana FWP in the amount of \$2,000. Other inkind funding from MFWP was \$750 for site surveys, permitting and monitoring.

This is a Priority 3 which, under FERC license 2188, is a PM&E project that meets License Article requirements by providing scientific or other tangible PM&E benefits to Madison-Missouri River fisheries or wildlife populations or their habitats. The project is located in the greater Missouri River drainage upstream from Fort Peck Reservoir.

The purpose of the project was to provide designated livestock watering sites that would concentrate use in areas with hardened banks and reduce impacts to the river banks. The project involved installing two wood rail fences at each site that connect to the existing riparian fences and span from the upper bench to 36 inches over the waters edge. These rail fences were installed in a wedge configuration so the smallest part of the wedge is near the river. The banks were sloped and angular rock (3-6 inches dia) were placed on these sloped areas to fortify the river banks.

The project was completed in August 2015. Rails on the left approach at the South Pivot water gap site were purposely left unattached so the landowner could complete a maintenance project at the irrigation intake located immediately upstream. An electrified wire will be installed by the landowners to prevent livestock from going around the rail fences as river water elevation changes.



Missouri River water gaps on Sterling Ranch and Blackman-Applestem Ranch, Craig, Montana.



South Pivot water gap – upper. Note; set posts are in place in background. Rails will be installed following irrigation intake cleanout. Sterling Ranch, Missouri River, Craig Montana.



Bross water gap – upper. Sterling Ranch, Missouri River, Craig Montana.



Bross water gap – lower. Sterling Ranch, Missouri River, Craig Montana.



High Bank water gap. Sterling Ranch, Missouri River, Craig Montana.



High Bank water gap. Sterling Ranch, Missouri River, Craig Montana.



Rumney water gap – upper. Sterling Ranch, Missouri River, Craig Montana.



Rumney water gap – lower. Sterling Ranch, Missouri River, Craig Montana.



North Pivot water gap. Blackman Applestem Ranch, Missouri River, Craig Montana.



North Pivot water gap. Blackman Applestem Ranch, Missouri River, Craig Montana.