North Platte River Restoration

- Izaak Walton Reach

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North Platte River Restoration - Izaak Walton Reach

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Executive Summary

The City of Casper, in conjunction with the Platte River Revival Committees that represent Wyoming Game and Fish Department, Casper District Bureau of Land Management, Natrona County Weed and Pest, Two Fly Foundation, and more will complete a river and riparian restoration project on the Izaak Walton reach of the North Platte River in Natrona County, Wyoming. The North Platte River is a blue ribbon trout fishery, but this reach suffers from significant bank erosion, tight riverbend geometry, a lack of riffle-pool complex development, poor bedform complexity, meager floodplain connectivity, and is characterized by a low-quality riparian vegetation community. These conditions have resulted in degraded habitat for trout as well as native aquatic and terrestrial species. These characteristics have also contributed to reduced ecological function, adversely affected the regional municipal water supply, degraded aesthetic values, and impaired river recreation. The City of Casper will design and implement a river restoration project for over 5,150 linear feet of the North Platte River that involves re-grading the bed, banks, and floodplain of the North Platte River to create appropriate geometry and bedform complexity, reduce riverbank degradation, and improve instream and riparian habitats. This project, underpinned by the North Platte River Environmental Restoration Master Plan, has been endorsed and supported by elected officials at the local and State levels, conservation groups, government agencies, and water users.

Project Location

North Platte River Restoration – Izaak Walton Reach is 5,150 linear feet of North Platte River and its associated riparian and upland areas located in Natrona County, Wyoming that flow through the unincorporated areas of Natrona County, City of Casper, and City of Mills. The project begins at 106° 22.45227112'W, 42° 50.02375845' N and ends at 106° 22.58242207' W, 42° 50.45744488' N. Location maps can be found in the Appendix. The exhibits show the project area including drinking water wells and public versus private property ownership.

Technical Project Description

The North Platte River Restoration Project – Izaak Walton Reach is one of the seven priority reach sites identified in the 2012 "North Platte River Environmental Restoration Master Plan – Phase 1," developed for the City of Casper, Wyoming. This reach consists of approximately 5,150 LF of channel with the project start located immediately downstream of the Central Wyoming Regional Water System treatment plant, flowing around a broad bend past Izaak Walton Park and terminates after the bend. The associated floodplain terrace landscape contains many of the wells that produce the region's municipal water supply, giving this restoration project a strong nexus to water resources and water resources management. This project site was selected as a high priority reach due to the presence of a variety of anthropogenically influenced stressors and potential functional uplift that can be accomplished through restoration activities.

Prior to the completion of the large dams and reservoirs upstream of Casper in the early 1900s, the North Platte River through this portion of Wyoming was said to be exceptionally wide and shallow, carrying a heavy sediment load on an annual basis. The influence of the large dams drastically changed the annual discharge hydrograph and quantity of alluvial sediment that had been transported through the river system for eons, which has ultimately led to a gradual

geomorphological evolution of the North Platte River downstream. In creating robust restoration designs, the City of Casper seeks to allow designed reaches to resume their historic vegetation trajectory by facilitating plant succession along a preferred pathway. The goal is to restore historic continuity and ecological resilience rather than static state or climax condition.

Though the North Platte River through Casper is classified as blue ribbon trout water, widespread colonization of the invasive Russian olive Tree (Elaeagnus angustifolia), bank erosion, and channel widening associated with urban development have reduced the aesthetic and ecosystem function of the riparian and aquatic habitats. Within the project planning area soils are predominantly unconsolidated coarse sand mixed with cobble that currently supports a sparse, shallow-rooted plant community, dominated by grasses. Organic matter and soil water holding capacity appear to be low. Non-native, invasive plant species are common across vegetative strata, and appear to be excluding native vegetation. Due to river entrenchment, the North Platte is not effectively accessing its floodplain effectively on either side of the river through this reach, and thus the hydrology to support a robust, native riparian community is lacking. The toe of the steep embankment adjacent to a concrete plant is dominated by Russian olive trees, and others occur with frequency along both banks along the river.

This project approach will utilize geomorphic principles and lessons learned from previously completed projects to take the 30% design to completion and implement a restoration project that accounts for the current and future geomorphic and hydrologic conditions. The design considerations will include:

- Mitigation of fine sediment contributions sourced from unstable banks
- Reshaping channel dimensions to improve low water depths and riparian floodplain connectivity based on the regulated flow release schedules from the upstream BOR reservoirs.
- Enhancing riffle-pool morphology and channel complexity
- Revegetation of riparian fringe and adjacent floodplain with native plants (including removal of invasive Russian olive trees to improve riparian habitat and groundwater recharge)
- Evaluation of treatment alternatives at stormwater outfalls to improve water quality.

The design approach will utilize locally sourced natural materials as the components for channel bed and bank structures. Bioengineered wood toe bank stabilization structures will be employed in strategic locations using logs and rootwads sourced, salvaged, and repurposed from local beetle-kill fire mitigation efforts on Casper Mountain. In-channel riffle structures will consist of low-profile grade control structures that made of well sorted natural bed material that mimic reference characteristics found in high functioning areas. Live willow/cottonwood cuttings and transplants will be sourced from existing on-site vegetation communities and planted along the riparian margins. Additional containerized plants and seed mixes will be sourced from local nurseries (as available) and installed according to a detailed bankscaping plan.

Russian olives currently growing at the base of this steep bank (and other Russian olives throughout the reach) will be physically removed (preferably pulled, but if not possible then “cut and treat”) during construction of the bankfull bench and as part of initial grading. Other, more

easily accessed Russian olives will be physically removed by city crews with excavators and materials handlers up to one year prior to in-river river construction to allow for a more accessible construction site. A robust native planting plan prescribing appropriate native plant materials and soil amendments would be developed for the project area within the grading limits. Heavy construction equipment and expertise necessary to complete the work, including grading and excavating, will be enlisted.

Responses to Evaluation Criteria

Applicant Category and Eligibility of Applicant

The applicant, City of Casper, Wyoming, is a Category A applicant. City of Casper is a municipality in Wyoming with drinking water delivery authority. The City owns, manages, and operates Public Water System No. WY5601415 that serves potable water for domestic and fire flow use to City of Casper residents and business as well as to five wholesale customers. Not only is City of Casper a majority member of the Central Wyoming Regional Water System Joint Powers Board (JPB) that owns the water treatment plant, it also has a contractual agreement with the JPB to manage and operate the drinking water wells, water treatment plant, and regional water distribution system, PWS No. WY5600009. Thus, all employees at the water treatment plant are City of Casper employees.

Performance Measures

Project performance measures will be evaluated using:

- Wyoming Stream Quantification Tool (WSQT)
- Baseline and post-implementation vegetation monitoring, and
- Assessment using the Five-Star Recovery System and Recovery Wheel (Gann et al. 2019).

Additional details describing how this project will be monitored and evaluated may be found under Evaluation Criteria E: Performance Measures, in this grant application, below.

Evaluation Criteria

Evaluation Criterion A: Project Benefits

Sub-criterion A.1: Project Benefits: General Project Benefits

The Platte River system, located in the states of Colorado, Nebraska, and Wyoming, supports 15 major dams and reservoirs, which provide water, hydroelectric power, irrigation, flood control, and recreation for about 3.5 million people, as well as habitat for fish and wildlife. The North Platte River that runs through central Wyoming is part of the Platte River Recovery Implementation Program (PRRIP), which was established in 2007 for the protection of threatened and endangered species including the whooping crane and pallid sturgeon.

The PRRIP has three main elements: (1) increasing flows in the central Platte River during certain periods; (2) protecting and restoring habitat for target bird species; and (3)

accommodating new water-related activities (e.g., water storage, diversions, and conservation) (Platte River Restoration Efforts (congress.gov)). The efforts of the U.S. Fish and Wildlife Service and the Bureau of Reclamation, through flushing flows, have complemented the efforts of the North Platte River Restoration by removing sedimentation and allowing natural regeneration of cottonwood benches.

The goals of the North Platte River Restoration seek to create resilient, biodiverse, self-sustaining riparian communities of native flora and fauna, enhance wildlife and fisheries habitat, and foster a healthy river system that is a catalyst for economic development and improved quality of life in the greater Casper region. The North Platte River Environmental Restoration Master Plan (Master Plan Link) provides the research and data that informs restoration activities, including the Izaak Walton Reach. The proposed activities on this reach will achieve beneficial effects including:

- native plant cover and density
- increased species richness and biodiversity
- arrest severe bank erosion
- improve water quality
- increased drinking water supply reliability
- enhanced aquatic, riparian, and upland habitats.

The North Platte River Restoration – Izaak Walton Reach (Izaak Walton Reach) is dominated by non-native invasive species. Mature stands of Russian olives line the riverbanks and are intermixed with bunch grasses, forbs, shrubs, and old cottonwood trees, though the native species are not thriving due to competition. The removal of Russian olives allows native species to re-establish in the area. Previous upstream restoration projects completed by the City of Casper have resulted in the re-establishment of cottonwood galleries and diverse undergrowth. Robust riparian root systems anchor riparian soils while simultaneously help in increasing porosity of soil and improve texture through organic matter inputs.

Additionally, the removal of Russian olives in previous upstream restoration projects completed by the City of Casper have resulted in reappearance of formerly existing wetlands. As part of the Izaak Walton Reach stormwater outfalls will be realigned to flow into constructed wetlands. The riparian vegetation and wetland act as barrier for highland runoff and play an important role in filtration, interception, and deposition of soil particles, preventing erosion and stabilizing riverbanks. It also effectively slows the velocity of runoff, thus improving erosion resistance of the banks and floodplain during times of flooding or elevated flows. High soil moisture and nutrient content in riparian zones may favor plant biomass production as compared to neighboring uplands.

The use of these natural processes serves to mitigate the degradation of water quality caused by non-point source pollution. Removal of the high water consuming Russian olive stands allow for increased ground water re-charge. The Central Wyoming Regional Water System water wells

are located within the Izaak Walton Reach. Any recharge of the groundwater system will not only benefit the Casper community but the Platte River system as a whole and will benefit the PRRIP.

Using a geomorphic-based design approach, the North Platte River channel and its associated banks, floodplain, and riparian zones will be designed for effective sediment transport, dynamic stability, and improved riparian hydrology. Riparian areas provide critical ecological functions (Gregory et al. 1991, Annear et al. 2004) and these are directly dependent on the quality and management of the river resource and broader land management paradigm. Healthy riparian areas buffer water loss from upland drainages and recharge aquifers. The dense, diverse, and complex vegetation of healthy riparian areas filter chemical and organic wastes, trap sediment, build and maintain stream banks, reduce soil erosion, and moderates stream temperatures. Riparian vegetation offers high quality foraging and nesting habitat, creates movement corridors for wildlife, and provides niches to a multitude of species. Riparian plant communities provide direct and indirect organic inputs to support stream ecosystems (Vannote et al. 1980), and terrestrial invertebrate inputs are often a key component of stream food webs. Woody debris contributions from riparian areas to streams can provide habitats for fish and invertebrates and influence stream channel stability and dynamics.

Izaak Walton Reach is located near the end of designated Blue Ribbon Trout Waters, meaning the river contains greater than 600 pounds of trout per mile. Blue Ribbon Trout Waters represent the top 3-5 percent of rivers or streams in Wyoming for trout production. But while the sport fish population may be healthy in a designated stretch of river, that does not necessarily mean their habitat cannot be significantly improved or is without stressors that can be mitigated.

Through applied principles of river engineering and Natural Channel Design, Izaak Walton Reach will create the geomorphically-appropriate cross-sectional, longitudinal, and planform dimensions of the North Platte River through the project reach, and in doing so significantly and directly improve aquatic habitats. This will be achieved through river geometry correction, the creation of in-channel and bank stabilization structures, the incorporation of large woody materials, arresting severe bank erosion and in-channel sedimentation by reducing near bank stresses, improving the quality of channel substrates, increasing the river's floodplain access, and enhancing hyporheic exchange both vertically and laterally. All of these river improvements will benefit aquatic habitat.

In addition, riparian area improvement associated with the project will provide important positive influences on Wyoming fish populations and their habitat needs. Riffle-dwelling species such as dace and riffle-spawning salmonids require relatively smaller, fine sediment levels associated with healthy riparian vegetation. The shading provided by willows and other shrubs create solar refuges and temperature moderation. The vertical structure of overhanging riparian vegetation is important for certain life stages of benthic macroinvertebrates. Cottonwood galleries periodically contribute logs and branches to the river channel which provides cover for

a variety of fish species. Woody debris accumulations also provide juvenile salmonid habitat and important adult overwintering habitat.

In Wyoming, 61% of 445 terrestrial vertebrate species are believed to show preference for riparian habitats (WGFD 2017), and approximately 73 avian species have been identified as using riparian habitats (Nicholoff 2003). Some riparian obligate bird species, such as the yellow-billed cuckoo and willow flycatcher, are among the most imperiled migratory species in Wyoming (Nicholoff 2003). Elk, moose, mule deer, white-tailed deer, pronghorn, and small mammals, as well as their predators, all have strong seasonal or year-long associations with riparian habitats (WGFD 2017). Riparian areas provide crucial habitat for wildlife in the form of wildlife movement corridors and migration habitats. The forage, cover, and water of riparian areas allow birds and mammals to move across otherwise harsh prairies and desert landscapes. Bats use riparian habitats for commuting, migrating, roosts, and foraging habitat. Beavers are an important part of the healthy functioning of the North Platte River. Riparian habitat is also required by many Wyoming amphibian and reptile assemblages. This project will enhance the structure and function of the riparian zone soils and vegetation within the project area, and will thus improve terrestrial and semi-terrestrial habitats.

Using principles of Natural Channel Design and ecological restoration, Izaak Walton Reach will improve the interaction between the river and the land at the river reach scale resulting in improved water quality, temperature moderation, and enriched biodiversity. Water quality will be significantly improved by addressing the severe bank erosion occurring in this river reach. Toe wood bank protection structures will be designed and constructed that will mitigate erosive flows and stop further bank degradation. Such structures improve water quality by reducing sediment inputs while simultaneously creating habitat for fish and other aquatic species. Channel alignment corrections, bank grading, and in-stream structures will be implemented to further benefit erosion control, habitat, and increase stream and riparian function. A native species riparian planting plan will be created that creates bank stability, resilience, and shading for the riverbanks while significantly improving the terrestrial habitat and restoring riparian function.

The drainage area of the North Platte River above the proposed project site is greater than 32,000 square miles. The project will improve watershed health within the river basin, albeit at a local and practicable scale. In combination with previous and future river restoration projects on the North Platte River, it is hoped that contributions to a greater good in terms of riverine health and function within the North Platte basin are being made. Watershed health can mean the capacity to support, maintain, and foster a resilient, integrated, adaptive community of organisms that have a species composition and functional organization comparable to that of reference habitats of the region. Izaak Walton Reach will have a “natural recovery potential” and that through the project, the City of Casper will seek the highest level of recovery possible given existing and potential future conditions (Gann et al. 2019). Project actions will be designed to assist natural processes of recovery that ultimately are carried out by the effects of time on physical processes and the responses and interactions of the biota throughout their life cycles. The intention is to

improve watershed health by positively impacting the structure, function, adaptive capacity, and resilience of the North Platte River, its floodplain, and its riparian zone in the area of our project.

Izaak Walton Reach will enhance 5,150 linear feet of river and associated riparian area. Native species plants will be promoted while invasive species are removed on 94 acres of private and public land. Conservation easements will be sought on 4.89 acres of private property protecting these lands from future development. In combination with previously completed and planned future river restoration projects, the City of Casper is optimistic that these immediate efforts will compound over a larger spatial area over time as larger emergent ecosystem properties have time to develop.

The expected ecosystem benefits associated with project implementation will be determined using the Wyoming Stream Quantification Tool (WSQT) (USACE 2018), baseline and post-implementation vegetation monitoring, and documentation of project success metrics with the Five-Star Recovery System and Recovery Wheel (Gann et al. 2019). As the lead permitting agency, the U.S. Army Corps of Engineers (USACE) will require the use of WYSQT to grant the project a 404 permit and mandate its use for subsequent (5 year) project monitoring. Formal vegetation monitoring, independent of the WSQT, will also be undertaken to specifically assess improvements in the riparian vegetation community because of project implementation. Restoration potential and subsequent assessment of ecological trajectory will be quantified with the recovery wheel. Strategies for continued improvement will be developed from all these assessment metrics. As the Project is in the initial planning phases, formal project-specific baseline data collection has yet to occur, and quantification of specific project benefits has yet to be initiated.

The proposed project will directly and indirectly benefit multiple aquatic and terrestrial species. With 5,150 linear feet of restoration, there is a potential to have cottonwood galleries re-established within the riparian zone (7.51 acres). These cottonwood galleries are known to provide nesting structures for bald and golden eagles. With an estimated project net wetland gain of 0.5 acres, Northern Leopard Frogs and Western Toads may be attracted as they were on an upstream reach. The restoration efforts with its increased diversity will increase avian species richness and provide cover for wildlife. Enriched plant species diversity will increase forbs including milkweed on which monarch butterfly caterpillars have been found in restored upstream reaches. For 87.47 acres of uplands, the removal of Russian olives will improve upland conditions being beneficial to avian species.

Quantification of existing conditions and anticipated functional uplift following proposed Izaak Walton Reach execution will be completed at the outset of the project design phase using the tools and techniques outlined above. Regardless, annual geomorphic and fisheries monitoring conducted by Wyoming Game and Fish Department on previously completed North Platte River restoration projects (Monitoring Reports) indicate that reconstruction of the river channel and

banks achieved the primary goals for the projects. Monitoring of the Wyoming Boulevard project reach, for example, indicated that:

- In-stream structures are largely intact and functioning as intended to maintain the improved stream channel characteristics and provide habitat diversity for fish.
- A narrower and deeper river channel is maintained through the project reach and entrenchment ratio, bank-height ratio, and width-to-depth ratio largely remain within the desired ranges.
- Bankfull flows are able to access more floodplain area, there is no evidence of lateral channel migration, and risk of bank erosion has been reduced throughout the reach.
- Riparian and wetland vegetation have established well along many of the new streambanks and wetlands, although it is much sparser in the lower part of the Wyoming Blvd reach.

These estimates were completed by the City of Casper based on the 30% design and on documented outcomes of restoration work on previous upstream reaches.

The proposed project will improve water quality by significantly reducing the negative impacts of sediment pollution caused by streambank erosion and lateral river migration within the project reach. This is especially true for the large vertical streambank on river-left (north bank) in the area of Chamberlain Road, where elevated rates of erosion have created a highly hazardous situation that will never self-correct. This actively eroding bank is currently threatening the integrity of the roadway and its access to a number of properties located to the west of this river bend, and the sediment produced by fluvial and colluvial processes is degrading both water quality and aquatic habitat. Updated data to document existing conditions and estimate potential functional improvement will be generated during WSQT surveys at the onset of the project design phase.

Sub-criterion A.1: Project Benefits : Water Conservation and Efficiency Benefits

Water conservation and efficiency is not a stated objective, although some benefits may be realized.

Sub-criterion A.1: Project Benefits : Water Management and Infrastructure Improvement Benefits

Izaak Walton Reach will impact water management in the drinking water wellfields by removing and controlling Russian olives, an invasive species notorious for consuming large amounts of water. It is expected there will be some recharge to the water wells; however, the City of Casper is unaware of what the magnitude will be.

Sub-criterion A.1: Restoration Project Benefits

Invasive Species – Vegetation: For projects that include removal of invasive vegetation, will the project include revegetation with native species at the removal site? If not, explain why revegetation is not necessary for the specific ecosystem in which the project is located. In addition, describe how removal of invasive vegetation will benefit water resources or water resource management. Provide references and citations.

The proposed Project will include the targeted removal and treatment of invasive Russian olive trees (*Eleagnus angustifolia*) and the revegetation of native species via planting and direct seeding within the grading limits. In addition, soil amendments including topsoil and mulch, among others, will be used to ameliorate the edaphic conditions resulting from riverbank reconstruction.

Sub-criterion A.2: Multiple Benefits

Izaak Walton Reach will provide benefits to ecological values and riverine ecosystem health, enhance fish and wildlife habitat, reduce the presence and associated impacts of invasive species, and, with a higher catch rate, improve recreational and subsistence (described in Subcriterion No. E2: Disadvantaged or Underserved Communities) experiences provided by the river and its corridor. The benefits and ecosystem services provided are detailed in Sub-criterion A.1: Project Benefits: General Project Benefits. Approximately 70,000 people receive drinking water produced at the Central Wyoming Regional Water Treatment Plant, and they will all benefit from Izaak Walton Reach due to improved water wells that will produce with greater reliability and quality. The proposed project will directly and indirectly benefit multiple aquatic and terrestrial species, but it will be specifically designed to improve habitat for brown and rainbow trout – gamefish that help fuel the local, regional, and state economies. According to the Bureau of Economic Analysis (BEA), in 2019, outdoor recreation added $1.7 billion to the Wyoming economy and accounted for 21,344 jobs and $785 million in wages. In Wyoming, 5.2% of all jobs and 4.1% of all wages in the state come from the outdoor recreation sector, of which fishing and boating are integral parts. Enhancing the trout fishery through Casper is one of the primary goals of the Izaak Walton Reach, as are the related objectives of increasing river stability, improving stream channel characteristics, and restoration of native riparian vegetation. In summary, Izaak Walton Reach will deliver multiple benefits to a broad spectrum of social and ecological water uses.

Evaluation Criterion B: Collaborative Planning

The North Platte River Restoration – Izaak Walton Reach is an identified restoration construction reach in the North Platte River Environmental Restoration Master Plan (May 2012). See link: Master Plan Link The master plan was developed as a natural progression from the grass roots effort that began in 2006 to restore the North Platte River that flows through Casper, Wyoming. Oil and gas industry representatives, known as Two Fly Foundation, worked with the

City of Casper to gather expertise from two federal agencies (Casper District Bureau of Land Management and Natural Resource Conservation Service); one state agency (Wyoming Game and Fish); and one county agency (Natrona County Weed and Pest) along with the enthusiasm from a diverse group of businesses and organizations to form a committee to cleanup and restore the river. They named the effort the Platte River Revival, and they leveraged their resources to address issues such as removing litter and debris from the banks and riverbed, addressing bank erosion, removing invasive Russian olives (designated as a noxious weed), protecting cottonwood galleries, promoting a healthy riparian area, and improving the aesthetics of the river banks that were strewn with discarded concrete pieces, metal, and more as riprap for bank stabilization.

The newly formed Platte River Revival Committee (PRRC) organized a volunteer day in conjunction with National Public Lands Day in September 2007. City of Casper took the role as the lead agency and fiduciary. The first year, 300 volunteers participated, and Volunteer Day, a National Public Lands Day event, has been held every September since. It has historically been the largest NPLD event in the country.

The cumulative results have been over 6,000 volunteers participating; over 1 million pounds of litter and debris removed from the river including cars and trucks that had been submerged as bank stabilizers, without their oil, fuel, and fluids removed; thousands of Russian olives removed; a citizen science protocol and application developed and used to monitor and retreat Russian olive removal regrowth annually; and many more hands-on restoration tasks and cleanup work.

As the effort continued and strengthened, PRRC gathered funding and developed a request for proposal (RFP) for an environmentally holistic river restoration master plan to guide ecological work for the riparian area and river, and in some cases, the watershed, and awarded a contract via a bid process to Stantec Consulting and SWCA Environmental to produce the master plan.

The master plan assessed the current conditions of the river and riparian area and proposed restoration strategies. The plan is holistic in its approach and provides commentary on wildlife, vegetation, and water quality. Stream assessment tools used for assessment included Rosgen Stream Classification, geomorphic cross-sections, geomorphic profiles, Bank Erosion Hazard Index and Near Stress, (BEHI), and Channel Evolution Model. Seven river reaches were identified for restoration construction work and eleven riparian areas were identified for ecological and habitat enhancement. With the highest erosion rate and hundreds of Russian olives dominating the banks, North Platte River Restoration – Izaak Walton Reach was identified as both a river reach in need of construction work and a riparian area in need of ecological and habitat enhancement. While Izaak Walton Reach has some of the highest erosion rates, three areas upstream and one downstream in the highly visible Casper downtown core were selected to be constructed before the Izaak Walton Reach. Some reasons included property ownership, costs, and available funding.

Izaak Walton Reach is now poised for work and is the number one priority of the three reaches left to construct. In 2022, City of Casper acquired over 42 acres of riverfront property on river

left previously owned by the Charles E. Piersall Chapter of the Izaak Walton League of America changing majority area ownership from private to public. Also in 2022, Riparian Vegetation Survey and Soil Study work was completed, and the final report, expected by April 30, 2023, will guide riparian vegetation work going forward. It was noted that vegetation especially after restoration construction work was not thriving, and the study was commissioned to find answers and provide solutions. Additionally, the Central Wyoming Regional Water System Joint Powers Board is currently working with the Wyoming Water Development Commission to complete a Wellfield Management and Operation Plan. The overall goal is that the Plan will identify best management and operation practices that will serve as a guide to protect source water, improve water quality and availability, extend the productive life of the wellfield and its equipment, and promote, enhance and protect the ecological diversity of the wellfield.

In addition to the North Platte River Environmental Restoration Master Plan, the Riparian Vegetation Survey and Soil Study, and the Wellfield Management and Operation Plan, several other studies, reports, and plans have guided and/or will guide the restoration work including the Restoration Monitoring of Russian Olives and Riparian Vegetation, Citizen Science Russian Olive – QAQC Report, State of Wyoming Statewide Habitat Plan, Wyoming State Wildlife Action Plan, and Wyoming Game and Fish North Platte River Monitoring Reports. See the following link to find links to all of these (Master Plan Link). All the work, with its successes and accomplishments, of North Platte River Restoration (a.k.a. Platte River Revival) has been collaborative, as all the planning and implementation have been science-based and guided by Committees representing multiple collaborators.

Evaluation Criterion C: Stakeholder Support for Proposed Project

North Platte River Restoration – Izaak Walton Reach is a 5,150 linear feet reach within the greater, holistic effort to restore and revitalize the 13.5 miles of North Platte River that flows through Casper, Wyoming. The effort, named Platte River Revival, enjoys widespread support from the community including fishing guides, businesses and organizations, and government entities with ties to the river and its associated riparian and upland area. This is demonstrated by up to 500 citizens who annually give some of their time on a Saturday morning in September for Volunteer Day, a National Public Lands Day event. It is evident in the funding and in-kind support from businesses like Plains All-American Pipeline, Rocky Mountain Power, Jonah Bank, and Ugly Bug Fly Shop. It is clear from entities who are responsible for the management of land, water, fish and wildlife, and recreation like Wyoming Game and Fish, Natrona County Weed and Pest, Central Wyoming Regional Water System, and Casper District Bureau of Land Management `that provide project collaboration, leadership, funding, and in-kind support.

The opposition to the project stems from whether to balance riverfront recreational opportunities within a natural setting in an urban environment or whether to focus on more developed opportunities with hard infrastructure. PRRC believes the restoration efforts it has been guiding to promote a healthy riparian area throughout the urban core broaden the scope of recreational opportunities and showcase how natural settings can interface successfully with urban areas.

Evaluation Criterion D: Readiness to Proceed

There have been multiple years of preparation to get North Platte River Restoration -- Izaak Walton Reach to a construction readiness state. Preparation and planning include meetings with private landowners including the options for establishing conservation easements on their river front property through Wyoming Game and Fish as well as complete removal and continued maintenance management of regrowth of Russian olives on their property; 30% design for in-river and riverbank construction; and purchase of private land by the City of Casper in 2022 that makes the majority of property on the area publicly owned. Private property owner meetings, held previously, were cordial and positive. Many of the owners are experiencing significant loss of their property through erosion.

The local Bureau of Reclamation office has not been contacted to date on this project. US Army Corps of Engineers governs potential environmental and cultural resource compliance under the 404 permit. The budget has a line item for updating the master plan cultural resource survey, and the PRRC expects it will also meet with Bureau of Reclamation local staff during project preparation. Below is a major task list of expected tasks with dates.

North Platte River Restoration – Izaak Walton Reach Task List

TASK NO.	TASK	DATES	SIGNIFICANCE TO PROJECT
PRE-AWARD – NOT IN PROJECT BUGET, NOT ELIGIBLE AS MATCH FOR GRANT			
A	Receive Riparian Vegetation Survey and Soil Sampling final report.	April 30, 2023	Findings will be used to guide bankscaping design and planting and may contribute to threatened and endangered vegetation species investigation for project area.
B	Implement and monitor pilot planting in First Street Reach.	May 2023 - June 2024	Findings will be used to guide bankscaping design and planting so that plant sustainability can be increased.
C	Conduct lessons learned, an investigative study on in-river restoration construction project outcomes in collaboration with Wyoming Game and Fish. Work to be completed by contractor. Final product is a report.	July 2023 - August 2024	Findings will be used to edit 30% design for Izaak Walton Reach

D	Advisory and Habitat Guidance Committee Work to include: (1) meet & discuss previous meetings with private land owners and on developing project and options for private property considerations in project area -- conservation easements or other property authorization for construction and Russian olive removal and invasives control; (2) meet with BLM and Wyoming Game and Fish to discuss conservation easements, property acquisitions, land owner authorizations so that options can be determined to present to private property owners.	May 2023 - September 2023	The Platte River Revival Committees, City of Casper, and Wyoming Game and Fish believe easements, authorizations or property acquisitions are in the best interest of the project. However, easements and authorizations are not required as the project can be altered to work within the confines of existing property boundaries without compromising project goals and objectives.
E	Advisory and Habitat Guidance Committees hire accounting and legal consultants for advice and work on conservation easements and Russian olive removal and control agreements.	July 2023	City of Casper used a consulting accountant and attorney with experience in conservation easements to acquire the Izaak Walton Property in 2022. Their expertise was critical in facilitating an acquisition. It is expected this same expertise will be helpful in obtaining other conservation easements and agreements.
F	Advisory and Habitat Guidance Committees meet with Casper City Council to establish strategies and authorities for private property agreements.	August 2023	Obtain required authority to enter into agreements.
G	Meet with property owners. Obtain easement/agreements.	September 2023 - September 2024	Secured easements and agreements will improve project cooperation with property owners and citizens.
	AWARD DATE -- IF LUCKY RECIPIENT	**December 31, 2023**	**Will make project possible**
	POST AWARD		
1	Prepare and release RFP for Stream Quantification Tool (SQT) work for project. Award SQT contract for project. Complete SQT work.	January 2024 - July 2024	Data required for design edits. It is thought that the findings from SQT will change the elevation of the bankfull bench and that this will positively impact vegetation survival.
2	Meet with BOR Casper staff on cultural resources and other environmental issues related to the project. Prepare and release RFP for cultural resources survey update and, possibly, any other environmental work. Award cultural resources survey update contract. Complete cultural resources survey update.	January 2024 - July 2024	Meet with BOR Casper staff on cultural resources and other environmental issues related to the project. Data required for construction and bankscaping design edits and construction constraints.
3	Prepare and release RFP for permitting for project. Award permitting contract. Obtain permits.	March 2024 - February 2025	Required to proceed on project.
4	Prepare and release RFP for design for project. Award design contract. Complete design for project.	June 2024 - December 2024	Critical component of project.

5	Prepare and release RFP for bankscape design for project. Award bankscape design contract. Complete bankscape design.	June 2024 - December 2024	Critical component of project.
6	Russian olive removal. Casper staff historian will be on site to oversee soil disturbance and any possible archeological finds.	September 2024 - December 2025	Critical component of project. Provides invasives removal and control. Improves water quantity. Improves riparian habitat.
7	Prepare bid documents for in-river construction. Bid project construction. Award in-river construction contract.	March 2025 - May 2025	Critical component of project. Provides river habitat improvements. Reduces bank erosion and more.
8	Prepare and release RFP bankscaping. Award contract for bankscaping.	March 2025 - May 2025	Critical component of project. Provides riparian habitat improvement.
9	Construct. Casper staff historian will be on site to oversee soil disturbance and any possible archeological finds.	September 2025 - December 2025	Critical component of project. Provides river habitat improvements. Reduces bank erosion and more.
10	Bankscape. Casper staff historian will be on site to oversee soil disturbance and any possible archeological finds.	September 2025 - June 2026	Critical component of project. Provides riparian habitat improvement.
11	Prepare and release RFP for five-year post monitoring SQT. Award SQT contract.	January 2026 - April 2026	This is separate from warranty on project. Stream Quantification Tool (SQT) is a requirement from USACE for permit and fulfills BOR monitoring requirement. Contract will be for 2026 - 2030.
12	Prepare and release RFP for five -year post monitoring vegetation survey. Award vegetation survey contract.	January 2026 - April 2026	This is separate from warranty on project. Vegetation monitoring will fulfill BOR monitoring requirement. Contract will be for 2026 - 2030.

Evaluation Criterion E: Performance Measures

Izaak Walton Reach performance will be evaluated using three tools: the Wyoming Stream Quantification Tool (WSQT) (USACE 2018), baseline and post-implementation vegetation monitoring, and assessment using the Five-Star Recovery System and Recovery Wheel (Gann et al. 2019).

The WSQT will be used to characterize stream ecosystem functions by evaluating a suite of indicators that represent structural or compositional condition attributes of a stream and its underlying processes. It will be used to describe existing conditions and monitor multiple ecosystem components post-construction. It was chosen for use as an effective, spreadsheet-based calculator, and is the preferred method of monitoring by the USACE, whose permit conditions require appropriate compliance.

To enhance the WSQT, specific and targeted soils and vegetation data will be collected for baseline purposes before project construction, and over at least five years post-construction to quantify vegetation and soils performance. These additional data will provide a clearer understanding of riparian community development (both above and below ground) and provide better data with which to evaluate the potential need for post-construction management

interventions. Riparian restoration is an integral part of this restoration project, and better data can lead to better adaptive management.

The Five-Star Recovery System and Recovery Wheel will be used to document overall project performance. We see these tools as a holistic planning and monitoring approaches that will allow us to better describe the "big picture" restoration story, and illuminate where the project might be exceeding expectations, or underperforming. Beyond the ability to succinctly summarize complex data, both the five-star system and the recovery wheel have the potential to be outstanding communication tools for this project.

All of the tools and techniques described above (WSGT, Vegetation and Soils Data Collection, Five-Star Recovery System and Recovery Wheel) are expected to be used for project baseline data collection and description, as well as used (at least) annually for a minimum of 5 years post-construction.

Evaluation Criterion F: Presidential and DOI Priorities

Subcriterion No. E1: Climate Change

North Platte River Restoration – Izaak Walton Reach will enhance riparian and aquatic ecosystems within the watershed by improving floodplain connectivity and increasing soil water storage, reducing bank erosion, increasing biodiversity and native vegetation, and reducing noxious and invasive plant species. These benefits will be a realized directly within the project area (river reach). Flood risk, bank erosion, and imminent infrastructure loss (Chamberlain Road) will be effectively mitigated within the project footprint. By its very nature of restoring native plant species, constructing wetlands and more, the project is a green infrastructure project providing multiple benefits to the river and its associated banks and uplands as has been outlined in the Sub-criterion A.1: Project Benefits: General Project Benefits and Sub-criterion A.1: Restoration Project Benefits. The project will also work to mitigate water pollution from stormwater outfalls by realigning them into wetlands, when possible, or finding other solutions to direct outflows so that the non-point source pollution can be filtered.

Subcriterion No. E2: Disadvantaged or Underserved Communities

Because the North Platte River Restoration – Izaak Walton Reach project directly impacts all 70,000 drinking water customers served by the Central Wyoming Regional Water System by improving water quality, protecting water sources, and increasing water availability, the project benefits all disadvantaged and historically underserved communities in the nine jurisdictions, with City of Casper being the largest. Safe drinking water impacts public health and safety.

The Izaak Walton Reach is also located in a disadvantaged census tract, tract 56025001100. With a population of 2,622, the census tract is in the 90th percentile for flood risk and the 68th percentile for poverty. Racial membership includes a slightly higher percent of Hispanic/Latino persons (10%) than Natrona County which is 9.3% Hispanic/Latino. See https://screeningtool.geoplatform.gov/en/#12.32/42.83604/-106.38639 . The Izaak Walton Reach

will reduce flood risk for this census tract, and reducing flood risk may reduce poverty impacts as well.

In addition to reducing flood risk, the project will bring nature-based recreational opportunities in close proximity to the population in this census tract. Studies have shown that access to nature provides human health. The in-stream work will improve the quality of fishing opportunities thereby enhancing subsistence fishing in this river reach.

Subcriterion No. E3: Tribal Benefits

This project does not directly provide any tribal benefits. However, because the project is a part of a landscape scale project in the Wyoming high plains desert where streams and rivers, thus riparian areas and wetlands, are rare, Tribal lands in the nearby Wind River Reservation and those downstream in Nebraska may be connected to the project through wildlife and water quality improvement, which include invasive Russian olive removal and control. According to the Wyoming State WSildlife Action Plan (pp. III – 10 – 4), "about 90% of wildlife species in Wyoming use wetlands and riparian habitats daily or seasonally during their life cycle, and about 70% of Wyoming bird species are wetland or riparian obligates (Nicholoff 2003)." Therefore, any wildlife on Tribal lands may be impacted by the restoration of the riparian area and restoration and addition of wetlands. Because human health is improved by connection with nature, any wildlife improvements may also provide human health improvements to Tribes. The successful efforts of the North Platte River Restoration – Izaak Walton Reach will set an example for all communities that rest along the banks of the North Platte River.

Project Budget

Funding Plan and Letters of Commitment

The non-Federal cost share for the North Platte River Restoration – Izaak Walton Reach is a combination of cash and in-kind costs all provided by City of Casper. All cash funds will be available July 1, 2023. The in-kind costs are personnel and equipment costs. The engineering staff in-kind contributions will be available July 1, 2023. The equipment in-kind and personnel in-kind costs for Russian olive removal including Historian oversight will be provided by the City of Casper Parks, Recreation, and Public Facilities Department and City of Casper Public Services Department. Those resources will be available July 1, 2024.

Budget Proposal

Table 1. – Summary of Non-Federal and Federal funding sources

Funding Sources	Amount
Non-Federal entities	
1. City of Casper Cash Funding	$ 879,000.00
2. City of Casper In-kind Funding*	$ 123,329.12
Non-Federal subtotal	$1,002,329.10
REQUESTED Reclamation funding	$3,000,000.00

Table 2. – Total Project Cost Table

Source	Amount
Costs to be reimbursed with the requested Federal funding	**$3,000,000.00**
	$3,000,000.00
Costs to be paid by applicant	**$1,002,329.12**
Cash	$879,000.00
In-kind – Construction costs including equipment and personnel	$123,329.12
Value of third-party contributions	0
Total project cost	**$4,002,329.12**

Table 3 - Items of Cost				
North Platte River Restoration - Izaak Walton Reach	**Total Cost**	**Cash - Federal**	**Cash - City of Casper**	**In-kind - City of Casper**
Engineering & Design				
Project over sight (City engineering staff)	13,156			13,156
Cultural resources survey update	5,000		5,000	
In-river construction design contractor project management	15,000		15,000	
Supplemental surveying	6,000		6,000	
Permitting contractor (includes hydraulic modeling)	50,000		50,000	
Design contractor final design	40,000		40,000	
Bankscape design contractor	12,000		12,000	
Construction drawings and bid package	67,500		67,500	
In-river Construction Work (5150 linear ft x $600 per linear ft)	3,090,000	3,000,000	90,000	
Russian olive removal - river construction contractor	25,000		25,000	
Construction administration (contract)	98,500		98,500	
Contingency 10%	309,000		309,000	
Riparian & Uplands Construction Work				
City historian (historic area bank disturbance work oversight)	2,496			2,496
Russian olive removal (City equipment)	75,628			75,628
Russian olive removal (City staff)	32,050			32,050
Bankscaping contractor (includes seeding & planting labor, tree stock, plants, seeds, soil sampling, soil amendment)	41,000		41,000	
Required monitoring - 5 years post project				
SQT - river	60,000		60,000	
Riparian monitoring	60,000		60,000	
Total project cost	4,002,329	3,000,000	879,000	123,329

Budget Narrative

Details are provided in the Budget Detail and Narrative. These are the spreadsheets noted as Attachment A in Notice of Funding Opportunity, in the Appendix.

Letters of funding commitment

There are no letters of funding commitment, as there will be no third-party funding or third-party in-kind services allocated to this grant request.

Environmental and Cultural Resources Compliance

Izaak Walton Reach is in an area that has been affected by development. Housing developments, commercial businesses, and a water treatment plant have confined the channel and impacted the riparian area. Large stormwater outfalls exist and broken concrete slabs have been placed as solutions to extreme bank erosion.

Water Delivery System

Casper's water system dates back to the late 1890's when water was piped from Elkhorn Creek into Casper. As Casper's population and water demand continued to grow, water was also sourced from Sage Creek and later the North Platte River. Today, the North Platte River is the Central Wyoming Regional Water Systems sole source of drinking water. The existing wellfields, Morad and Casper wellfields, were put into service beginning on the 1920's. Hand dug wells were installed in the 1920's to the 1950's, a wood stave infiltration gallery in the 1930's, three Ranney horizontal wells in 1958, and drilled wells in the 1950's, 1980's and 1990's. Numerous wellfield, treatment facility, and water distribution system expansions and improvements have taken place over the years to meet water needs. Currently, roughly 60-65 percent of water demands are met using the year-round ground water supplied by 29 drinking water wells in the Morad and Casper wellfields located along the North Platte River. The remaining 35-40 percent of demand is met using surface water from the North Platte River. EPA has designated the ground water as "ground water under the direct influence of surface water". No negative impacts are expected as a result of construction activities, and beneficial impacts are expected which include increase in water resources from removal of invasive species especially high water consuming Russian olives and improving water quality by realigning stormwater outfalls into wetlands, when possible.

Endangered Species and Critical Habitat

It is projected Izaak Walton Reach work will create critical habitat for species of greatest conservation need and other species of concern, though construction may cause a temporary disruption. This assumption is based on monitoring completed by Wyoming Game and Fish where two species of greatest conservation need, Northern Leopard Frog and Western Toad, were found in abundance in the constructed wetland in the Morad Water Wellfield. Also, monarch butterfly caterpillars were found in September 2022 by Riparian Vegetation Survey and Soil Sampling consultant in the Morad Water Wellfield. This water wellfield is across the river from Izaak Walton Reach.

According to the North Platte River Environmental Restoration Master Plan (page 18), several wildlife species that may occur in the project area are listed as threatened or endangered: black-footed ferret, blowout penstemon, Ute Ladies'-tresses, and greater sage grouse, though potential habitat for Ute Ladies'-tresses does not occur withing the project area. Surveys will be

conducted within suitable habitat prior to ground disturbance. Migratory birds and bald and golden eagles are known to nest and feed in the project area. The area may also contain nesting habitat for various raptor species. A known best management practice is to have no surface-disturbing activity within a mile radius of an active nest from February 1 to July 31. As collaborators on the project, Wyoming Game and Fish and Casper District Bureau of Land Management staff will be involved in design and scheduling.

Cultural Resources

A cultural resource desktop analysis, review of wildlife, and vegetation was done as part of the North Platte River Environmental Restoration Master Plan. Findings include habitat may exist for several threatened or endangered species and Historic Ferry Crossing is downstream of the in-river construction area but in the Russian olive removal area. City of Casper staff historian will provide oversight during removals. A copy of the cultural resource survey used for the master plan is included in the Appendix.

To date no work has been stopped because of cultural resources on previous constructed reaches. As is stated in the budget narrative and budgeted in the project as an in-kind cost, a Casper staff historian will be onsite and oversee any activities that disturb soil.

Buildings, Structures, National Register of Historic Places

The Izaak Walton Lodge built in 1938 is located on the river right is 311 feet from the North Platte River's edge and may be eligible for National Register of Historic Places. The Izaak Walton Reach will decrease flood risk and no construction activities will occur on the building site. Fort Caspar located slightly downstream from the end of the Izaak Walton Reach is listed in the National Register of Historic Places and is a known archeological site. A professional historian will be reviewing designs and will be onsite to monitor removal of Russian olives as well as construction and bankscaping work.

The majority of the property is owned by the City of Casper. Work will be done on property where conservation easements are purchased or where landowners have granted authority. None of these properties have been identified for low income housing projects or other low income community developments. Therefore, no negative impacts are expected. Benefits to low income and minority populations have been discussed in the Evaluation Criteria Section, Subcriterion No. E2: Disadvantages or Underserved Communities.

Noxious Weeds and Non-native Invasive Species

Izaak Walton Reach will reduce the continued existence and spread of noxious weeds and non-native invasive species, specifically Russian olive trees. Through an aggressive removal plan that includes an annual monitoring and treatment plan, Russian olives will be controlled. The Committees have been performing the removal, monitoring, and retreat/removal cycle for Russian olives since 2007 in several ways. First, Natrona County Weed and Pest is a collaborator on the project and has provided retreatment with herbicide, where appropriate. In the water wellfields, herbicide is not appropriate. A citizen science protocol and application (app) was developed and its effectiveness tested through quality assurance/quality control by a

qualified third party. The citizen science app for Russian olives is used annually with a team of volunteers. The team consists of people trained to identify Russian olive regrowth and mark GPS coordinate where regrowth occurs who are joined by dig teams who hand dig out seedling Russian olives. These protocols will be followed in the Izaak Walton Reach.

Required Permits or Approvals

Izaak Walton Reach will adhere to Federal, State, and local laws, regulations, and codes, and will obtain all required approvals and permits to successfully implement this river restoration work. The primary Federal permit required to complete the proposed project is a Section 404 permit under the Clean Water Act (administered by the U.S. Army Corps of Engineers Corps) and corresponding Section 401 water quality certification (administered by the Wyoming Department of Environmental Quality (DEQ)). The Corps will be the lead agency and primary permitting contact for this project. The Corps will coordinate 401 Certification with Wyoming DEQ, Endangered Species Act consultation with the U.S. Fish and Wildlife Service, and Section 106 of the National Historic Preservation Act compliance with the Wyoming State Historic Preservation Officer (SHPO). The Corps would ultimately grant the project a Section 404 Permit and enforce the permit provisions.

It is anticipated that the proposed project will qualify for a General Section 404 Permit, specifically a Nationwide Permit #27 permit. This permit is specific to Aquatic Habitat Restoration, Enhancement, and Establishment Activities, and such permits have been successfully obtained for previously completed restoration projects on the North Platte River. National Environmental Policy Act (NEPA) consultation is not anticipated, as the project area lacks any Federal nexus (Federal land). Informal consultation with the Corps will begin at the onset of the project design phase. In our experience, frequent and transparent communication with the Corps facilitates timely and successful project permitting, effective implementation, and straightforward expectations for compliance.

State and local permits (such as those related to erosion control and sedimentation during construction) may be required based on the final restoration design. Compared with Section 404 Permits, however, the lead times associated with permitting are short, and requirements are generally straightforward.

Within the Izaak Walton Reach project boundaries are six private properties on river left near the proposed beginning of the project work. The Platte River Revival Committees, City of Casper, and Wyoming Game and Fish believe easements, authorizations or property acquisitions are in the best interest of the project, and there have been several promising discussions with landowners. The Platte River Revival Committees made up of representative from the City of Casper, Wyoming Game and Fish, BLM, and more will continue to seek easements, authorizations, and/or property acquisitions, and hire accounting and legal advisors to work help complete the negotiations. However, easements and authorizations are not required, as the project can be altered to work within the confines of existing property boundaries without compromising project goals and objectives.

Official Resolution

Official Resolution is found in Appendix.

Letters of Support and Letters of Partnership

Letters of support and partnership from Advance Casper, Casper District Bureau of Land Management, Central Wyoming Regional Water System, Natrona County Conservation District, Natrona County Weed and Pest, Two Fly Foundation, Visit Casper, and Wyoming Game and Fish are found in the appendix.

Conflict of Interest Disclosure Statement

There are no actual or potential conflicts of interest with the applicant, City of Casper, or its employees including the procurement of supplies, equipment, construction, and services. Further, City of Casper has internal controls and policies that identify, disclose, and eliminate conflicts of interest, including through its bidding and contract award process. City of Casper accepts responsibility for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.

No funds received under this grant will be used for lobbying activities. All required certifications and disclosures pursuant to 43 CFR§ 18 and U.S.C § 1352 will be filed as required.

Uniform Audit Report Statement

City of Casper submits a Single Audit Report annually through the Clearinghouse's Internet Data Entry System in accordance with 2 CFR § 200 subpart F. A Single Audit Report was submitted for fiscal year 2022 and is available through the Audit Clearinghouse website. The Employer Identification Number is 83-6000049.

Overlap or Duplication of Effort Statement

This North Platte River Restoration – Izaak Walton Reach grant proposal does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source.

Appendix

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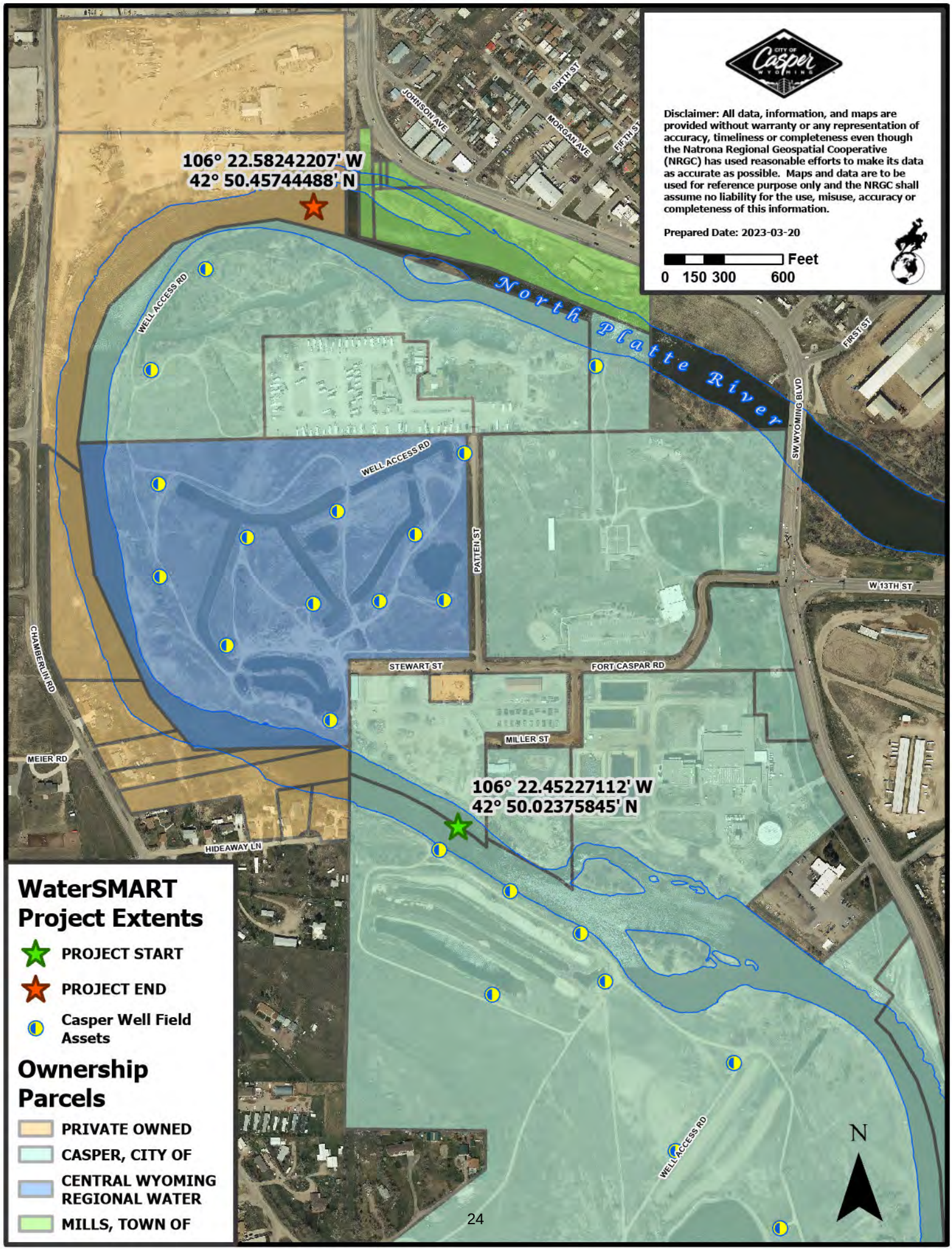
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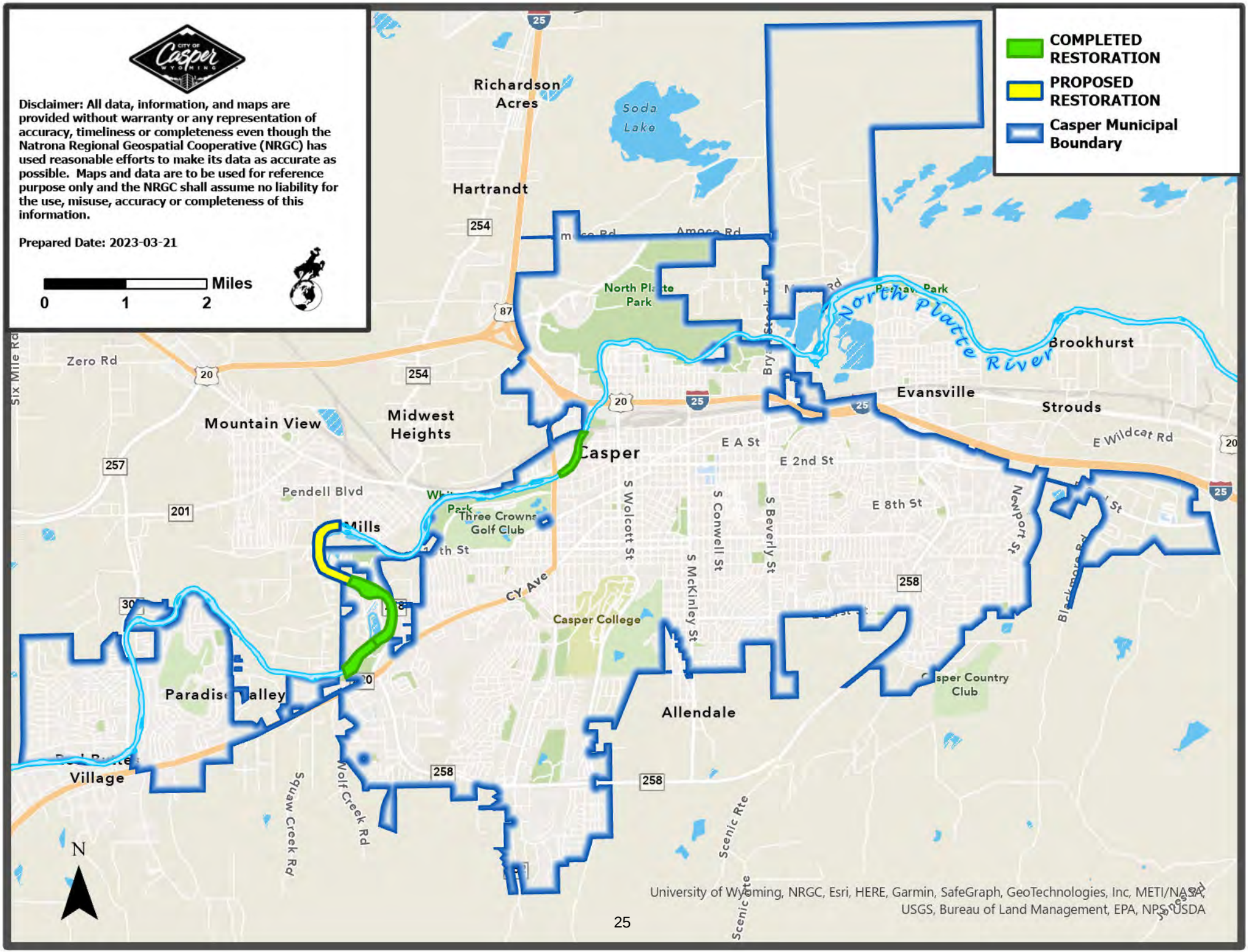
42° 50.45744488' N
106° 22.45227112' W
42° 50.02375845' N
North Platte River
JOHNSON AVE
SIXTH ST
MORGAN AVE
FIFTH ST
WELL ACCESS RD
WELL ACCESS RD
PATTEN ST
FIRST ST
SW WYOMING BLVD
W 13TH ST
CHAMBERLIN RD
STEWART ST
FORT CASPAR RD
MILLER ST
MEIER RD
HIDEAWAY LN
WELL ACCESS RD
N
Disclaimer: All data, information, and maps are provided without warranty or any representation of accuracy, timeliness or completeness even though the Natrona Regional Geospatial Cooperative (NRGC) has used reasonable efforts to make its data as accurate as possible. Maps and data are to be used for reference purpose only and the NRGC shall assume no liability for the use, misuse, accuracy or completeness of this information.
Prepared Date: 2023-03-20
Feet
0 150 300 600
WaterSMART Project Extents
PROJECT START
PROJECT END
Casper Well Field Assets
Ownership Parcels
PRIVATE OWNED
CASPER, CITY OF
CENTRAL WYOMING REGIONAL WATER
MILLS, TOWN OF


COMPLETED RESTORATION
PROPOSED RESTORATION
Casper Municipal Boundary
Disclaimer: All data, information, and maps are provided without warranty or any representation of accuracy, timeliness or completeness even though the Natrona Regional Geospatial Cooperative (NRGC) has used reasonable efforts to make its data as accurate as possible. Maps and data are to be used for reference purpose only and the NRGC shall assume no liability for the use, misuse, accuracy or completeness of this information.
Prepared Date: 2023-03-21
Miles
0 1 2
N
Richardson Acres
Soda Lake
Hartrandt
Amoco Rd
North Platte Park
North Platte River
Brookhurst
Evansville
Strouds
Zero Rd
Six Mile Rd
Mountain View
Midwest Heights
Casper
E A St
E 2nd St
E 8th St
E Wildcat Rd
Pendell Blvd
Mills
Three Crowns Golf Club
S Wolcott St
S Conwell St
S McKinley St
S Beverly St
Newport St
CY Ave
Casper College
Casper Country Club
Allendale
Paradise Valley
Squaw Creek Rd
Wolf Creek Rd
Scenic Rte
Village
University of Wyoming, NRGC, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

A Cultural Resource Evaluation of the City of Casper's North Platte River Restoration Project, Natrona County, Wyoming

Prepared for

City of Casper

Prepared by

SWCA Environmental Consultants

January 30, 2012

A Cultural Resource Evaluation of the City of Casper's North Platte River Restoration Project, Natrona County, Wyoming

Prepared for

City of Casper Public Services Dept.
City Engineering Division
200 North David
Casper, Wy. 82601

Prepared by

Alan Hutchinson

Principal Investigator

Scott Phillips

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SWCA Report Number 2011-232
SWCA Project Number 20449
Permit Number 325-WY-SR10

January 30, 2012

For Official Use Only: Disclosure of Site Locations Prohibited (43 CFR 7.18)

ABSTRACT

This report documents the results of a cultural resource evaluation conducted by SWCA Environmental Consultants on behalf of the Stantec Engineering and the City of Casper, Inc. for the proposed North Platte River Restoration Project in Natrona County, Wyoming.

The City of Casper proposes to restore 5 targeted areas along the North Platte River that flows through the town of Casper, Wyoming. Specifically, river restoration activities would take place along a segmented, five-mile-long stretch within the riparian zone along both the north and south sides of the river. The purpose of this report is twofold; to assist and inform project planners in appropriately considering and incorporating historic preservation values into the project development and design process, and to provide an evaluation of cultural resources that lie within the project area in order to facilitate project design strategies and recommendations in regards to potentially sensitive cultural resources within the delineated project area.

Research indicates that a total of five cultural resources (48NA293, 48NA579, 48NA2164, 48NA2458 and 48NA2303) are located either within or very near the areas targeted for restoration. Of the five, 48NA293 (Oregon Trail), 48NA579 (Childs Route of the Oregon Trail) are determined eligible for nomination to the National Register of Historic Places (NRHP). Site 48NA2304 (North Casper Clubhouse) is an eligible site that is listed on the NRHP. Site 48NA2164 (Mormon Ferry Crossing) is recommended eligible for the NRHP and site 48NA2458, which is a historic pump house, is recommended not eligible for NRHP nomination.

A formal Class III inventory of the project area would need to be conducted in order to substantiate the presence of any cultural resources within the project area. At this point, it is unknown if any of the cultural resources listed above, particularly the trail segments (48NA293 and 48NA579); even exist in the project area anymore. All cultural resources would need to be updated, and if any trail segments are present, further work would be required in order to establish if these segments are contributing elements of the site.

SWCA recommends that all eligible cultural resources including 48NA293, 48NA579, 48NA2164 and 48NA2304 are considered during the design process.in order to eliminate any impacts to these sites. Further work would need to be conducted to identify the historic footprint of the trail segments (48NA293 and 48NA579) within the project area and to accurately provide an adequate buffer around eligible sites 48NA2164 and 48NA2304. Since 48NA2458 is recommended not eligible, no further work is recommended for this site. Any changes in project design as a result of avoiding eligible sites would require a new assessment of cultural resources within the newly defined project areas.

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UNDERTAKING/PROJECT DESCRIPTION

This report documents the results of a cultural resources evaluation for the City of Casper's North Platte River Restoration Project in Natrona County, Wyoming.

The City of Casper proposes to conduct river restoration activities along a five-mile-long stretch of the North Platte River that flows through the town of Casper in Sections 2-4, 7 and 18 in Township 33 North (T33N), Range 79 West (R79W); Sections 12 and 13 in T33N, R80W and Sections 33-35 in T34N, R79W of the North Platte River Valley (Figure 1). SWCA Environmental Consultants (SWCA), on behalf of the City of Casper, conducted a desktop analysis and evaluation of cultural resources within the aforementioned project area in order to facilitate project design tactics related to avoiding eligible cultural resources, and to provide a general assessment of cultural resources located within the project area.

In all, five discrete locations along the North Platte River were evaluated for cultural resources, resulting in an aggregate total of 329.74 acres evaluated for this report. The first location in Section 18, T33N, R79W and Section 13, T33N R80W encompasses 90.66 acres. Moving north, the next location in Section 7, T33N R79W and Section 12, T33N R80W is 23.90 acres. Moving east, but still in Section 7, T33N, R79W the next location identified as Site 09 in Figure 1 is 5.54 acres. The largest contiguous area is in Sections 2-4, T33N R79W and Sections 33 and 34 in T34N R79W. This area encompasses 136.92 acres. Further east, the final location in Section 2, T33N R79W and Section 35 in T34N R79W is 72.72 acres.

It should be noted that this analysis was done purely to identify cultural resources within the specific project area and provide a preliminary treatment for those resources in regards to project design. Given the projects location along a major waterway within a major city, site density was projected (and indeed proved to be) extremely high. Subsequently, in the interest of utility, only those sites located within the delineated project area were identified, mapped in and discussed in this report. No fieldwork was conducted for this phase of the project.

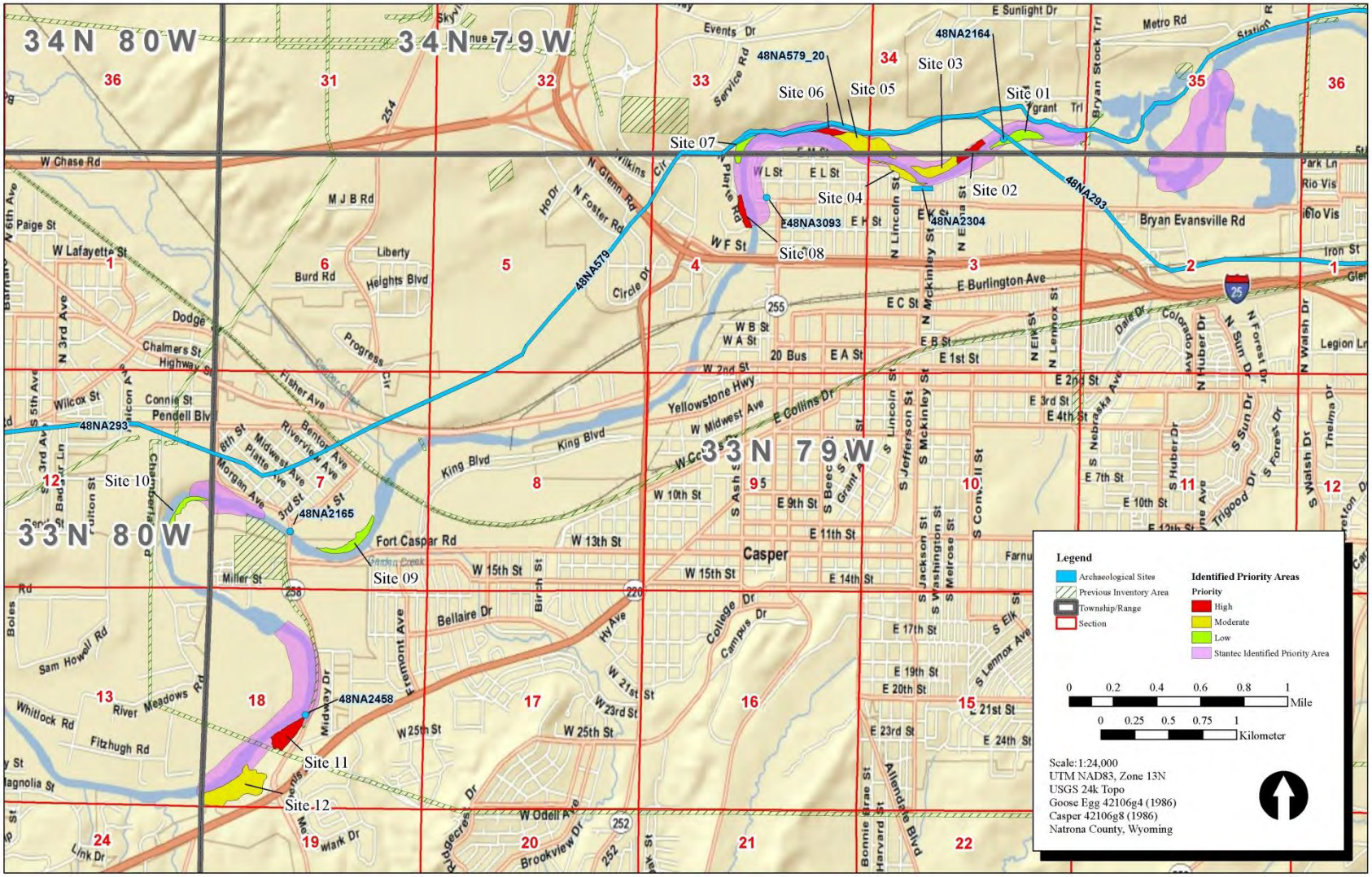


Figure 1. 1:24,000 scale topographic map showing project area and associated cultural resources.

BACKGROUND RESEARCH

Research into previous cultural resource investigations and previously recorded archaeological sites was conducted through an official Wyoming Cultural Records Office (WYCRO) file search received from the Wyoming State Historic Preservation Office (SHPO) on November 17, 2011 (File Search Numbers 28117-28119) for Sections 2-4, 7, and 18, T33N, R79; Section 13, T33N, R80W and Sections 33-35, T34N, R79W. An additional file search (#28212) was conducted on January 18, 2012 for Section 12, T33N R80W.

PREVIOUS INVESTIGATIONS

The file search indicated that 32 previous cultural resource inventories were conducted between 1982 and 2010 for the legal Sections associated with the project (Table 1).

Table 1. Summary of Previous Cultural Resource Investigations.

Accession Number	Project Name	Conducted By	Location (T/R/S)[1]	Type	Date
9 423 0	North Platte River Parkway Trust: Bever St.	Greer Services	33N/79W/2, 3	Linear	2009
81 2492 0	Wyoming Truss Bridge Survey	Fraser Design (FRD)	33N/79W/2	Block	None given
98 1588 0	Casper Branch, Union Pacific RR	Rosenberg Historical Consultants	33N/79W/2, 3, 7	Linear	1998
5 1660 0	Casper Rail Trail	Archaeological Energy Consulting	33N/79W/3	Linear	2005
6 1227 0	Cell Tower WA-CA-Casper-Junction	ERM	33N/79W/3	Linear	2006
7 1849 0	Legacy Senior Residences	Archaeological Energy Consulting	33N/79W/3	Linear	2008
95 1217 0	Garbutt, Weidner, Sweeney Bldg's	Rosenberg Historical Consultants	33N/79W/3, 4	Block	1995
2 864 0	North Platte River Bridge-NA3391	TRC Environmental Corp.	33N/79W/7	Unknown	2002
7 677 0	WY-CA-Casper-Hieghts-JH-INV TWR	Mettler & Associates	33N/79W/7	Block	2007
86 875 0	Mills History	Unknown	33N/79W/7; 33N/80W/12	Block	1986
88 1094 0	Platte Bridge Mills CLG Project	Historical Research and Photography (HCH)	33N/79W/7	Block	1988
96 350 0	STPECA-0111(42) Ft Casper Pathway	Pronghorn Archaeological Services	33N/79W/7, 18	Linear	1996

Table 1. Summary of Previous Cultural Resource Investigations.

Accession Number	Project Name	Conducted By	Location (T/R/S)[1]	Type	Date
98 1507 0	Ft Casper Investigations	Office of the Wyoming State Archaeologist	33N/79W/7	Block	1998
98 1588 2	Bridges 1210 and 924 Abandonment	National Park Service	33N/79W/7	Unknown	None given
85 9110 0	Casper-Dave Johnston PWL	Centennial Archaeology	33N/79W/18; 33N/80W/12, 13; 34N/79W/33, 34	Block/ Linear	1986
97 1837 0	Pathway Through Morad Park	Pronghorn Archaeological Services	33N/79W/7, 18	Linear	1997
93 1652 0	Casper HPC Historical Survey	Rosenberg Historical Consultants	34N/79W/33, 34	Linear	1993
93 1652 2	Childs Route/Oregon Trail	Rosenberg Historical Consultants	34N/79W/33, 34	Block/ Linear	1993
98 1676 0	WAPA Facilities in CO-WY-NE-UT	Associated Cultural Resources Experts	34N/79W/33, 34, 35; 33N/R80W/12	Block/ Linear	1998
99 1609 0	National Historic Trails Center	BLM/Casper District	34N/79W/33	Block	1999
87 47 0	Big Muddy Transmission Line	Pronghorn Archaeological Services	34N/79W/34, 35	Linear	1987
90 1446 0	Brookhurst Water Pipeline	Bureau of Reclamation, Billings Mt.	34N/79W/34, 35	Block/ Linear	1990
0 758 0	Cemetery Road Pathway Project	Pronghorn Archaeological Services	34N/79W/35	Linear	1987
82 1091 0	Illegal Fill Activity	BLM/Casper District	34N/79W/35	Block	1982
85 911 0	Western Area Power Administration (WAPA)	Centennial Archaeology	34N/79W/35	Block/ Linear	1986
91 1237 0	Cassper 20" Loop Pipeline	Archaeological Energy Consulting	34N/79W/35	Linear	1991
96 570 0	Sand Pitnear Casper	TRC Environmental Corp.	34N/79W/35	Block	1996
3 2135 0	Alcova-Casper Trans Line Pole	Alpine Archeology	33N/80W/12	Linear	2003

Table 1. Summary of Previous Cultural Resource Investigations.

Accession Number	Project Name	Conducted By	Location (T/R/S)[1]	Type	Date
9 738 0	Central Wy Transmission Line Imp	Alpine Archeology	33N/80W/12	Linear	2009
108110	Mills Street Poison Spider Road	Office of the Wyoming State Archaeologist	33N/80W/12	Linear	2010
83 1336 0	WAPA Electrical Transmission Line	TRC Environmental Corp.	33N/80W/12	Linear	1983
83 1336 6	Casper Waltman 69KV Trans Line	J.F. Sato & Associates	33N/80W/12	Linear	1987

[1]**T/R/S = Township/Range/Section**

PREVIOUSLY RECORDED SITES

As stated previously, site density within the legal sections associated with the project is notably high however, since the purpose of this phase of investigations is strictly to aide project planning and project constraints, sites situated outside the area of potential effect (APE) are not discussed in this report. Consequently, research identified five cultural resources that either lie within the project area, or are so close as to garner consideration in this report (Table 2).

Table 2. Summary of Previously Recorded Sites.

Site Number	Site Type	Status[1]	Location (T/R/S)[2]	In Inventory Area	Proposed Mitigation
48NA293	Historic Trail (Oregon Trail)	E	33N/80W/12; 33N/79W/3	Yes	Avoidance
48NA579	Historic Trail (Childs Route of the Oregon Trail)	E	34N/79W/33, 34	Yes	Avoidance
48NA2164	Historic Ferry Crossing (Mormon Ferry Crossing)	E	33N/79W/34	Yes	Avoidance
48NA2304	Historic Building (North Casper Clubhouse)	E	33N/79W/34	Unknown,	Avoidance
48NA2458	Historic Pump House	NE	33N/79W/18	Yes	No further work

[1] **NE = Not eligible for listing on the NRHP**
[2] **T/R/S = Township/Range/Section**

HISTORIC BACKGROUND

Historical research for the North Platte River Restoration project involved a review of the 1883 General Land Office (GLO) survey plats for the aforementioned Township and Ranges, (BLM 2010, 2011). The original interior lines survey plats indicate that an unidentified trail/road segment appears to bisect the project area in Section 18, T33N R79W, and Section 12 in T33N R80W. Another unidentified trail/road segment passes through Sections 33, 34 and 35 in T34N R79W, and roughly corresponds to the Oregon Trail (48NA293) and Childs Route of the Oregon Trail (48NA579) alignments depicted in Figure 1. No other potential cultural resources were identified from any of the survey plats reviewed for this project.

CONCLUSION

This report documents the results of a cultural resources evaluation conducted by SWCA on behalf of the City of Casper for the proposed North Platte River Restoration project in Natrona County, Wyoming. In all, 329.74 acres in five separate areas were evaluated in order to identify possible cultural resources contained within the project area.

The purpose of this evaluation is to inform project planning and design and to assist the City of Casper in appropriately considering historic preservation values during project planning, and to facilitate project design constraints in regards to lessening or eliminating any impacts to potentially significant cultural resources.

The City of Casper proposes to conduct river restoration activities along a five-mile-long stretch of the North Platte River that flows through the town of Casper in Sections 2-4, 7 and 18 in Township 33 North (T33N), Range 79 West (R79W); Sections 12 and 13 in T33N, R80W and Sections 33-35 in T34N, R79W of the North Platte River Valley.

An official WYCRO files search conducted through the Wyoming SHPO revealed five cultural resources (48NA293, 48NA579, 48NA2164, 48NA2458 and 48NA2303) were possibly within or in very close proximity to the project area. Of the five, 48NA293 (Oregon Trail), 48NA579 (Childs Route of the Oregon Trail) are determined eligible for nomination to the NRHP. However, further field work is needed to verify the historic footprint within the project area and if found, to establish whether or not any segments within the project area are contributing elements of the site. 48NA2304 (North Casper Clubhouse) is listed on the NRHP. At this point, it is unknown of the any part of the site is within the project APE. Additional fieldwork would be needed to define the extent of the site in relation to the project area. If the site is within the APE, SWCA recommends avoidance in order to limit any impacts to the site. Site 48NA2164 (Mormon Ferry Crossing) is recommended eligible for the NRHP. If the site is within the APE, SWCA recommends avoidance in order to limit any impacts to the site. Site 48NA2458, which is a historic pump house, is recommended not eligible for NRHP nomination and no further work is recommended for this site. A formal Class III inventory of the project area would need to be conducted to ground-truth and assess any cultural resources within the project area. In summary, SWCA recommends that project design constraints are implemented to reduce any impacts to all eligible cultural resources revealed during the SHPO files search including 48NA293 (Oregon Trail), 48NA579 (Childs Route of the Oregon Trail), 48NA2304 (North Casper Clubhouse) and 48NA2164 (Mormon Ferry Crossing). Site 48NA2458 is recommended not eligible for the NRHP and no further

work is recommended. Any changes in project design as a result of avoiding eligible sites would require a new assessment of cultural resources within the newly defined project areas.

REFERENCES CITED

Bureau of Land Management (BLM)

2010 *t42nr72w*. GLO & BLM Survey Plats & Field Notes. United States Department of the Interior, Bureau of Land Management. Electronic document available online at http://www.wy.blm.gov/cadastral/countyplats/converse/t41nr72w.pdf. Accessed May 18, 2011.

2011 *Search Documents*. General Land Office Records. United States Department of the Interior, Bureau of Land Management. Electronic application available online at http://glorecords.blm.gov. Accessed May 18, 2011.

RESOLUTION NO. 23-38

A RESOLUTION AUTHORIZING SUBMISSION OF AN APPLICATION TO THE WATERSMART GRANT PROGRAM

WHEREAS, the City of Casper has identified the need to restore the North Platte River through Casper and has identified the reach of the river with nexus to water wellfields that provide drinking water to Casper's citizens; and,

WHEREAS, the river restoration project will improve stream channel structure and complexity, improve flood plain connectivity, protect and stabilize riverbanks to reduce erosion, influence water temperature, improve riparian habitat, restore natural wetlands, divert stormwater flow into wetlands, and enhance river-based recreation; and,

WHEREAS, the WaterSMART Grant is designed to assist in environmental water resources projects and can provide up to $3,000,000 with a of a maximum project cost of $6,000,000 with a match of at least 25% in cash and in-kind services; and,

WHEREAS, required grant match can be met with cash and in-kind work from a combination of River Fund reserves, other grants and donations including the Charles E. Pierall Izaak Walton League donation of $60,000, and in-kind work from the City of Casper staff, volunteers, and other businesses, foundations, organizations and agencies who have a track record of cooperating on the river restoration work; and,

WHEREAS, the City of Casper has the legal authority to enter into an agreement with the U.S. Bureau of Reclamation; and,

WHEREAS, the Casper City Council supports the application and will review the contents prior to application; and,

WHEREAS, the City of Casper will work with the U.S. Bureau of Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF CASPER, WYOMING: That the Mayor is hereby authorized and directed to execute and the City Clerk to attest, an application to the WaterSMART grant program in the amount of up to $3,000,000 for the river restoration project.

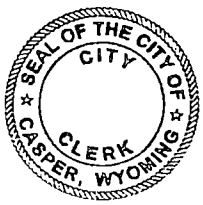
BE IT FURTHER RESOLVED: That the governing body of the City of Casper adopts the WHEREAS clauses set forth above for purposes complying with Section D.2.2.11 of the Notice of Opportunity No. R23AS00089.

PASSED, APPROVED AND ADOPTED this 7th day of March, 2023.

APPROVED AS TO FORM:

CITY OF CASPER, WYOMING
A Municipal Corporation

ATTEST:



Fleur D. Tremel
City Clerk

Bruce Knell
Mayor

March 15, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007, MS 84-27133
Denver, CO 80225

Re: The City of Casper's North Platte River Restoration Project-Izaak Walton Reach Project

Dear NOFO Team:

Advance Casper, Natrona County's Economic Development Organization, is writing to express our strong support for the City of Casper's application for a *WaterSMART Environmental Water Resources Projects for Fiscal Year 2023 Grant* through the Department of the Interior, Bureau of Reclamation, Water Resources and Planning Office. This Project is important to the continued economic development and improved livability efforts in Casper, Wyoming. We understand the critical role of environmental sustainability and natural resources in fostering economic growth and prosperity.

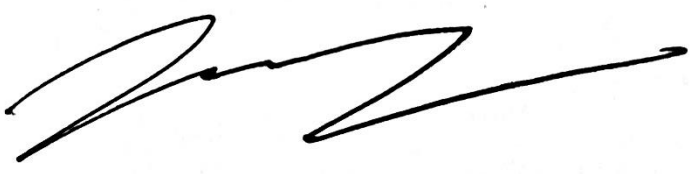
The City's North Platte River Restoration Project-Izaak Walton Reach Project is a visionary initiative that seeks to restore and preserve the ecological health of the North Platte. The North Platte River is a vital natural resource that provides numerous economic and recreational benefits to the residents of Casper and the surrounding area. This Project will involve the removal of invasive Russian Olive trees, restoring destructive erosion, protecting drinking water wellfields, and realigning storm sewers to wetlands to improve public access, water quality, and aquatic habitat.

The benefits of this Project extend far beyond the environmental realm. This Project will help boost the local economy by attracting tourists and outdoor enthusiasts to the area. The river provides excellent opportunities for blue ribbon fly fishing, kayaking, rafting, and other outdoor activities, which generate increased revenue for local businesses such as outfitters, watersport rentals, hotels, restaurants, and retailers year over year.

Moreover, the North Platte River Restoration Project- Izaak Walton Reach Project aligns with the broader economic development goals of Casper and the State of Wyoming. The Project will create jobs and stimulate economic growth through the construction and maintenance of river restoration infrastructure. It will also enhance the quality of life for residents, making Casper a more attractive place to live, work, and invest.

In conclusion, I urge the grant committee to support the City of Casper's North Platte River Restoration Project-Izaak Walton Reach Project. This visionary initiative represents a unique opportunity to promote environmental sustainability, economic growth, and community development in Casper, Wyoming. Thank you for your consideration.

Sincerely,



Justin Farley, CEO/President of Advance Casper Economic Development

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Casper Field Office
2987 Prospector Drive
Casper, Wyoming 82604-2968
www.blm.gov/wy

March 19, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007, MS 84-27133
Denver, CO 80225

Re: City of Casper's North Platte River Restoration Izaak Walton Reach Letter of Support

Dear NOFO Team,

The purpose of this letter is to express the support of the Bureau of Land Management (BLM)– Casper Field Office (CFO) for the City of Casper's North Platte River Izaak Walton Reach Restoration Project. The CFO has been involved with the City's North Platte River Restoration for several years. The project is very much in line with the BLM's multiple use and sustainable yield mission. The project has a long list of significant positive factors such as water quality and quantity, bank stabilization, floodplain connectivity, erosion control, and fish and wildlife habitat. Additionally, the scenic and intrinsic values this project positively affects and unmeasurable benefits to all that live and visit Casper. The North Platte River is the heart of Central Wyoming and Casper, and the health of the river influences a vast area beyond that.

The BLM has supported the City's efforts to improve the North Platte River for several years. We are proud to call the City of Casper a partner and have provided staff and expertise on past improvements of other reaches of the river. We also have worked closely together to host the largest Public Lands Day efforts in the Country, almost always focused on a North Platte River improvement project. We would like to see the City of Casper continue their efforts to improve the river function health in Central Wyoming and plan to continue to support the efforts.

Again, the BLM fully supports the City of Casper's proposal and believe it will have long lasting significant impacts to the North Platte River and all things that are dependent on it. Please support this project with funding through the WaterSMART Environmental Water Resources Projects for Fiscal Year 23.

Sincerely,

Benjamin Bigalke
Field Manager, Acting
Casper Field Office

Central Wyoming Regional Water System
Joint Powers Board
1500 SW Wyoming Boulevard
Casper, Wyoming 82604
(307) 265-6063

March 21, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007, MS 84-27133
Denver, CO 80225

Dear NOFO Team:

The Central Wyoming Regional Water System Joint Powers Board (JPB) is writing in support of the City of Casper's (City) application for a *WaterSMART Environmental Water Resources Projects for Fiscal Year 2023* grant through the Department of the Interior, Bureau of Reclamation, Water Resources and Planning Office. The City's North Platte River Restoration – Izaak Walton Reach Project (Project) includes removal of invasive Russian Olive trees in the JPB's drinking water wellfields and realigns storm sewers to wetlands. The Project provides a good nexus to water resources and water resources management activities that will have a positive impact on the JPB's water supply improving both water availability and quality.

The JPB provides drinking water to nine wholesale customers that serve roughly 70,000 people located throughout the entire region. Source water and wellhead protection are of utmost concern and critical to the JPB's water system operation and, ultimately, to public health and safety. Elements of the City's river restoration project that improves water resources, aquatic habitat, riparian habitat, and wildlife management through this corridor dovetails nicely with the JPB's overall wellfield management and operation plan. The JPB proudly supports this application and looks forward to its continued collaboration with the City, Wyoming Game and Fish, Natrona County Weed and Pest, and Bureau of Land Management, Casper Office on the Project. The JPB is confident that the City can, and will, see this project through to a successful completion.

Please feel free to contact Bruce Martin, Public Utilities Manager, City of Casper at (307) 235-8213 or myself at (307) 437-6355 should you need any further information concerning the JPB's support for this important project.

Sincerely,

H. H. King, Jr.
Chairman

Natrona County Conservation District
5880 Enterprise Drive, Suite 100 ● Casper, Wyoming 82609 ● 307-261-5436, ext. 4

March 20, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25077, MS 84-27133
Denver, CO 80225

Dear NOFO Team:

The Natrona County Conservation District (NCCD) Board of Supervisors is writing in support of the City of Casper's (City) application for a *WaterSMART Environmental Water Resources Projects for Fiscal Year 2023* grant through the Department of Interior, Bureau of Reclamation, Water Resources and Planning Office.

The NCCD has worked closely with the agricultural producers of Natrona County to implement water quantity and water quality best management practices since the 1990s. This work ultimately resulted in the de-listing of 36.8 miles of the North Platte River from the Wyoming Department of Environmental Quality's 2016/2018 Integrated 305(b) and 303(d) Report. The NCCD continues to work with landowners to improve the water quality throughout the watershed.

Thousands of acres are irrigated from the North Platte River, producing abundant crops in Natrona County. Our agricultural producers rely on the water of the North Platte River for their irrigation purposes, while urban and many rural landowners rely on the river for their drinking water through the Central Wyoming Regional Water System. The restoration efforts by the City of Casper have been extraordinary throughout the years, and this project would assist in the continuation of their work.

The NCCD recommends the City of Casper for funding through the WaterSMART Environmental Water Resources Projects and will gladly collaborate on the North Platte River Restoration – Izaak Walton Reach Project.

Sincerely,

Lisa Ogden

Lisa Ogden
District Manager
Natrona County Conservation District

NATRONA COUNTY WEED AND PEST DISTRICT

6819 W. YELLOWSTONE

CASPER, WY 82604

Phone: (307) 472-5559
e-mail: ncwpoffice@gmail.com

March 8, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007, MS 84-27133
Denver, CO 80225

RE: Letter of Support and Collaboration

Dear NOFO Team:

This letter is in support of the City of Casper's (City) application for a *WaterSMART Environmental Water Resources Projects for Fiscal Year 2023* grant through the Department of the Interior, Bureau of Reclamation, Water Resources and Planning Office.

The City's North Platte River Restoration – Izaak Walton Reach Project (Project) will restore important cottonwood galleries, develop essential wetlands and mitigate destructive erosion on this stretch of the North Platte River. Natrona County Weed and Pest is a collaborator on designing and implementing the Project. Our collaborative efforts will include Russian olive removal and regrowth control. Russian olives are a Wyoming State Designated Noxious weed species and is an invasive species of major concern in our valuable (and rare!) riparian areas of the State.

We are in full support of the Project and will be committed and valuable Partners throughout.

Thank You for Your Consideration of this Important Project,

Respectfully,

Brian Connely, Supervisor

Natrona County Weed and Pest Control District

March 16, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007, MS 84-27133
Denver, CO 80225-0007

Re: North Platte River Restoration – Izaak Walton Reach Project – City of Casper's Grant Application for the *WaterSMART Environmental Water Resources Project for Fiscal Year 2023* – Funding No. R23AS00089

Dear NOFO Team:

The Two Fly Foundation, LLC, would like to ask for your favorable consideration of a grant request by the City of Casper for the ecological, in-river restoration, and bank stabilization of the river reach called Izaak Walton. This reach is part of the cities of Casper and Mills, Wyoming.

As you already know, the North Platte River below Grey Reef Dam 20 miles west of this reach has been labeled Blue Ribbon quality for many years. You may not know that the in-town North Platte River has always been a section that is fished by guides for big browns; and as a result of some restoration projects by the Platte River Revival, has become a very attractive trip for rainbow and brown trout by guides and their clients.

The Two Fly Foundation has been intimately involved with fish Guide Shops and individual guides for 14 years as our philanthropic activity now requires up to 36 guide boats for two days in early May each year to provide our participants with the best experience possible in the hope of getting large donations for Wyoming charities.

We have donated $2.86 million to 27 Wyoming charities as a result of fishing on the North Platte River. These participants come back to Casper bringing friends, family, or business acquaintances every year; booking hotel rooms, eating at restaurants, buying local "Western" clothing, buying fishing equipment and more. As a result of the quality of the river, four major guide outfitters employ more than 50 guides that annually take two persons/day for six months of the year. Fishing on the North Platte is responsible for a huge influx of out-of-state money for Casper and Wyoming.

In addition to fishing, the river in town supports surfing at the White-Water Park, kayaking, tubing, general boating of all types, and general touring along the banks of the river to resident and tourists alike. With the help of a grant from the Bureau of Reclamation, another in-town reach will offer tourists and citizens an additional place to enjoy the river's aesthetics, opportunities, and experience the great outdoors of Casper and Wyoming.

Thank you for your consideration.

Yours very truly,

Tom E. Swanson
Board Member
Two Fly Foundation, LLC

CASPER AREA CONVENTION
& VISITORS BUREAU
139 WEST 2nd STREET, SUITE 1B
CASPER, WYOMING 82601

March 14, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007, MS 84-27133
Denver, CO 80225

Dear NOFO Team:

Visit Casper is writing in support of the City of Casper's (City) application for a *WaterSMART Environmental Water Resources Projects for Fiscal Year 2023* grant through the Department of the Interior, Bureau of Reclamation, Water Resources and Planning Office.

It is our understanding that this North Platte River Restoration – Izaak Walton Reach Project supports water resources and water resources management activities that will have a positive impact on water availability and quality as well as the riparian area. With our focus on tourism in Casper and Natrona County, Visit Casper believes this commitment to water quality and realignment to natural habitat on the North Platte will be an extreme benefit to our community recreationally and ecologically. This project will only enhance many of the river restoration and related projects that the City has already committed to or executed. The project will have a direct impact on our local economy via tourism, events, urban redevelopment, community improvement, and increased property value.

Thank you for your consideration and please do not hesitate to contact me should you have any questions on our organizational support of this wonderful project.

Sincerely,

Tyler Daugherty, CEO
Visit Casper
139 W. 2nd Street, Casper, WY 82601
307-234-5362
tyler@VisitCasper.com

WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006
Phone: (307) 777-4600 Fax: (307) 777-4699
wgfd.wyo.gov

March 15, 2023

Bureau of Reclamation
Financial Assistance Operations Section
Attn: NOFO Team
P.O. Box 25007, MS 84-27133
Denver, CO 80225

RE: City of Casper's North Platte River Restoration Izaak Walton Reach Letter of Support and Collaboration

Dear NOFO Team,

The Wyoming Game and Fish Department (WGFD) fully supports the City of Casper's North Platte River Izaak Walton Reach Restoration. The WGFD recognizes that the City's proposed plans will improve stream channel complexity, floodplain connectivity, bank stability and erosion rate, groundwater recharge, and riparian, backwater, and wetland habitats. The project will also enhance recreational fishing, remove invasive vegetation species, establish native riparian communities, and filter stormwater.

The WGFD has partnered extensively with the City of Casper on previous North Platte River Restoration reaches by creating a monitoring plan, conducting five years of post-completion monitoring, writing three monitoring reports, providing funding, and reviewing restoration designs. The WGFD will continue assisting the City of Casper throughout the Izaak Walton Reach Restoration and other remaining reaches.

Finally, the Izaak Walton Reach is within recognized Statewide Habitat Plan priority areas including Stream Restoration, Blue Ribbon Fishery, and Riparian Restoration. We therefore support this project for funding through the WaterSMART Environmental Water Resources Projects for Fiscal Year 2023.

Sincerely,

Alan Osterland
Chief of Fisheries
Wyoming Game and Fish Department
5400 Bishop Boulevard
Cheyenne, WY 82006

AO/JM

cc: Jolene Martinez, Assistant to the City Manager, City of Casper
Paul Dey, Aquatic Habitat Program Manager, WGFD
Lara Gertsch, Assistant Aquatic Habitat Manager, WGFD
Matt Hahn, Casper Fisheries Management Supervisor, WGFD
Matt Pollock, Casper Habitat Access Supervisor, WGFD
John McCoy, Aquatic Habitat Biologist, WGFD
File