

2020

THE RAINWATER BASIN JOINT VENTURE

Annual Report



JOINT VENTURE

ESTABLISHED 1992





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DUCKS UNLIMITED



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FARM SERVICE AGENCY



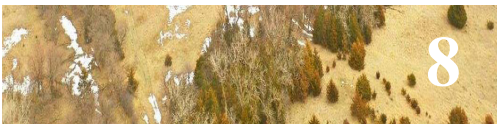
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FUNDING

The Rainwater Basin Joint Venture (RWBJV) partnership is dedicated to conservation of wetlands and grasslands in the mixed-grass prairie ecoregion of Nebraska. This geography is as varied as the migratory birds that use this landscape. Nebraska's Sandhills, is the hemisphere's largest intact dune stabilized grassland, while the Rainwater Basin Region's wetlands are scattered across a landscape dominated by irrigated row-crops. Regardless of differences in these and other landscapes, the RWBJV partners find solutions that allow quality habitat to be part of the private landowners farm and ranch operations. These solutions require a diverse and growing number of partners, including individuals and organizations comprising government agencies, agriculture associations, non-government organizations, corporations, academic institutions and others. Our respective missions and purposes may differ, but we share a common interest in the water, soils, habitat, and other resources that make this a special place.

A major accomplishment of the RWBJV partnership was the establishment of an Annual Operations Plan (AOP). This plan provides a strategic guide for our work. The AOP prioritizes wetland and grassland conservation in the different Geographic Focus Areas identified in the RWBJV Implementation Plan. In addition to habitat acreage benchmarks, the AOP outlines capacity needs to achieve the desired habitat objectives. Additional funding from a variety of partners has allowed the RWBJV to leverage six shared positions to deliver wetland restoration, implement prescribed fire, and communicate about these successes. These shared positions include a Pheasants Forever Farm Bill Biologist, two Easement Specialists as well as an Easement Administrative Specialist and Communications Assistant positions hosted by Central Platte Natural Resources District. The Nature Conservancy (TNC) is also hosting a Burn Boss. These positions have significantly increased one-on-one interaction with landowners interested in implementing conservation programs. The Farm Bill Biologist has been focused on delivery of the Conservation Reserve Program (CRP), development of burn plans, and other United States Department of Agriculture Farm Bill programs. The easement support staff are focused on successful delivery of Natural Resources Conservation Service's Agriculture Conservation Easement Program throughout the RWBJV Administrative Area. The Communications Assistant has been instrumental in highlighting numerous RWBJV partner projects. The TNC Burn Boss has significantly increased education, coordination, and communication about prescribed fire statewide with a focus on the Eastern Sandhills.

These additional positions collaborated with other RWBJV partners to leverage \$8.6 million dollars to positively impact 14,545 acres. These acres represent a diversity of projects including wetland restoration, implementation of prescribed fire, and establishment of grazing infrastructure to incorporate prescribed grazing as a management tool. Projects varied by region and the following partner highlights will feature these diverse projects.

This annual report highlights both the commitment to projects in the Rainwater Basin, where our work began in 1992, but also highlights the diversity of projects that the partners have implemented to successfully contribute to the RWBJV Implementation Plan objectives for the entire RWBJV Administrative Area.

Our work would not be possible without the contributions of major funding partners, including Ducks Unlimited, National Fish and Wildlife Foundation, Nebraska Environmental Trust, Nebraska Game and Parks Commission, North American Wetlands Conservation Act, Natural Resources Conservation Service, and the U.S. Fish and Wildlife Service. In particular, the Nebraska Environmental Trust has been a mainstay in the funding for our on-the-ground habitat work since the partnership's earliest years. The non-federal match provided by these grants is essential to receiving federal grant funding, and is thus invaluable to the RWBJV and other conservation groups across Nebraska.





Photo: RWBJV



Photo: Bobbie KrizWichham



Ducks Unlimited

Supporting the Rainwater Basin Water Development Fund

Ducks Unlimited's (DU) mission is to conserve, restore, and manage wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people. The Rainwater Basin Wetland Complex (RWB) is a priority landscape for DU based on the important habitat resources these wetlands provide.

Historically, the RWB had over 200,000 acres of wetlands with about 90,000 acres inundated in any given year. Unfortunately, only about 40,000 acres of wetlands remain and only about 8,500 have water annually. This is sometimes inadequate for the millions of migratory birds that depend on these habitats during migration to replenish fat and nutrient reserves necessary for optimum breeding. Further, the lack of dispersed wetlands causes over-crowding, a contributing factor to disease outbreaks.

As outlined in the RWBJV Water Plan, this landscape needs to provide 18,000 acres of flooded RWB wetlands to meet the needs of migratory birds. Therefore, in addition to the 8,500 acres of flooded habitat in an average year, plans call for the restoration of an additional 20,000 acres by 2030, of which 5,000 acres are expected to have water in an average year. That leaves a 4,500 acres deficit that must come from pumping and water delivery to existing wetlands. Currently, about 1,000 acres are pumped each year in the RWB by the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service (USFWS). To close this habitat shortfall, a Rainwater Basin Water Development Fund (RWBWDF) was established following unanimous approval by the RWBJV Management Board that will be held by Ducks Unlimited, Inc. (DU) in hopes of eventually providing sufficient funding to ensure there is enough water to support RWB migrations in perpetuity via supplemental water.

The RWBWDF will support pumping costs from existing wells and surface water deliveries from irrigation districts to supplement existing wetlands. The Fund will also be used to develop new wells and water-delivery infrastructure. This is the largest fund-raising endeavor ever embarked upon in Nebraska by DU. The goal for the RWBWDF endowment is at least \$7 million over the next 5-10 years based on current cost calculations. The interest on this fund will pay for pumping costs and potentially new wells and infrastructure to put water on the landscape annually. Contributions to the RWBWDF will come from 3 primary sources, the sale of specific revolving lands owned by Wetlands America Trust, Inc. (i.e. DU), USFWS and NGPC migratory bird compensation funds, and donations. Many donors have already pledged support explicitly to this effort, and water delivery projects that will allow for annual inundation of 5 large western Rainwater Basin wetlands containing 1,894 acres of wetlands have already been achieved by the RWBJV.

While DU is the holder of the fund, it will be the RWBJV Management Board that will advise and make the decisions on pumping and infrastructure projects annually to ensure that the funds are put in areas where they will have the most benefit to migratory birds and wetland health in a given annual cycle. The majority of funding will be used toward public lands to benefit the most people with the majority occurring in the spring to benefit the greatest number of migratory birds during our most important part of their life cycle, but the funds will still have the ability to fund private lands projects and fall pumping. The RWBJV partnership has done a great job of protecting and restoring habitats, but the creation of this fund is a multi-partner effort that will allow us to open the full wetland management playbook on RWB wetlands.

Farm Service Agency

Partnering with the RWBJV for Soil, Water, and Wildlife Health Through the Conservation Reserve Program

The Nebraska USDA Farm Service Agency (FSA) administers a number of conservation programs through the Conservation Reserve Program (CRP) and its subsets, including the Conservation Reserve Enhancement Program (CREP) and State Acres for Wildlife Enhancement (SAFE). These programs are all administered by the FSA, with implementation support from the Rainwater Basin Joint Venture (RWBJV) partners.

The CRP is a program that provides agriculture land owners a yearly rental payment, practice establishment cost-share, and possible other incentives on environmentally sensitive land that has been reseeded back to species that will improve environmental health and quality. CRP contracts are for 10 to 15 year periods.

The CREP is a part of CRP that targets high-priority conservation concerns identified by the lead state, and through the leveraging of non-federal funds to effectively addresses these concerns. In Nebraska, landowners have an opportunity to enroll in the CREP developed to assist the state with Platte and Republican River water issues. In 2020, a CREP signup period was held with 249 offers made on 25,974 acres. The Nebraska Department of Natural Resources (NDNR) is the primary State CREP sponsor.

The SAFE is also part of CRP. It is focused on maximizing CRP enrollments to benefit priority wildlife species. In Nebraska, SAFE enrollments have been developed to benefit Northern Bobwhite Quail, Greater Prairie-Chickens, Ring-necked Pheasants, and of specific interest to the RWBJV, migrating waterfowl, cranes and shorebirds. The Migratory Birds, Butterflies, and Pollinators SAFE project was announced in 2017 and is applicable in select playa areas of Kansas and Nebraska. RWBJV and Playa Lakes Joint Venture (PLJV) are the project sponsors and continue to assist FSA in both states with marketing and implementation of the program. A signup was not held in 2020. In Nebraska, the RWBJV continues to be a critical part of outreach to promote and implement this program.

The CRP also has a specific grasslands component, and with the assistance of groups such as the RWBJV, Nebraska was extremely successful during the 2020 CRP Grasslands contract offer period. FSA county offices took 1,041 offers on 488,695 acres of CRP Grasslands in Nebraska. The CRP Grasslands program is significant because it marries livestock grazing with development of plant and animal biodiversity that improves environmental quality.



Photo: Ele Nugent

Little Blue Natural Resources District

Supporting Integration of Wetlands into Local Producer Operations

The mission of the Little Blue Natural Resources District (LBNRD) is to be a leader in conserving, protecting, developing, and managing the natural resources of this District for the health and welfare of the people of the District. The LBNRD is one of the 23 Natural Resource District's in Nebraska. As mandated under state statute NRDs have 12 program focuses ranging from groundwater management to fish and wildlife habitat management. It lies in the southeast portion of Nebraska and encompasses the eastern 90% of the Little Blue River Basin. All or parts of seven counties make up the Little Blue District. Counties include: Adams, Clay, Fillmore, Jefferson, Nuckolls, Thayer, and Webster Counties. The total area is approximately 1,537,280 acres. A significant portion of the LBNRD overlaps the Rainwater Basin Wetland Complex (RWB).

The LBNRD Long Range Plan was established in 2020 to guide district investments over the next five years. Several objectives were established for each of the 12 program focus areas. The LBNRD Board and staff recognized the challenges of achieving meaningful fish and wildlife management objectives, but prioritized several strategies to achieve a resilient landscape that provides quality habitat. The plan identifies six actions that will be implemented in the next five years to improve habitat. These include public education, implementation of cooperative programs, and management of NRD managed lands.

The Regional Conservation Partnership Program (RCPP) grant awarded by Natural Resources Conservation Service to the Rainwater Basin Joint Venture Partnership (RWB JV) provided a set of new wetland conservation options. These options afforded more flexibility for producers to integrate wetlands into their operations. LBNRD embraced the opportunity to use these flexible programs to achieve the fish and wildlife management objectives outlined in the five year plan.

In 2020, three projects were developed in LBNRD. These projects impacted approximately 400 acres. These projects were focused at the field scale, addressing both irrigation water management and wetland restoration. On these tracts the producers were provided cost-share to upgrade pivot irrigation systems to implement Variable Rate Irrigation (VRI) and restore 120 acres of wetlands. The easements incorporated a significant amount of flexibility. As part of these easements, producers were allowed to continue cropping the restored wetland acres or transition these acres to irrigated pasture. The easement payment compensated landowners for restoring wetland acres and the restrictions on future wetland drainage. Incorporation of the VRI technology also improved the producer's net-farm income. This technology helps reduce excess irrigation inputs by precisely applying water to portions of the field based on crop water needs.

Minimizing excess irrigation inputs does not just provide economic benefits for the producer it also reduces nitrate leaching into the aquifer. These projects are "win-win" scenarios for producers, wildlife, and the aquifer in terms of water quality and quantity. LBNRD looks forward to continuing to support "win-win" solutions that help wetlands and wildlife habitat fit into private farm and ranch operations in the LBNRD.



Photo: Cortney Schaefer

Nebraska Game and Parks Commission

Habitat Management of Public and Private Lands

The Nebraska Game and Parks Commission (NGPC) is one of the founding partners of the Rainwater Basin Joint Venture (RWB JV), helping to gain Joint Venture status as part of the North American Waterfowl Management Plan (NAWMP) in 1992. NGPC helped create the RWB JV's partnership structure and is still involved at all levels. Broad benefits to the State have occurred, including habitat restoration and management, social benefits associated with soil and water conservation on private and public lands, and outdoor recreation opportunities for Nebraska residents. The following are some examples of how NGPC leveraged its resources with RWB JV partners to accomplish wildlife habitat benefits in 2020.

This year the NGPC hired a new RWB JV Habitat Specialist position for management of public and private lands. Without active management of existing wetland habitats, these areas transition to dense stands of emergent vegetation, limiting their value for many migrating bird species. Aggressive and/or invasive plants also limit the diversity of wetland vegetation, excluding early-successional species that are valuable food resources for migrating birds. Active wetland management also results in open water areas and seasonally-exposed mud flats, beneficial to a broader group of migrating birds.

To ensure sufficient capacity to support habitat management NGPC collaborated with the RWB JV, Natural Resources Conservation Service (NRCS), and U.S. Fish and Wildlife Service (USFWS) to host the RWB JV Habitat Specialist position. To ensure this position has the necessary funding to delivery management actions, NGPC submitted and was awarded a Nebraska Environmental Trust (NET) grant. These funds are being leveraged with other RWB JV funding sources and partners to maximize the number of public and private lands sites and acres treated. Habitat accomplishments by the Habitat Specialist include: (1) Tree Removal on 22 properties comprising 1,656 acres. Areas treated include NRCS Easements (private), Wildlife Management Areas (WMAs - NGPC), Waterfowl Production Areas (WPAs – USFWS), and Ducks Unlimited (DU) properties open to the public. (2) Fall Herbicide Treatment on 45 NRCS easements and WMAs comprising 1,551 acres. (3) Prescribed Fire on 19 NRCS easements and 1 WMA comprising 1,511 acres.

The RWB JV Habitat Specialist position also delivers other RWB JV habitat programs, supported by NGPC and RWB JV partners. The Working Lands Initiative establishes grazing infrastructure on NRCS easements following wetland restoration. The RWB JV Habitat Specialist is currently involved in 22 of these projects.

One project is an 80-acre grazing management project on an existing WRP easement. Fence, new gates, and a solar well with tanks were built on site. This site is adjacent to the Marsh Duck WMA, adding scale and habitat variability on this publicly and privately owned wetland.

The RWB JV's "Watershed Initiative" has also benefitted public and private land wetlands, by helping to restore the hydrology and function of protected wetlands. The RWB JV GIS shop has identified pits within watersheds of publicly and privately owned wetlands protected through perpetual conservation easements. These easements are held by a variety of RWB JV partners including local Natural Resources Districts, NRCS, and the USFWS. As irrigation technologies have changed, so has the need for traditional, irrigation reuse pits. Landowner's often seek support from RWB JV partners to fill these pits as they are unnecessary for their current irrigation systems and to improve the ability to farm individual tracts. NGPC prioritizes cooperative agreements with landowners that wish to fill pits within the watersheds of WMAs and other protected wetlands. At times, sediment is removed from the wetland to use as fill for the pit, gaining broader public and private lands benefits.



Pheasants Forever

Amplifying the Working Lands for Wildlife Initiative

In 2016, the Rainwater Basin Joint Venture (RWBJV) partners worked with Nebraska Cattlemen to submit a Working Lands for Wildlife (WLFW) proposal to the Natural Resources Conservation Service (NRCS). The goal of the Eastern Sandhills WLFW is to improve grassland habitat for beetles, birds, and beef. Pheasants Forever (PF) recognized the urgency of habitat management in this landscape. To support the WLFW, PF developed additional capacity to hire Farm Bill Biologist to help coordinate the WLFW work in the eastern Sandhills. Having a dedicated position allowed PF to focus on low density Eastern Red Cedar (ERC) control, prescribed grazing management, and prescribed burning in this region. To date, this position has focused on program delivery as well as coordinating with partners and communicating a consistent message about the WLFW throughout the Eastern Sandhills. As a result, 42,809 acres have been enrolled in WLFW Environmental Quality Incentives Program (EQIP) contracts since 2018. Practices have been implemented on 23,264 acres. The goal for the 2019 sign-up is to enroll an additional 25,000 acres for a total impact of 80,000 acres.

This successful enrollment is a result of the education and outreach efforts by both PF biologists and other partners. This collective team has hosted 16 events with an audience of 2,584 resource professionals, students, landowners, and the general public. Social media was also use to engage almost 5,000 people as well.

To support the increased workload from these marketing and outreach events, NRCS and other partners (Nebraska Game and Parks Commission, Nebraska Land Trust, Sandhills Task Force, The Nature Conservancy, U.S. Fish and Wildlife Service) have also increased capacity. This collective team has developed 45 different project components including fencing, ERC removal, well drilling, pipelines, and tanks. Over a dozen local contractors completed these project elements, infusing over \$1.0 million into local economies.

To help develop a tool to streamline EQIP contract development the PF WLFW Coordinator and partner staff collected 378 field transects at 50 different ranches across the Sandhills. This tool is designed to accurately delineate woody cover classes based on EQIP Practice Payment Scenarios cost-share rates. Accurate acreage estimates by canopy cover will streamline EQIP contract development and potentially increase the number of contracts and acres impacted. This tool is currently developed for the Sandhills, with the data collection protocol being implemented to develop this tool in the Central Loess Hills and Republican Drainage. These two landscapes have significant grassland acres that are being invaded by ERC. The PF WLFW Coordinator has also assisted with a statewide prairie grouse survey that will help identify core areas for Greater Prairie Chickens and Sharp-tailed Grouse, two of the priority species identified by the WLFW Initiative.

The success the PF Coordinator and partners have been able to achieve in the Eastern Sandhills has resulted in additional funds from the National Fish and Wildlife Foundation and Nebraska Environmental Trust to continue building momentum. The RWBJV partners anticipate another successful year in 2021 assisting ranchers to maximize habitat on their lands for the benefit of their operations and the millions of grassland nesting birds that rely on these private lands.

The Nature Conservancy

Helping Private Landowners Implement Prescribed Fire in Nebraska's Sandhills

With the invasion of Eastern Red Cedar (ERC) into native grasslands, private landowners in Nebraska are beginning to incorporate prescribed fire more effectively into their ranch operations as a grass management tool. These landowners are recognizing that this tool not only helps manage against ERC, but it also improves forage quality and quantity as well as promoting biodiversity. The Rainwater Basin Joint Venture (RWBJV) and The Nature Conservancy (TNC) have teamed up to provide landowners with quality training, planning, and logistical support when needed to support safe implementation of prescribed fire. The goal is to help more landowners safely put fire on the ground and become advocates for prescribed fire.

In Nebraska, private landowners can burn their pastures, woodland, range and natural habitat by applying for an open burning permit through the local fire department. Landowners must prepare a prescribed burn plan which outlines how they will safely conduct the burn. The plan includes the location of firebreaks, how many people and equipment will be on the burn, the required weather conditions along with several other elements. A prescribed burn boss from TNC helps prepare the burn plans by working one-on-one with the landowners.

During the past year, prescribed burn plans were completed for 10 landowners on a total of 6,644 acres. Three prescribed burns were completed on 1,370 acres. Some of the planned burns were postponed during the Covid-19 outbreak and for not having the right weather conditions. The remaining acres are scheduled to be burned in the spring of 2021.

In addition to the planning and logistical support, TNC staff is also providing prescribed fire training to landowners to introduce some of the basic concepts of wildland fire. Over the last year, classroom style training was available at several locations within the Sandhills Region. Each single-day class provided information about weather, fuels, and how the environment influences wildland fire. Participants learned about tools and equipment commonly used during prescribed burns and what to expect on a burn day. Personal and public safety is always a major component of the training.

One activity that worked well this past year was to bring landowners new to burning out to help with landowners who are already burning. The new landowners were able to experience and observe the prescribed burn as they prepare for burning their own land. Instruction was given throughout the burn to describe what was happening and answer any questions from the landowners. Seeing a successful prescribed fire in person ties together all the information provided in the classroom.



Photo: John Thorburn



Photo: Chrystal Houston

Tri-Basin Natural Resources District

Maximizing Habitat and Groundwater Recharge

Water resources management usually requires difficult choices. The perception, and sometimes the reality, is there are winners and losers. Tri-Basin Natural Resources District (TBNRD), working with other Rainwater Basin Joint Venture (RWB JV) partners, was able to create “win-win” outcomes for water resource management.

Tri-Basin NRD is a local subdivision of government, which is responsible for the protection of natural resources in Gosper, Phelps and Kearney Counties in South Central Nebraska. TBNRD contains approximately 30% of the remaining wetlands in the Rainwater Basin and about 100,000 acres of cropland irrigated by water diverted from the Platte River through the Central Nebraska Public Power and Irrigation District (CNPPID) canal system. This system provides a unique opportunity for supplemental water deliveries to several Waterfowl Production Areas (WPAs) owned and managed by the U.S. Fish and Wildlife Service’s Rainwater Basin Wetland Management District (USFWS RWB WMD). Several bottlenecks made supplemental water deliveries to these wetlands problematic in the past. These included limitations of delivery infrastructure, timing of available water for surface water deliveries, and the cost of surface water deliveries. Working together, CNPPID, TBNRD, USFWS RWB WMD, coordinated with a variety of RWB JV partners developed a set of solutions to address these bottlenecks.

At five WPAs - Cottonwood, Funk, Johnson, Linder, and Victor Lakes - surface water delivery infrastructure was constructed or upgraded to maximize water delivery. Engineers developed infrastructure modifications to support 3,000 acre/feet of deliveries to these wetlands in a seven-day period. The upgrades were designed to increase the rate and volume of water delivered from the Platte River after the minimum target flow for Whooping Crane Migration ends (November 15th) and during winter weather conditions. For the five WPAs, a total of 23,300 feet of underground pipeline was installed. Pipeline sizes range from 36 inches in diameter at Funk WPA to 18 inches at Johnson WPA. Modifications also included valves, head gates, and energy dissipation structures. The infrastructure improvements cost \$1.3 million. This project was funded by the Nebraska Department of Natural Resources through its Platte over Appropriated Activities Committee (POAC) funds, Nebraska Environmental Trust Funds, North American Wetland Conservation Act grant funds, and a grant from the USFWS Threatened and Endangered Birds grant program.

This infrastructure has enabled delivery of 3,242 acre/ft. of water to these basins from 2018-2020. These supplemental water deliveries resulted in over 2,000 acres of flooded habitat. Prior to the surface water deliveries, wetlands were surveyed and instrumented with water level recorders. Additional observation wells were drilled, while several existing wells were equipped with sensors and dataloggers to develop a groundwater monitoring network. This instrumentation has helped establish baseline groundwater levels and allowed the quantification of groundwater recharge contributions from Rainwater Basin wetlands. Based on data from this monitoring network, these deliveries provided 2,789 acre/ft. of recharge to the underlying aquifer. This translates into 908 million gallons of water. Based on the average water use for a year by a resident of Lincoln (11,000 gallons annually – 2012) this is enough water for 82,545 individuals or roughly five times the amount of water the 17,519 residents of TBNRD would annually consume. From the agriculture water management perspective this recharge will provide groundwater to irrigate 5,580 acres (6 inches/acre) or 41 center pivot irrigation systems for a year.

This project highlights the ability of the RWB JV partners to identify opportunities, coordinate efforts, leverage funding, and implement projects. This collaborative approach will provide significant benefits for years to come. In just the first two years, the project has provided thousands of acres of flooded habitat and acre/ft. of recharge to the aquifer. These outcomes have significantly benefited area producers, Nebraska residents, wetland dependent migratory birds, and resident wildlife.

Upper Big Blue Natural Resources District

Collaboration Across NRD’s to Maximize Management Benefits

Rainwater Basin (RWB) Wetlands are critical stopover habitat for millions of waterfowl, shorebirds, and other wetland dependent wildlife. These wetlands and associated upland grasslands evolved under an intensive disturbance regime that included grazing by large herds of bison, extreme wildlife events, drought, and deluge. These disturbances promoted a diverse wetland and upland vegetation communities that provided habitat for a variety of priority species. Today, a variety of species including at-risk, threatened, and endangered species rely on these wetlands. Priority species include Whooping Cranes, Buff-breasted Sandpipers, King Rails, and nearly 20 other priority species identified in Nebraska’s State Wildlife Action Plan. Unfortunately, nearly 90% of the wetlands and 80% of the wetland acres have been effectively drained. For this reason management of the existing wetlands is critically important for these important species.

Wetland grazing is one of the most effective management tools for both public and private wetlands. In 2019, the Rainwater Basin Joint Venture (RWB JV) partnered with three Natural Resources Districts (NRDs) to provide equipment to support grazing wetlands. The three NRDs with this equipment overlap the RWB: the Tri-Basin, Little Blue, and Upper Big Blue NRD. The NRDs oversee management of the equipment and check-out these systems at no charge to area cattle producers.

The portable corrals have multiple pen set-up variations, frame gates for sorting, a palpation gate, and a permanently sheeted adjustable alley that can be narrowed for calves. All panels of the corral work like gates, providing maximum utility to producers in the sometimes-challenging terrain of a wetland. This combination of flexible equipment allows producers to safely and efficiently transport livestock to wetlands using semi-trailers rather than traditional pull behind trailers. This helps increase the stocking rate and achieve the desired wetland management goals. The portable corrals are easy to haul and can be set up by one person as these are equipped with battery-powered hydraulics for easy operation. The corral allows producers to safely work cattle and address any animal health issues like pinkeye or hoof rot that can occur when grazing wetlands.

The corrals not only save producers time moving livestock, it helps ensure these individuals are an active part of the wetland management through their cattle operations. Integration of RWB wetlands into local farm operations has helped change the way area producers view these resources. In the past, many producers viewed these wetlands as wasteland. Grazing makes these publically and privately owned wetland sites an economic asset in local communities. Beyond the economics, these wetlands provide some intangible benefits for Nebraska residents. Research at the University of Nebraska – Lincoln found that public lands in the Rainwater Basin are some of the most used public lands in the state, enjoyed by hunters and other outdoor recreation enthusiasts. RWB wetlands and associated uplands do not just provide habitat and recreational opportunities. These wetlands benefit all Nebraskans through the ecosystem services provided by playa wetlands - groundwater recharge, nutrient cycling, carbon sequestration, and flood storage - as documented by researchers from the University of Nebraska - Lincoln.

In the Upper Big Blue NRD, the corral was used by two landowners in four wetland areas in the first year. In the Tri-Basin NRD, the portable corral was used by one producer in two wetlands in 2019. In 2020, it has been used by two producers in two Waterfowl Production Areas. The equipment has seen a higher rate of use in the Little Blue NRD where in 2019 it was used by 13 producers 37 times; in 2020, it has been used by 14 producers 40 times.



Photo: Jeff Drahota

U.S. Fish and Wildlife Service

U.S. Fish and Wildlife Service Programs Work Together to Support a Wide Variety of Projects that Benefit Habitat on Private and Public Lands

The mission of the U.S. Fish and Wildlife Service is to work with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. The Rainwater Basin Wetland Management District (RWB WMD) and the Partners for Fish and Wildlife (PFW) programs are part of the National Wildlife Refuge System (NWRS). Within the Rainwater Basin Wetland Complex (RWB) the RWB WMD focuses on restoration and management of habitat on USFWS owned Waterfowl Production Areas (WPAs), while PFW assists landowners with the restoration of wildlife habitat on private lands. This restoration and enhancement work support the goals and objectives of the RWB WMD, PFW, and the Rainwater Basin Joint Venture (RWBJV). The USFWS Migratory Bird Management Program supports landscape-scale conservation by providing funding to administer the RWBJV partnership. These programs work cooperatively to support wetland and upland restoration for the greater good of international bird conservation.

The RWB WMD has completed a 5-year Habitat Management Plan that specifies 12 different wetland restoration projects that will be completed on WPAs over the next 5 years. A few of these projects have already been completed with the financial support from various partners, including the RWBJV. The RWBJV funded portions of restoration activities on Ritterbush WPA and the Mallard Moist Soil Unit at Funk WPA. The RWB WMD is set to receive RWBJV partnership support for work on restoration projects, including Cottonwood WPA, Killdeer WPA, Linder WPA, and the Whitefront Unit on Funk WPA. Recent topographic surveys were completed by Ducks Unlimited (DU) and the RWBJV helped fund on-site soil surveys, with the assistance of the Natural Resource Conservation Service (NRCS). The soil profile information and topographic surveys provided by the partnership were integrated into the restoration planning process. Once the restoration plans are finalized, the RWBJV, DU, NRCS, and other funding partners will be able to determine funding levels for the specified components of each restoration plan. This will allow the RWB WMD to move forward with the restoration of Cottonwood WPA, the top priority.

Other work completed with funding support from the RWBJV include the upland seeding at Heron WPA, tree clearing at Spoonbill Flats and Kenesaw WPAs, and adding Platte River water for groundwater recharge at Victor Lakes WPA. The RWB WMD also assisted with a groundwater recharge monitoring project developed by the RWBJV partners. The WMD staff assisted with installation and maintenance of observation wells and water level recorders at Cottonwood, Funk, Johnson, Linder, and Victor Lakes WPAs. A portable tub/chute/alley system, available to local producers through Tri-Basin Natural Resources District, was used by the RWB WMD's grazing cooperators, to load and work their cattle that grazed on WPAs to promote desired habitat conditions.

As part of the RWBJV partnership, the PFW Program delivers projects in the RWB to meet the goals and objectives of the RWBJV Implementation Plan and the Service's PFW Mountain Prairie Region

Strategic Plan. The PFW Program carries out this mission by providing technical and financial assistance to Landowners who voluntarily restore upland and wetland habitat on their land. RWBJV programs provide funding for grazing infrastructure, to fill abandoned irrigation reuse pits in the watersheds of perpetually protected lands, implementation of non-easement wetland restorations, and assist with wetland restoration under long-term conservation easements. All of these programs and practices meet the goals and objectives identified in the PFW Program's Mountain-Prairie Region Strategic Plan and RWBJV Implementation Plan. These activities are carried out by PFW biologists, who partner with the RWBJV. The RWBJV provides important funding for these projects, which helps the PFW Program conduct on-the-ground conservation across more acres. The PFW Program participated in 17 projects this year, with substantial funding contributions from the RWBJV. This work included completing two wetland restoration projects under the Migratory Birds, Butterflies and Pollinators Conservation Reserve Program (CRP) State Acres for Wildlife (SAFE) program, signed two Landowner Agreements for three abandoned irrigation reuse pits closures, and signed 13 Landowner Agreements to install grazing infrastructure and pivot modifications on perpetually protected wetlands in order to implement grazing as a management strategy. These projects involved numerous partners including DU, NRCS, Nebraska Game and Parks Commission, Pheasants Forever, and the RWB WMD. The PFW Program will continue to seek opportunities to work with the RWBJV partners on the conservation and protection of wetland habitats in the RWBJV administrative area.



Photo: Laurel Badura



Photo: RWBJV

Private Lands Conservation

The Cornerstone of Bird Conservation in Nebraska

The Rainwater Basin Joint Venture (RWBJV) Administrative Area encompasses 34.7 million acres, including 20.3 million acres of grassland, 9.3 million acres of cropland, and 2.3 million acres of wetlands. With 97% of the RWBJV in private ownership, a majority of the habitat is owned and managed by farmers and ranchers. Therefore, bird conservation in the RWBJV Administrative Area is directly tied to the quality of habitat on private working lands.

The farm and ranch operations in the RWBJV Administrative Area are as varied as the habitats found in the different geographies. For example, numerous family ranches are scattered across the Sandhills. The strong land ethic of these ranchers helps ensure the sandhills remain an intact grassland system. Row crop production dominates the Rainwater Basin landscape. Area producers in the Rainwater Basin have long recognized the difficulty of reliably producing crops on farmed wetlands. The value of RWB wetlands for pasture and aquifer recharge is being embraced at an increasing rate. Regardless of the geography the farmers and ranchers across the RWBJV Administrative Area have a strong conservation ethic. Their willingness to enter into conservation projects is a direct reflection of their commitment to stewardship of their lands.

The RWBJV Implementation Plan recognizes the diversity and opportunities in the different geographies. Habitat objectives have been established for the eight distinct Geographic Focus Areas in the RWBJV Administrative Area. The RWBJV partners have committed to these objectives. The partners are innovative, often developing outside-the-box solutions that ensure conservation projects can “fit” into local farm and ranch operations. An example of this in the Sandhills is the leveraging of grant funding to hire a Burn Boss through The Nature Conservancy work with private landowners to plan and implement prescribed fire as well as provide training to landowners about safe implementation of prescribed fire. As part of the training TNC also sponsors implementation of prescribed fires on private lands. These demonstrations allow landowners with limited or no experience to participate and see that prescribed fire can safely be implemented a grassland dominated landscape.

Pheasants Forever has also been actively working with RWBJV partners to increase prescribed fire in Central Loess Hills. Despite the restrictions on implementing prescribed fire due to COVID19 pandemic a multi-landowner burn plan has been developed to implement prescribed fire on 5,000 acres to be burned through the Prescribed Fire Training Exchange (TREN). This large-scale prescribed fire will help demonstrate that large scale prescribed fire can be safely implemented on private lands and show how neighbors can help neighbors with prescribed fire. Continuing to support prescribed burning in the Central Loess Hills will be critical to get ahead of the region’s eastern red cedar invasion.

In the Rainwater Basin landscape, a variety of programs are available to producers to integrate playa wetlands into their farm operations. As part of Divots in the Pivots Regional Conservation Partnership

Program producers receive cost-share to upgrade existing pivot irrigation with Variable Rate Irrigation (VRI) technology. VRI allows producers to precisely apply irrigation inputs on the adjacent cropland based on crop

water needs and shut the pivot off over the wetland. This maximizes irrigation efficiency and restores natural wetland hydrology. As part of the Working Lands for Wildlife Initiative 13 landowners worked with RWBJV partners to develop landowner agreements to construct grazing infrastructure on restored sites. Grazing is not only economically viable; it promotes desired habitat conditions. As part of the Watershed Initiative five landowners filled abandoned irrigation reuse pits to restore 172 acres of wetland function to the Macon Lakes Waterfowl Production Area and Sacramento Wildlife Management Area.

In closing, Landowners are the most important partner in the RWBJV partnership. Without their participation, land ethic, and willingness to collaborate with the RWBJV partners we would not have the unique and quality habitats that we all depend on. wetlands into their farm operations. As part of Divots in the Pivots Regional Conservation Partnership Program producers receive cost-share to upgrade existing pivot irrigation with Variable Rate Irrigation (VRI) technology. VRI allows producers to precisely apply irrigation inputs on the adjacent cropland based on crop water needs and shut the pivot off over the wetland. This maximizes irrigation efficiency and restores natural wetland hydrology. As part of the Working Lands for Wildlife Initiative 13 landowners worked with RWBJV partners to develop landowner agreements to construct grazing infrastructure on restored sites. Grazing is not only economically viable; it promotes desired habitat conditions. As part of the Watershed Initiative five landowners filled abandoned irrigation reuse pits to restore 172 acres of wetland function to the Macon Lakes Waterfowl Production Area and Sacramento Wildlife Management Area.

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Photo: Greg Wright



Photo: NRCS | Krystal Bialas



Photo: RWBJV



Photo: Pheasants Forever | Kelsi Wehrman



Photo: NRCS | Krystal Bialas



Photo: NRCS



Photo: RWBJV



Photo: Pheasants Forever



Photo: NRCS | Krystal Bialas



Photo: RWBJV | Cortney Schaefer



Photo: RWBJV | Cortney Schaefer



Photo: Pheasants Forever



Photo: RWBJV



Photo: RWBJV | Cortney Schaefer



Photo: Pheasants Forever | Trent Findley



Photo: RWBJV | Cortney Schaefer



Photo: RWBJV | Cortney Schaefer

INCOME AND EXPENSES

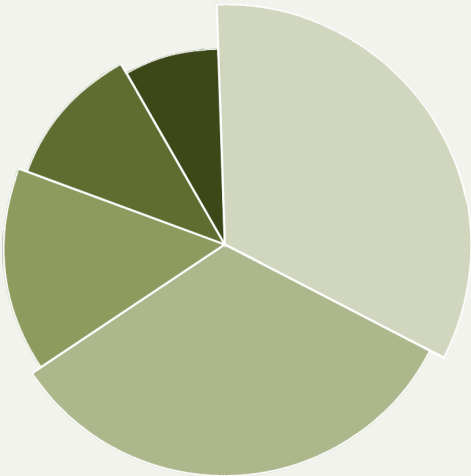
for Fiscal Year Ending September 30, 2020

INCOME

U.S. Fish and Wildlife Service Allocation	\$ 498,820.00
Grants	
Nebraska Environmental Trust	\$1,003,454.93
Other Grants and Funding Awards	\$7,123,687.91
Total Grants and Other Income	\$8,127,142.84
Total Available Funding	\$8,625,962.84

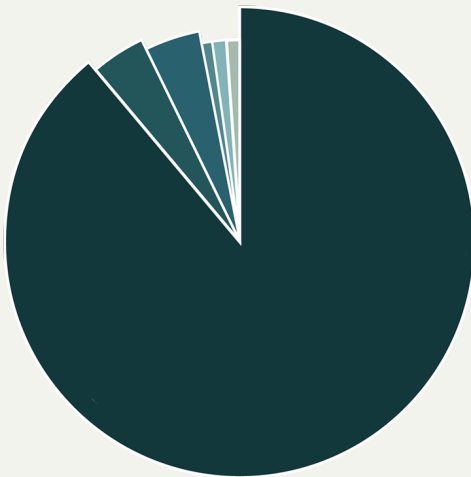
EXPENSES

Regional Administrative Support	\$ 39,000.71
Coordination	\$ 345,861.38
Communication	\$ 50,594.89
Planning	\$ 104,921.18
Monitoring, Evaluation, & Research	\$ 383,672.79
Project Development & Implementation	\$7,701,911.89
Total Expenses	\$8,625,962.84



U.S. FISH AND WILDLIFE SERVICE FUND ALLOCATION

- 33% Coordination
- 33% Project Development & Implementation
- 15% Monitoring, Evaluation, & Research
- 11% Planning
- 8% Regional Administrative Support
- 0% Communication



PARTNERSHIP FUNDING

- 89% Project Development & Implementation
- 4% Coordination
- 4% Monitoring, Evaluation, & Research
- 1% Planning
- 1% Regional Administrative Support
- 1% Communication

RAINWATER BASIN JOINT VENTURE

PARTNERS INCLUDE



RWBJV.ORG