Cowiche Confluence Complex - Design

Technical Proposal

WaterSMART Aquatic Ecosystem Restoration Project through the United States Department of Interior, Bureau of Reclamation

Yakima County Public Services – Water Resources Division

Yakima County Flood Control Zone District

In Cooperation with

City of Yakima Water and Irrigation Division

Including Design of a Replacement Bridge, Floodplain Habitat Features, Decommission and Restoration of Irrigation Delivery Infrastructure, Topographic Restoration of Disturbed Sites, Development of Designs for a Naches Cowiche Confluence Park, and Resolution of Property Interests and Deed Restrictions to facilitate Park Development.

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Executive Summary

1/22/2024
Yakima County Public Services
Yakima, Washington

Yakima County is a Category A applicant as a local government agency with water distribution authority. The Water Resources Division of the Yakima County Public Services Department also manages the Yakima County Water Resource System which owns senior water rights in the Yakima Basin and provides mitigation water for new water uses permitted under the County's Comprehensive Plan, and the Yakima County Flood Control Zone District which has broad authorities under Washington State Law to cooperate with other entities in the management of water resources for the purposes of reduction of flood hazard and management of the channel/floodplain complex in Yakima County. This application is in cooperation with the City of Yakima Water and Irrigation Division, which manages both the potable and irrigation delivery systems for the City of Yakima, including facilities which will be both constructed and demolished by this proposed project. The County is applying for Task A: Study and Design funding for a suite of restoration activities near the confluence of Cowiche Creek and the Naches River.

Project Summary

Yakima County, in collaboration with the City of Yakima, and the Washington State Department of Transportation will design and permit a flood risk reduction and floodplain restoration project near the confluence of the Naches River and Cowiche Creek, located near the western limits of the City of Yakima in central Washington State. The Yakima County FCZD through their cooperative role outlined in Chapter 86.15 of the Regulatory Code of Washington (RCW) has obtained cooperative agreements with stakeholders and other managing agencies in this area to address recurring flooding problems and implement the recommendations of multiple basin fish recovery plans to restore function and passage to the lower Naches floodplain and Cowiche Creek which has in the past supported spawning populations of Steelhead trout and Coho salmon. Rapid expansion of the urban growth area and recent development of several multi-family housing complexes has provided an impetus to address these issues before the area becomes urbanized and further constrained by infrastructure. This project will develop designs to replace an undersized bridge, remove obsolete irrigation infrastructure, regrade disturbed areas to more natural floodplain topography, replant with native riparian vegetation, and reorganize lands, easements, and covenants held by the County to facilitate Park development, and develop the plans for the park itself. Through this design effort, the County will produce plan sets to reduce potential for flooding from Cowiche Creek, improve fish passage and riparian habitat in the confluence area, and to build a park that will provide recreation and relaxation to the rapidly growing community.

Project Timeline

The estimated time from award to conceptual design of scoped elements is approximately 6 to 9 months, allowing ample time for stakeholder consideration. It is anticipated that designs would reach a 30% level in a year and with continued coordination between the County, stakeholders, and engineering consultants preliminary (60%) designs for all elements would be achieved in less than 2 years, except for the bridge design which could require up to an additional year to incorporate additional review and studies to ensure public safety and conveyance. Anticipated timeline of October of 2025 for deliverable designs for all the proposed design elements and legal review/survey/recording apart from the bridge design over Powerhouse Rd. which would be completed October of 2026.

Project Location

The Cowiche Confluence Complex Project is located in Yakima County, Washington. Approximately half of the project area is within the city limits of Yakima while the remainder is in unincorporated Yakima County. The project latitude is 46.627785 N, and the project longitude is -120.574325 W. See attached map for more information.

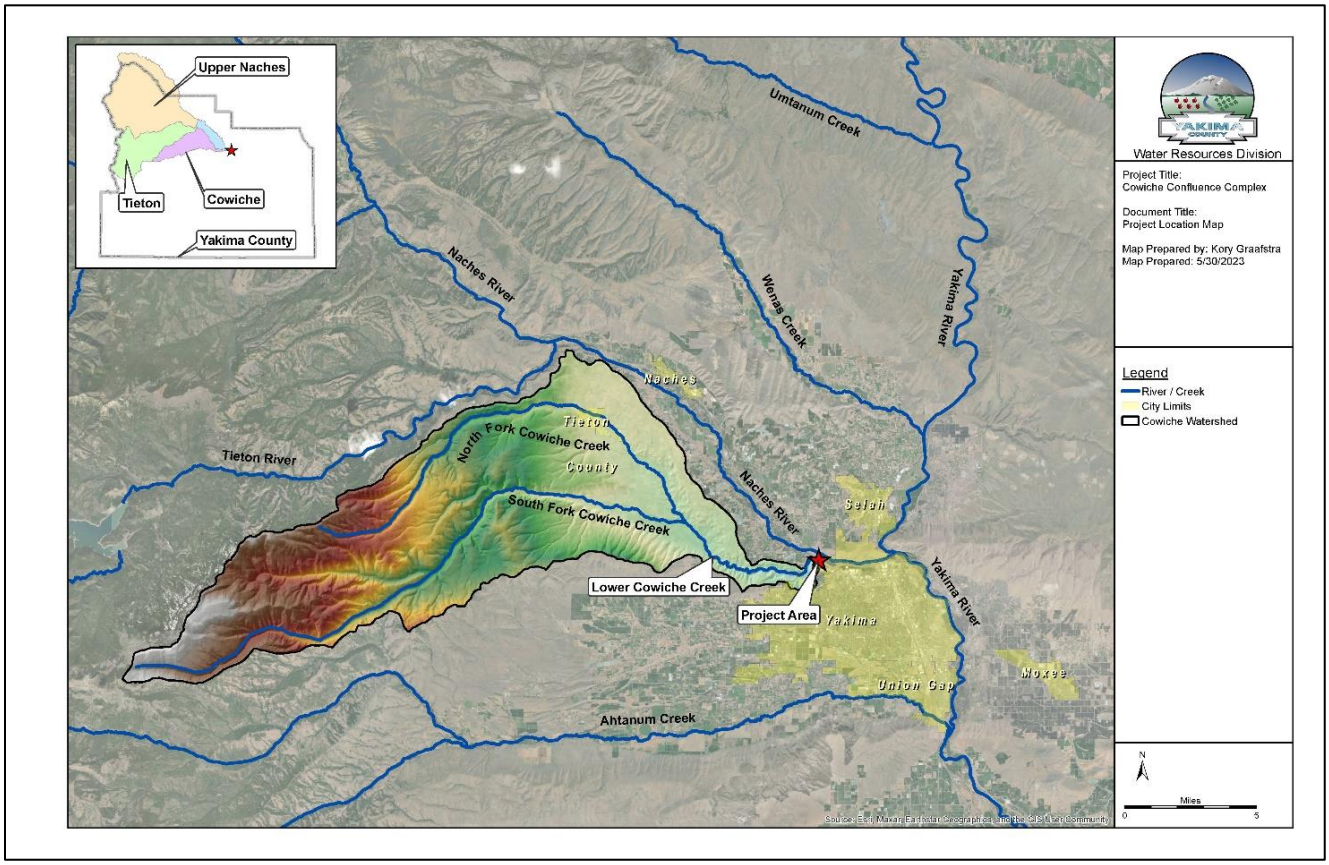

Figure 1 - Project Location

The Project encompasses approximately 136 acres of floodplain and channel habitats, including 1.5 miles of the Naches River, 0.6 miles of Cowiche Creek as it currently exists, and 1.2 miles of new pipeline in already-secured ROW, beginning at the new Nelson Diversion just upstream of US 12 in Yakima County, and ending near 40th Av. North in the City of Yakima. The Project is complicated by the significant narrowing of the 'gap' between the two ridges that define the lateral limits of the geomorphic floodplain for the Naches River and the resulting complex overlapping network of independently designed, water diversion and conveyance, flood control, and transportation infrastructure.

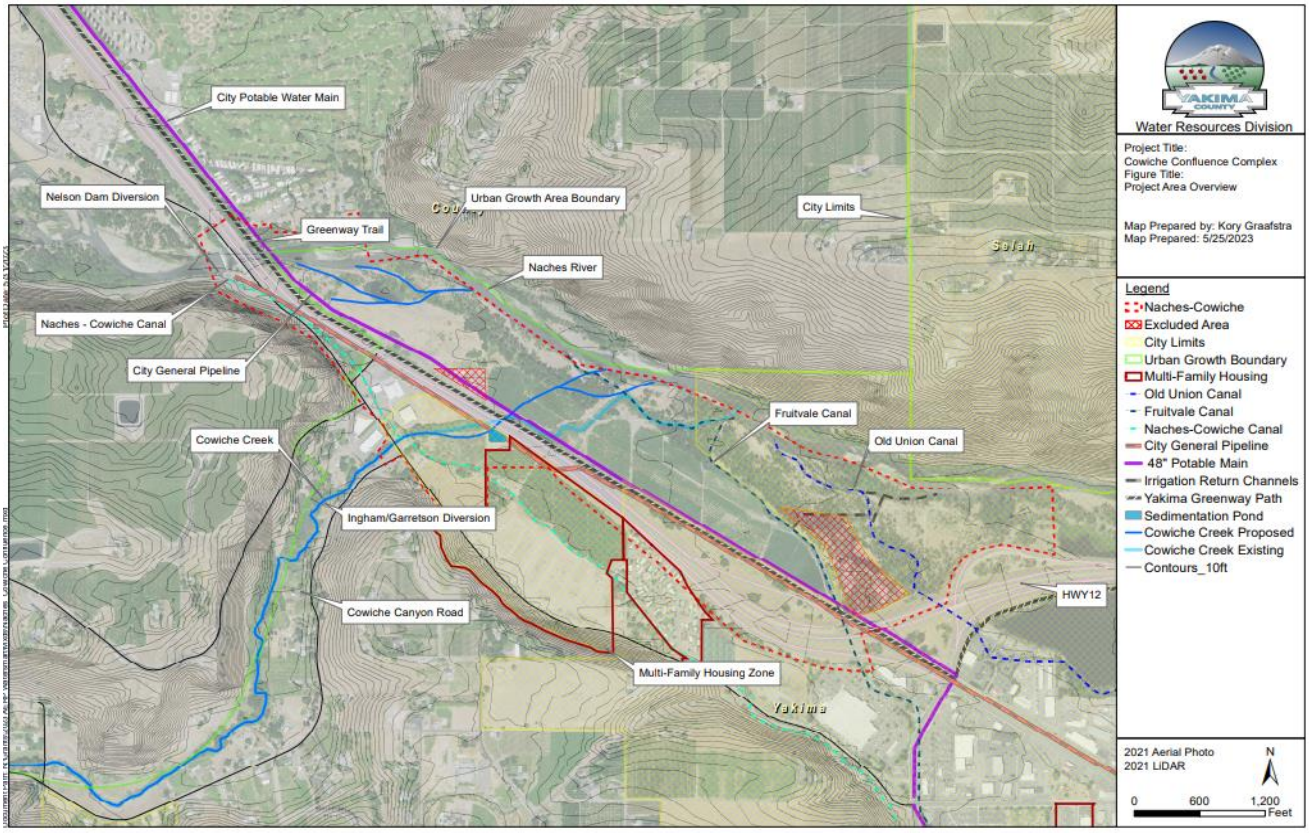

Figure 2 – Project Area is a relatively Narrow "water gap" linking the Lower Naches River alluvial valley to the Ahtanum-Moxee Valley where the City of Yakima is located in the lower right of the figure. Naches River lies along the north wall, current and former orchards and the two irrigation diversions to be removed occupy the floodplain. US 12 bisects the valley, south of US 12 is within the City Limits and currently is being converted to multi-family housing and hotels. The current channel of Cowiche Creek is shown in light blue, and proposed new alignment in dark blue, as proposed side channels.

Project Description

The Naches-Cowiche Flood Risk Reduction and Floodplain Restoration Project (Project) is a coordinated multi-agency effort towards integrated floodplain management of the entire Naches-Cowiche Confluence Complex. Led by the Yakima County Flood Control Zone District (FCZD), and implemented through close collaborative partnerships with the City of Yakima, the Washington State Department of Transportation (WSDOT), local agricultural landowners, resource agencies, and other regional stakeholders, the Project will:

- Reduce flood risk to the City of Yakima, Highway 12, Powerhouse Road, and adjacent working agricultural lands,
- Reduce the need for costly and disruptive emergency maintenance and flood response efforts, and
- Restore fish passage, ecological floodplain functions, and habitats for native and endangered species on Lower Cowiche Creek and within the Naches-Cowiche floodplain and confluence.

To meet the Project goals, the FCZD has determined several beneficial enhancements. These include, resizing and replacing the existing Powerhouse Rd Bridge and the HWY12 bridge, setting back the existing right bank levee between the two bridges and creating additional floodplain habitat, improvements to the City's water delivery system, realignment of the creek below HWY12 and additional side channel, powerline relocation, decommissioning and removal of old water delivery infrastructure and riparian planting to improve floodplain habitat and connectivity across the Naches-Cowiche creek greater confluence area. The Project grew out of the recommendations of the 2018 Cowiche Addendum to the Upper Yakima River CFHMP, the Naches River CHFMP (2005), and the back-to-back flood events of 2016 and 2017 which overwhelmed a levee, closed a major intersection in the regional transportation network (US 12 and 40th Avenue), and caused extensive damages to businesses and residences far into the City of Yakima. The Project is also consistent with, and specifically implements, many of the recommended recovery actions provided in the 2009 Yakima Steelhead Recovery Plan and the 2012/2017 Yakima Bull Trout Action Plan.

The project is currently funded by $500,000 from Yakima Basin Integrated Plan (YBIP) grant (WRYBIP-2019-YaCoPS-00006) and $516,000 from Floodplains by Design grant (SEAFBD-2019-YaCoPS-00050). The YBIP funding covers stakeholder coordination, engineering design of Project elements, environmental permitting and property acquisition. YBIP task 3 requires design work for the setback levee, canal improvements, hydraulic sizing of the Powerhouse Road Bridge and side channels downstream of HWY12.

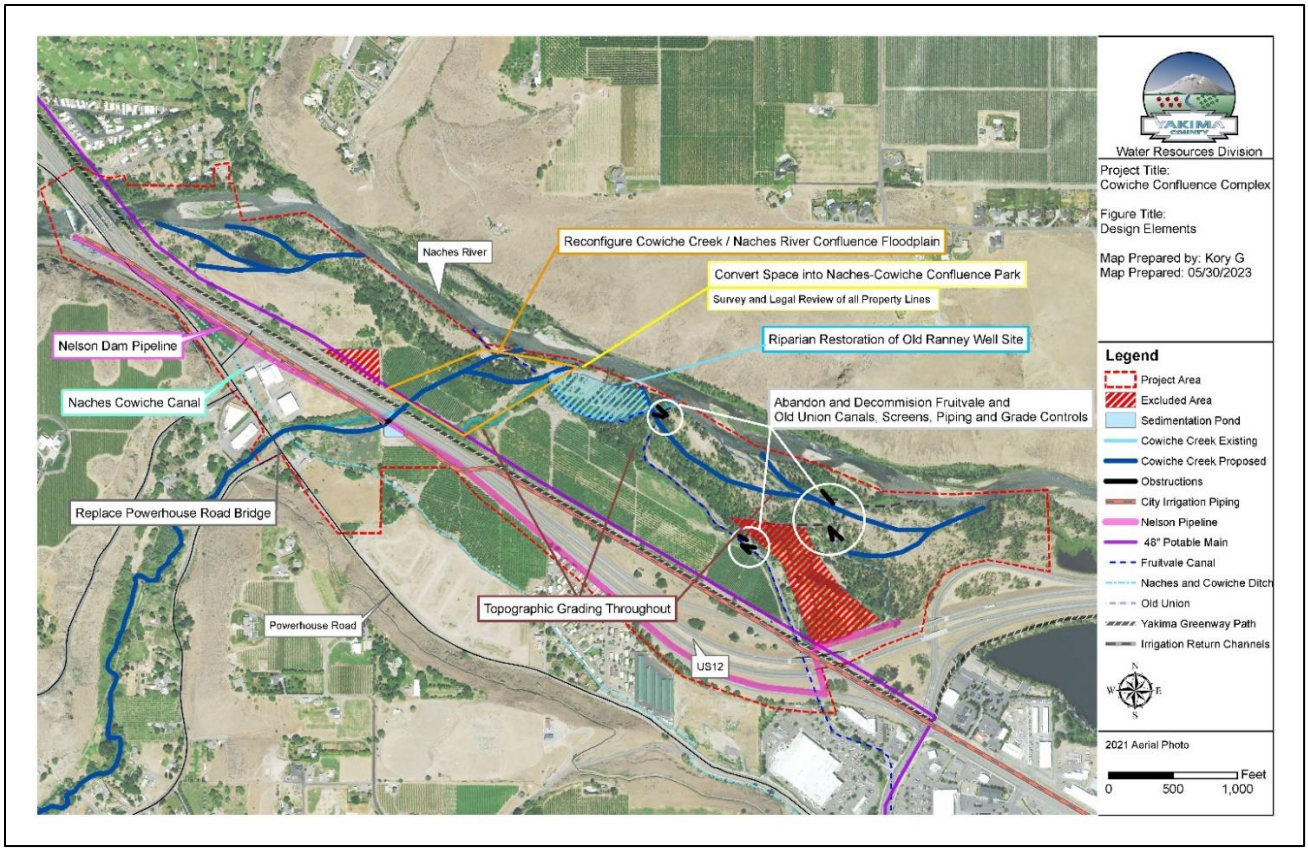

Figure 3 - Project Elements Proposed for Design Funding.

Powerhouse Bridge - During the 2016 flood, it was estimated that the peak flow of Cowiche Creek was roughly 1,200cfs and that was sufficient flow to top the right bank berm and flood the adjacent field and sedimentation pond. This caused a breach in the secondary berm and floodwaters were able to flow along HWY12 and down into the city and cause extensive damage. Modelling efforts mirrored this event and concluded that both the Powerhouse Road bridge and the HWY12 bridge are significantly undersized to convey even a 10-year flood. Multiple scenarios were run using an SRH-2D model to evaluate the appropriate sizing of Powerhouse Road bridge. The proposed conditions model included the setting back of the right bank levee, removal of the City of Yakima's sedimentation reservoir, the resizing of the HWY12 bridge and straightening of Cowiche Creek downstream of HWY12. Modeling results indicate that a 55-foot span will be necessary to achieve the necessary conveyance and keep all floodwaters in the floodplain. The elevation of the Powerhouse Road Bridge is roughly 1175ft. By adding 10 feet of span to the bridge, as well as the other proponents, BFE would be reduced to 1170ft. Inundation would be limited to the floodplain and risk to flooding HWY12 and down into the city would be substantially reduced. This funding would be used to develop preliminary designs for the replacement of the existing undersized bridge bridge.

Downstream of US12 highway, Cowiche Creek makes several ninety degree turns before being utilized as an irrigation conveyance in its lowest reaches, and finally returning to the Naches

River through a series of diversions and check structures. With the construction of the City of Yakima general pipeline from the recently completed Nelson Dam diversion structure, this infrastructure in lower Cowiche Creek will become obsolete and ripe for removal. Designs for the realignment of lower Cowiche Creek are at a 70% level. Construction funding for the pipeline (Nelson Dam phase 2) and realignment of the lower channel is included in our concurrent proposal for Task B construction funding.

Restoring Floodplain - Once the creek is realigned to a more natural channel configuration with easier fish access from the Naches River, the next step in the lower confluence is to improve the floodplain habitat and remove any remnants of the irrigation infrastructure to return this site to a safe and functioning riparian environment. Yakima County would design for a long-term side channel complex, removal of remnant levees and bank armoring, and other confluence habitat features to accelerate the recovery of the resource and improve habitat for wildlife, particularly anadromous fish.

Diversion Infrastructure Removal - The canals and diversions downstream of US-12 near the confluence will no longer be needed after completion of the City's general pipeline. Designs for this would include demolition of the diversion structures, screen abutments once WDFW retrieves their screens, site grading, filling in the canal to provide an access route and park maintenance facilities. This task will also include an assessment of the Ingaham/Garrettson diversion structure upstream of Powerhouse Road to determine what action are necessary to remove this structure and provide irrigation delivery from a different source such as the City's general pipeline or the Naches Cowiche Canal Association.

These actions have been made necessary by the use of the lower portion of Cowiche Creek as an irrigation delivery conveyance and the appurtenant infrastructure that entailed. According to the Yakima Habitat Improvement Master Plan (Golder, 2003) "fish passage barriers are the primary salmonid limiting factor in Cowiche Creek". Removal of these passage barriers is included in our Task B proposal and will work synergistically with the design of these habitat features to provide habitat for multiple species and life-history stages once access is restored. It should also be noted that restoration of the lower Naches floodplain including the confluence with Cowiche Creek is priority action #5 in the Yakima Basin Steelhead Recovery Plan (YBFWRB, 2009).

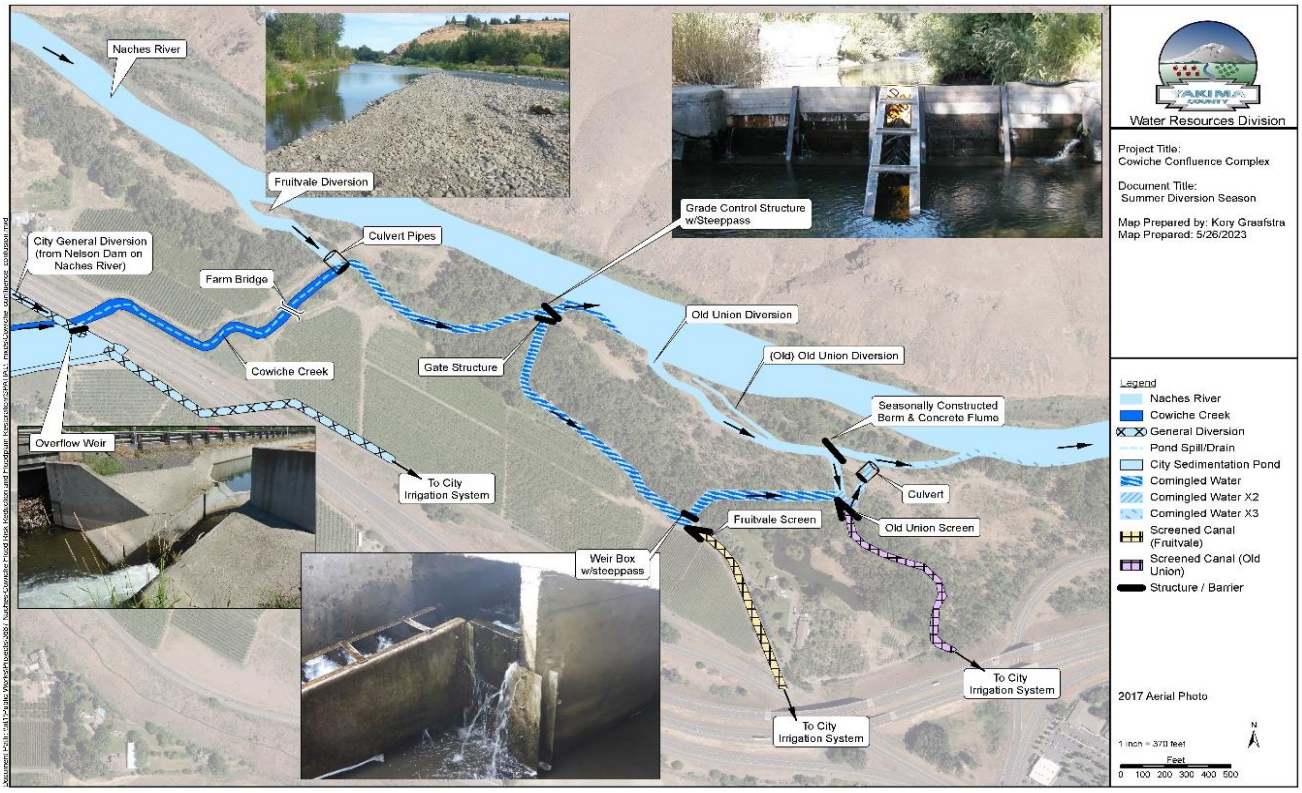

Figure 4 – Current configuration of Lower Cowiche creek and Fruitvale and Old Union Canals.

Ranney Well Restoration - The next design task is the restoration of the Ranney Well site near the Fruitvale canal diversion just upstream from the current confluence with the Naches River. This site was formerly used as a water extraction site for local irrigators. The deep well connected to the Naches River aquifer and supplied irrigation to the nearby orchards. The well has since been decommissioned and the parcel was purchased by the County in 2020. To return this site to a more natural character the County will design topographic restoration activities to remove debris and embankments which now serve no purpose and are obstructing the natural surface flow of this floodplain. This action will require survey and geotechnical borings to identify any buried waste piles or old foundations to be excavated and removed. The goal for the site is to prepare it to be revegetated and integrated into the larger overall confluence restoration plan.

Naches - Cowiche Confluence Park - The final part of this overall Naches-Cowiche confluence restoration plan is the development of a riverside park. The lands were purchased with a combination of County and RCO grant funds which limit development through conservation covenants after purchase. Public recreation is one of the allowable uses for these public lands and the area is experiencing rapid growth in multifamily housing developments. This park facility would provide a huge amenity to the growing neighborhood and provide a connection between the community and the floodplain environment. The park is slated to include parking, trails, boat launch, play structure, restrooms and landscaping and will also serve as a connecting

hub between the Naches River greenway trail and the Cowiche Canyon trail systems once the US-12 bridge is replaced and pedestrian crossing provided at that juncture.

Legal Review of Land - The lands purchased around the proposed park were bought with a mix of grant funds and County dollars meaning there is currently a patchwork of allowable uses and covenants to navigate for park development. To reconcile this, the County will perform a legal review and move equivalent acreages from one conservation status to another to allow for the park development while still meeting the requirements for lands purchased using grant funds (primarily RCO). Deliverables for this task would include updated easements and deeds showing the transfer of conservation status between parcels.

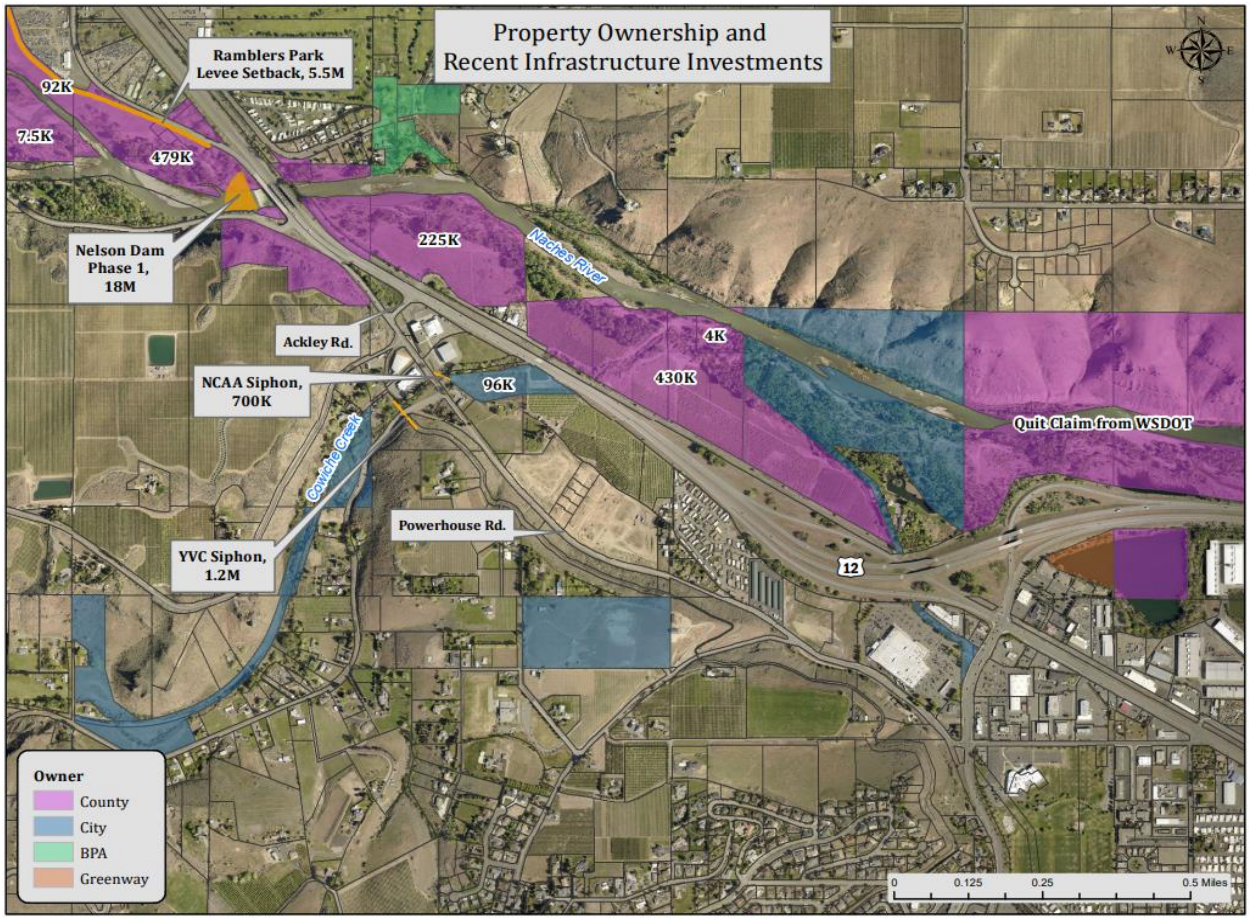

Figure 5 – Properties owned and recent investments.

All design deliverables for this request would be preliminary designs (70%) suitable for evaluation through the NEPA and SEPA processes and yet capable of incorporating changes instituted through those processes.

Evaluation Criteria

Project Benefits

Critical issues in this watershed have been identified through several planning processes including the Yakima Basin Subbasin Plan, and the Yakima Basin Steelhead Recovery Plan, both of which were formulated with Yakima County as the sponsor. Yakima County has also prepared both the Lower Naches and Upper Yakima Comprehensive Flood Hazard Management Plans, including the Cowiche Addendum which is directly related to this project proposal. The Yakima Basin Integrated Plan has incorporated those documents as well as the overall economic and water supply objectives for the Basin as a whole. The Habitat section of the plan features these types of floodplain restoration projects as centerpieces of the plan, both because of their central importance to agricultural productivity and the location of the major irrigation diversions which drive the economy of the valley, but also are consistent with the seminal blueprint for restoration of the salmonid productivity of the basin, known as The Reaches Report. This report was prepared by the Flathead Lake Biological Station under contract to the Bonneville Power Association, and in cooperation with the Yakama Nation and the United States Department of Interior, Bureau of Reclamation. The report looks at the historic production potential of the basin and the productive capacity and habitat diversity of the major mainstem river reaches. All these documents and studies tie back to that original report, and prior actions on the Naches and Yakima Rivers by the Yakima Flood Control Zone District and its partners have built upon that report to implement significant restoration actions such as the series of floodplain and habitat restoration projects in the lower Naches, including Nelson Dam and associated levee setbacks, and other actions on the Yakima River as well. This proposed project implements recommended actions from all of these plans and also represents the benefits of the Yakima Basin integrated plan as the continued implementation and design of these multiple actions aligned with overall management goals of sustainable and resilient management of the channel and floodplain, incorporating the ongoing need for surface diversion facilities which minimize conflict with fish passage and overall riverine processes would not be possible without the Integrated Plan. Just as important, the Washington State Department of Ecology's Floodplains by Design Program also is geared toward similar sets of social and biological considerations in management of channel and floodplain environments. Yakima County Flood Control Zone District has received funding in the past for related actions such as design of the Nelson Project, levee setback and Wrecking Yard Reconfiguration, and floodplain restoration in the project area, due largely to conformance with the biological goals of the Recovery Plans and the societal goals of the Shorelines Management Section of the Department of Ecology in the provision of public access to, and the protection of Shorelines of the State, as well as flood hazard reduction and sustainability and resilience of infrastructure in the floodplain environments. This project will address some of the critical issues in the watershed within the Lower Naches River floodplain. According to the 2009 Yakima Steelhead Recovery Plan the

major factors for the decline in populations of salmon and steelhead within the Yakima Basin includes the 5 factors listed below:

1. Alteration of stream flows due to development of irrigation systems, including both the dewatering of lower reaches in many tributaries and the high and low flows in the mainstem Yakima and Naches rivers associated with water storage and delivery from upstream reservoirs.
2. Creation of passage barriers associated with both small and large diversion dams, road crossings, and Bureau of Reclamation (BOR) storage dams.
3. Reductions in floodplain function due to diking, channel simplification, and floodplain development for agricultural and urban uses.
4. Impacts to riparian areas and upland hydrology due to past and, to a lesser extent, current, grazing, and forestry practices.
5. Changed ecological dynamics, including reduction in beaver populations, reductions in delivery of oceanic nutrients to headwaters by salmon, introduction of exotic species, and increased predation by native species.

The design products proposed for this Task A project would address the first three factors listed above within the Cowiche Creek confluence complex which has the potential to support a spawning population of steelhead and coho salmon in its lower reaches. This is reiterated within the report titled *Habitat Limiting Factors: Yakima River Watershed* (Haring 2001) which states that "A survey in July 1988 indicated that Cowiche Creek had many miles of good/excellent spawning and rearing habitat for steelhead and coho (CBSP 1990). Cowiche Creek could be a major producer of steelhead and coho (and perhaps a minor producer of spring chinook)." A lengthy discussion of the specific habitat issues in Cowiche Creek follows but the action recommendations are well aligned with the objectives of the proposed project. The action recommendations are included below:

- Prioritize and correct identified fish passage barriers at water diversions and install fish screens.
- Consolidate diversions, where possible.
- Correct sedimentation from streamflow running down Cowiche Mill Road.
- Implement a comprehensive grazing program to protect riparian vegetation and streambank stability; restore riparian vegetation and function.
- Restore floodplain function, where impaired.
- Correct false attraction problems into lower NF Cowiche Creek during the irrigation season, by installing a fish passage barrier at the mouth or by providing persistent flow through the lower NF.

This project would result in a design to demolish 2 grade control structures, acting as fish passage barriers, return the floodplain grade and vegetation to a more natural/functional state, and consolidate the conservation status of lands previously acquired for fish benefit, open

space, recreation, and floodplain habitat by establishing a plan for the Cowiche Confluence Complex Park.

• *Explain how your project will benefit aquatic ecosystems, including benefits to plant and animal species, fish and wildlife habitat, riparian areas, and ecosystems. For example, will your project create new habitat, improve water quality, improve stream or riparian conditions, restore fish passage and connectivity, or otherwise benefit aquatic ecosystems.*

This project is a continuation of projects already implemented and is primarily designed to restore fish passage and habitat connectivity/eliminate false attractions flows at the confluence of Cowiche Creek with the Naches River. This project is also strongly related to the past upstream floodplain restoration, irrigation, and transportation projects which will restore sediment transport to this reach. The project area also sits at the site of hyporheic upwelling at the lower end of the 11-mile Lower Naches Valley and restores the potential for the high habitat value side channels that naturally existed at this location prior to channel incision and floodplain disconnection in the early 20th century. For a more thorough discussion of these multi-reach scale benefits see the attached Nelson Dam Environmental Memo. This project area is at the edge of the City of Yakima's Urban area and the project represents an effort to resolve the uncoordinated development of infrastructure in this reach in an area that is now expected to rapidly develop. The restored area of Cowiche Creek is zoned for multi-family residences and is currently undergoing conversion to that land use. Within 2 years there will be over 5,000 new residences adjacent to the project area. Downstream designs and study of the riparian habitat will lead to projects which restore the confluence area to a functional state with a more diverse habitat mosaic which can support multiple species and life-history stages. Development of a park plan and consolidation of conservation status will help the County reserve the highest value habitat for wildlife purposes and develop public nature-based recreation in other areas where negative impacts can be minimized. Finally, the study and design for removal and decommissioning of the diversions and canals for the Fruitvale, and Old Union canals with all their associated infrastructure will open up the lower Cowiche Creek floodplain to recolonization of anadromous and resident fish populations and reduce false attraction and juvenile stressors when entering or exiting Cowiche Creek, opening the creek to potential spawning by adults and rearing for juveniles.

• Does the project affect water resources management in 2 or more river basins (defined as a minimum HUC-10 level)? Explain how and identify the area benefitted (provide a map).

This project will provide benefits to fish populations that reside in 3 HUC 10 watersheds that together occupy the entirety of the upper Naches watershed. It also affects flows and sediment continuity between the Lower Naches and Moxee HUC 10 watersheds in the Naches and Mainstem Yakima Rivers.

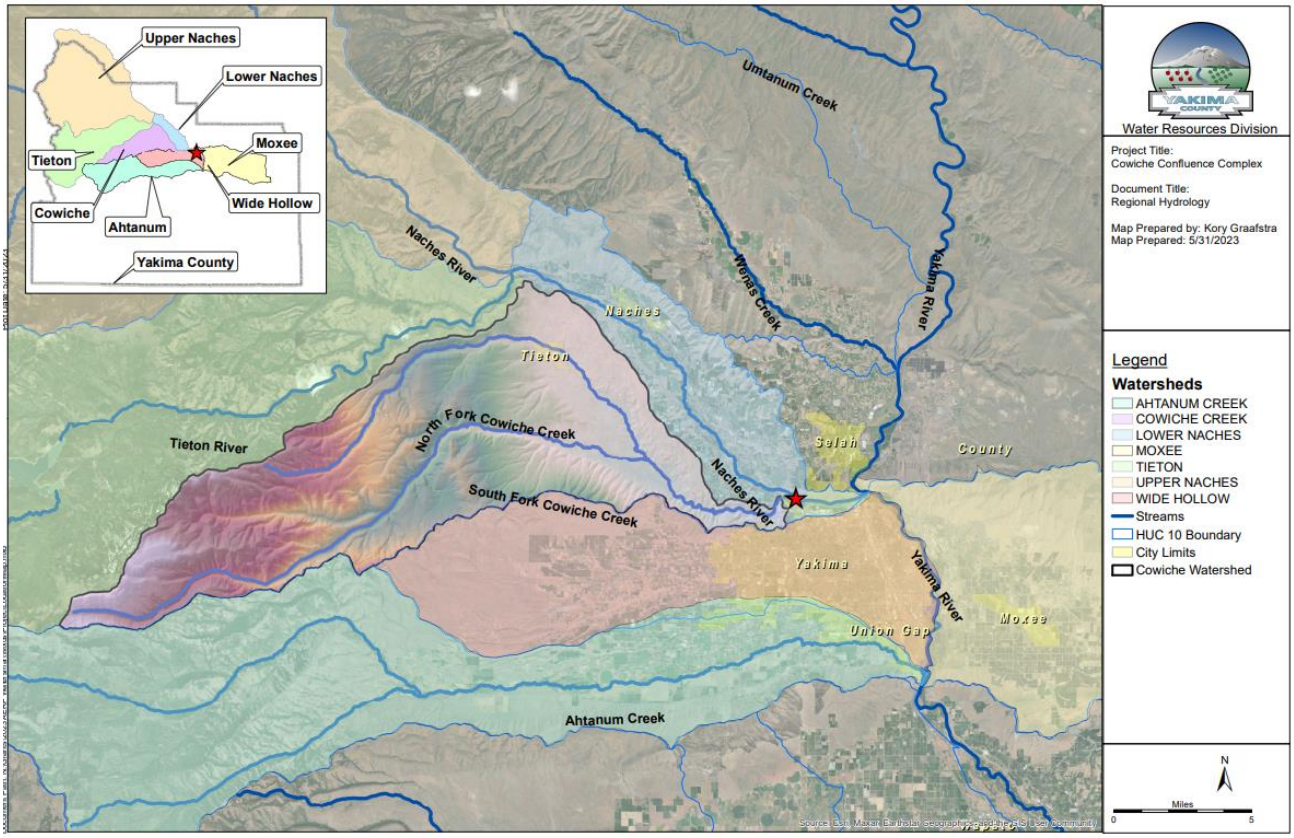

Figure 6 – Regional Hydrology

• Does the project provide regional benefits, in addition to fish or habitat restoration, including:
o Supporting water needs for multiple water uses (i.e., agricultural, municipal, Tribal, environmental, recreational)?

The study and design project will have other regional benefits beyond fish and habitat restoration. Public safety would be one of the biggest ancillary benefits to this restoration effort. Overland flooding would be reduced by designing and replacing the bridge at Powerhouse Rd. and floodplain habitat restoration of the confluence area would reduce peak flows in the watershed during runoff events. The area slated to become a park would also be made much safer by removing the old diversion structures, canals, and screens associated with the Fruitvale

and Old Union irrigation systems, additionally the park would serve as access to outdoor space by underserved communities in this urban growth area.

• *Is this project a component of a broader strategy or plan to replace aging facilities with alternate facilities providing similar benefits? Describe how this project fits within the strategy or plan and how it will continue to provide benefit.*

Yes, this project is part of a larger effort started with the removal of Nelson Dam to replace the main irrigation delivery pipeline to the City of Yakima and restore floodplain to the Naches River by creating side channels and setting back levees. Anticipated improvements in irrigation and water supply delivery from the recently completed Nelson Dam project are presenting new opportunities to consolidate irrigation infrastructure while maintaining and improving the service provided to water users. Those efforts have already advanced beyond design and some of them are proposed for funding under the Task B application for this project. Task A elements are more about habitat restoration and development of the facilities once the infrastructure has been made obsolete by construction efforts associated with the Nelson Dam phase 2 pipeline.

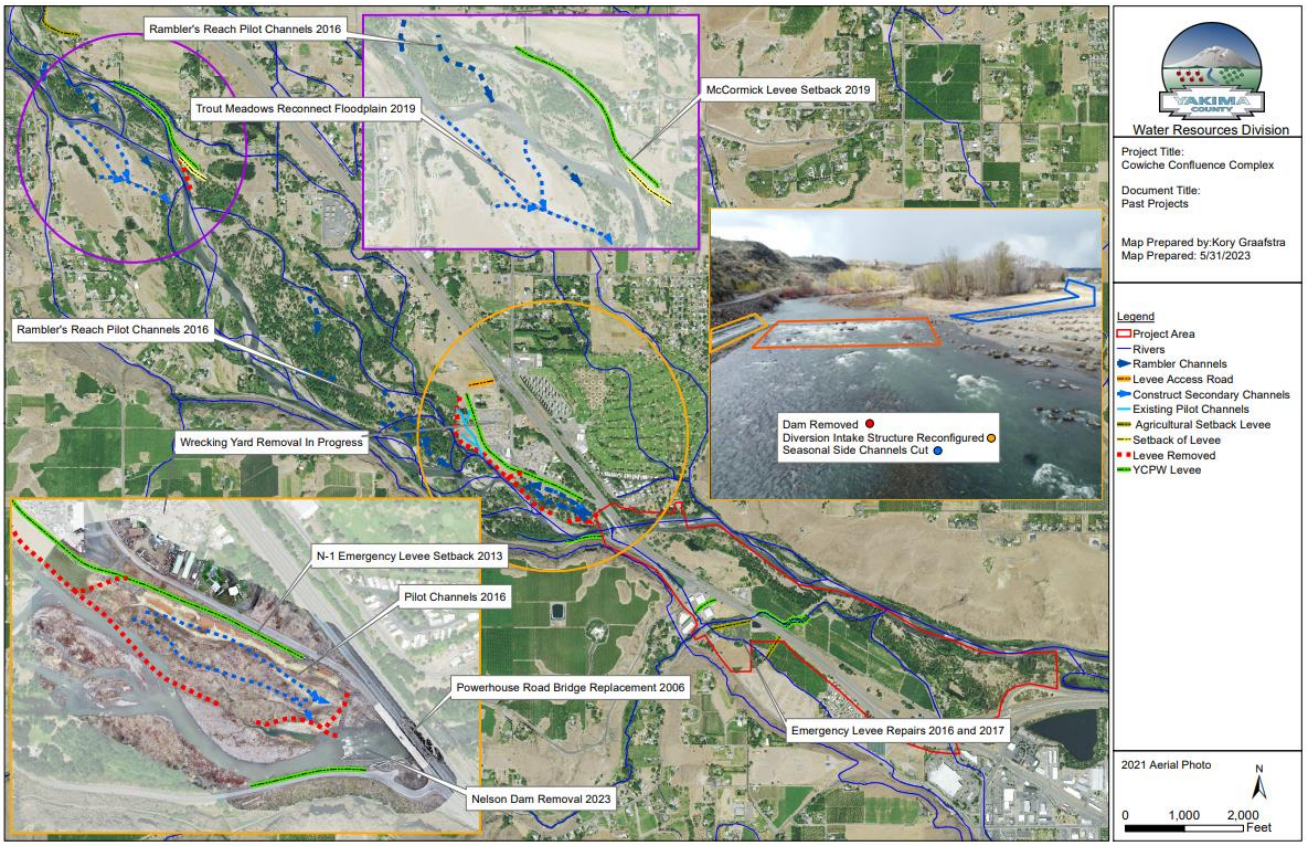

Figure 7 – Recent reach projects.

• *Describe the status of the species and/or habitat that will benefit from the project:*

This project is targeted toward Steelhead recovery. It occurs within and improves designated critical habitat for the species. The project addresses the last remaining partial fish blockages to Cowiche Creek. Restoring a healthy Steelhead population to Cowiche Creek is a cornerstone of the Recovery Plan for Steelhead as it greatly improves species viability through increased habitat and spatial diversity thereby reducing extinction risk. Steelhead numbers in the Yakima Basin have been gradually increasing over the years since recovery, some of this is undoubtedly attributable to improved habitat and passage conditions such as passage in Cowiche Creek which has shown Steelhead spawning increasing in the Creek. The Yakama Nation's Kelt reconditioning program has also likely greatly increased the production potential/fecundity of the population by increasing the survival of mature fish, large-bodied fish which have already spawned at least once in the basin and allowing them to spawn again.

The project will also have primary and secondary benefits to listed Bull Trout by improving mainstem/FMO habitat, providing the cold-water side channels, and allowing side channels to re-express themselves through natural floodplain processes should improve both designated critical habitat for Bull Trout and their prey. Fluvial life history Bull Trout populations in the basin are at a stable level, but still well below de-listing criteria. The most endangered Bull Trout populations are restricted to the upper reservoirs of the basin and are the focus on near term, emergency level actions such as the captive rearing program to keep those populations from extirpation under the local Bull Trout Action Plan for the Yakima Basin.

The project will also benefit other anadromous fish. The seasonal side channels and natural side channels that will develop from hyporheic flow should also provide rearing habitat for Naches River Spring Chinook; this species should also benefit from the other floodplain restoration action that occur in the lower Naches River. The restoration of mainstem Cowiche Creek will also benefit Coho salmon which are being reintroduced. These salmon do spawn in the lower portion of Cowiche Creek, but survival is very low due to unstable channel conditions associated with the modified channel plan form and slope of the lower creek.

This reach of the Naches has been the focus of release projects for the reintroduction of Coho, but channel instability up and downstream of the former Nelson Dam had limited mainstem egg survivals for Coho and also for mainstem spawning Steelhead. Over the longer term, these actions to restore sediment transport and other riverine processes in the mainstem should improve habitat for spawning and improved survival for those species. Similarly, the other floodplain restoration efforts in the lower Naches and the mainstem Yakima River in the Gap-to-Gap reach just downstream has led to efforts to reintroduce Summer Chinook in these reaches in the middle of the basin. The restored mainstem Naches River and the lower reaches of Cowiche Creek in this area of high hyporheic zone discharge has all the elements needed to develop into high quality spawning habitat for all these species.

Species and Habitat Health

Quantify and provide metrics for the extent to which the project will benefit the species and/or habitat, and provide support for your response:

Mid-Columbia River Steelhead are still listed as threatened under the ESA and critical habitat for the species was designated in 2005. Some recovery was evident from the low return that prompted the listing in 1996 but have recently seen another downward trend (YBFWRB 2022). Significant work to restore riparian habitat and improve passage has been completed since the conception of the original basin recovery plan but there has not been significant monitoring to corroborate habitat restoration work with species population viability. The 2022 5-year status review for Mid-Columbia Steelhead performed by National Marine Fisheries Service (NMFS) stated that habitat degradation is still a significant threat to the continued existence of this distinct population segment, "In the 2020 Columbia River System (CRS) biological opinion (NMFS 2020b), NMFS concluded that while some degraded areas in the Middle Columbia River steelhead DPS are likely improving because of restoration actions and improved land-use practices, in general tributary habitat conditions are still degraded through past and present anthropogenic activities (levees, water withdrawals, roads, dams, etc.). These degraded habitat conditions continue to negatively affect Middle Columbia River steelhead abundance, productivity, spatial structure, and diversity. In addition, ongoing development and land-use activities may also have negative effects into the foreseeable future." (NMFS 2022).

This project will improve habitat in the Lower Naches River and Cowiche Creek by providing off channel refugia, revegetating with native riparian species that support nutrient inputs to the trophic cycle, improving shade in formerly open sites, and reducing opportunities for fish to become trapped in derelict irrigation conveyances by removing the abutments and regrading. Degradation of the Cowiche Confluence through land-use has been largely resolved by the previous County acquisition of all adjoining parcels. The current vegetative status of the land is a mix of mature riparian vegetation in bands along the waterways and open areas now taken out of agricultural production which are currently being managed as day use recreation sites with contracted weed control and mowing in anticipation of the proposed restoration efforts.

Watershed Benefits

o Provide information regarding the current status of water quality, ecological function, and ecological resiliency in the planning area.

Water temperatures in Cowiche Creek and throughout the Naches River watershed are often higher than the state standard for fish during the hot summer months. Although this project cannot influence solar radiation striking the surface of the stream in the upper reaches it will allow for increased shading in the lower reach to the confluence area, increased hyporheic exchange through side channels, increased floodplain recharge by expanding active floodplain in open space, and potential wetland development near the confluence without the constant maintenance actions to keep the diversions operating as they are now. The Washington State Department of Ecology has listed these waters on their 303(d) list numerous times for temperature exceedance. Near-stream vegetation, channel morphology, and stream hydrology are the main factors that influence stream temperature. Through this project, Yakima County will be able to maximize the suitability for the lower reach of Cowiche Creek by increasing habitat quality and water residence time in shaded, mature riparian forest and minimizing the channel's surface exposure to direct solar radiation through orientation, grading and vegetative screening. Acreages of restored area will be determined during the design process but the County has acquired ownership of approximately 159 acres of adjoining parcels on this bank of the Naches River encompassing the Cowiche confluence specifically for floodplain restoration, fish habitat improvement and flood hazard reduction.

Water Supply Benefits

o Provide information regarding the current status of water availability for aquatic ecosystems.

The companion Task B application to this request will be addressing the water supply issues associated with this confluence by consolidating irrigation delivery systems into one general pipeline that will go from Nelson Dam into the City of Yakima. This will at least allow the County to clear up some of the confusing maze of diversions, canals, fish returns, and bypass channels that now complicate the confluence area. Cowiche Creek in this lower reach flows perennially with summer low flow dipping down to a minimum of 1cfs during the month of August. Improvements to water quality will largely come from increases in summer flow by retirement of the lowest diversion in the Cowiche Creek when the orchard is converted to native vegetation and the current diversion with a capacity of 1.7cfs is retired. The restoration of floodplain habitat and park development will provide some impetus and a discussion point for further negotiations with upstream water users when the County or other resource management organization attempts to implement water conservation measures or purchase of water rights dedicated to instream flow and held in trust. Having a visible symbol of our goals for restoration of this watershed and demonstrating the potential for cooperation of multiple stakeholders for broader societal goals will be beneficial to that cause.

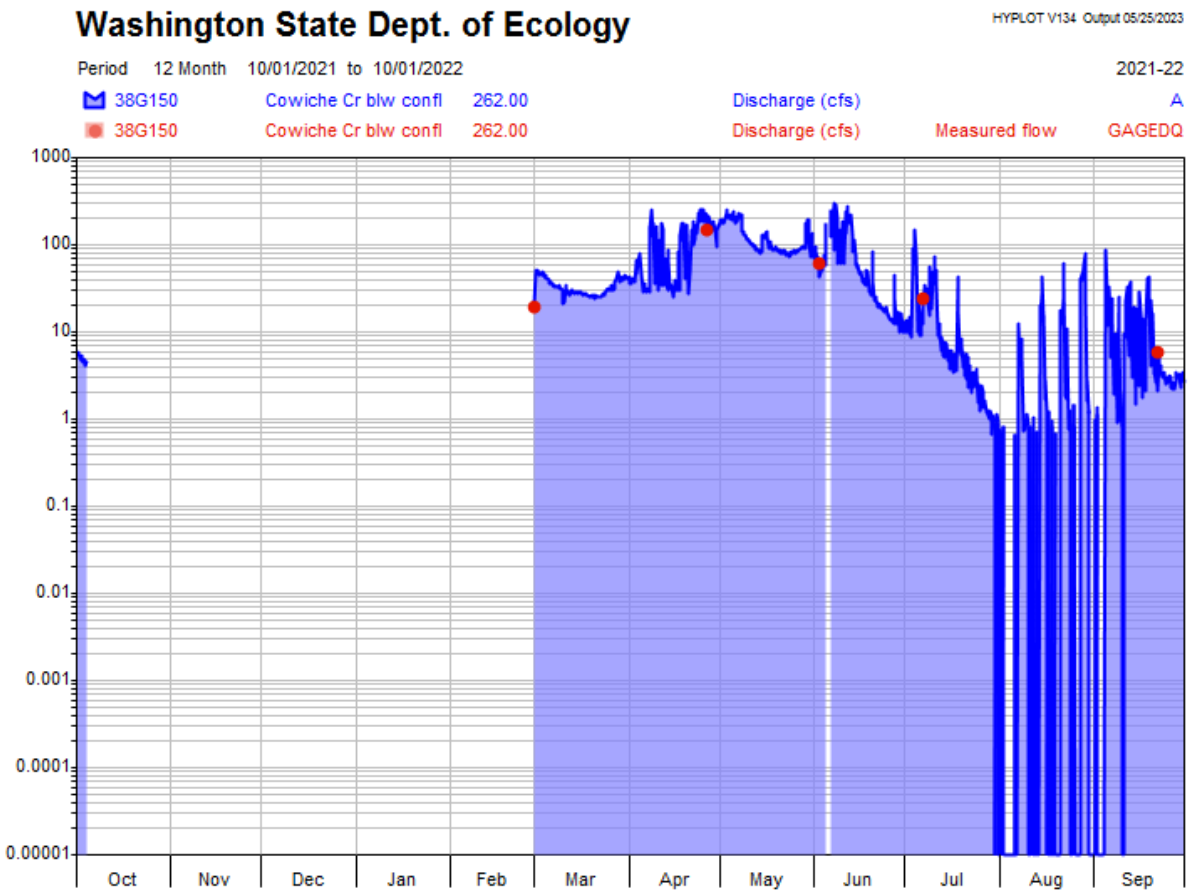

Figure 8 - Hydrograph of Cowiche Creek for 2022, note seasonal operation of the gauge.

Other Quantifiable Benefits

o Provide information regarding the other critical issues of concern in your project planning area.

This project will provide significant benefits to the community other than the habitat and floodplain functions. Replacement of the Powerhouse Rd. bridge will reduce the water surface elevation of flood waters passing through lower Cowiche Creek and, in conjunction with separately funded levee setback and realignment of the creek, will eliminate the flow path which brought floodwaters into the City of Yakima in 2016 and again in 2017. In terms of human safety, decommissioning the diversions, and filling in portions of those canals will reduce the risk of drowning and falls, which will be especially important in the context of park development. The design of the park itself will contribute to public safety as well with designated parking and recreation areas and increased visibility for maintenance and law enforcement rather than the unstructured day-use designation it now retains. Job creation will not be a significant contribution of this design project as most of the work will likely be

performed by County staff or contracted consultants which could be located elsewhere. This project will address a lack of recreational facilities in the immediate area and with a boat launch planned for the park will provide waterborne access to this reach of the Naches River for fishing and recreation which has never existed before.

Prior Planning

o Describe any prior planning efforts related to your proposed project, i.e., planning that took place before you submitted your proposal.

There were basically 3 eras of planning for this and related projects. During the early 2000's the City of Yakima, Yakima County and the Washington State Department of Transportation all had proposed Capital projects in the area that affected either the Naches River or Cowiche Creek. At that time, Mid-Columbia Steelhead had just been listed under ESA and these projects were subject to permitting under ESA. The City convened a group of those partners plus the Washington State Department of Fish and Wildlife to sketch out what actions could be undertaken to implement those projects and improve fisheries habitat in this reach. This group was called the Lower Naches Partnership and is discussed further in the Environmental Memo.

The second era was the preparation of the Comprehensive Flood Hazard Management Plans and the Yakima Subbasin Recovery Plan, the FCZD was the lead agency for those plans formulated between 2005 and 2009. In the project area, both types of plans were heavily influenced by the recommendations of the Lower Naches Partnership. The FCZD then undertook preliminary reach scale designs for the Rambler's Park area, including modification of Nelson Dam, levee alignment, the existing highway bridges, abandoned infrastructure in the river channel itself. The FCZD also begin preliminary updates to the Flood Insurance Rate Maps for Cowiche Creek and developed 1-dimensional hydraulic models for the Creek, and from that understood the severe flood conveyance capacity limitations of the lower portions of the Creek.

The final era is related to the floods of 2011 which caused the Rambler's Park levee to partially collapse for the 11th time, and the Cowiche Creek floods of 2016 and 2017 which cause significant disruption within the City of Yakima. With the collapse of the levee the County and the Corps of Engineers decided to begin the process of levee setback and simultaneous hydraulic design of related facilities, various grant funds and sources were used to begin this project, specifically including the Yakima Basin Fish and Wildlife Recovery Board and the Yakima Basin Integrated Plan Habitat and Water Use Committees, both of which provided funding to those early efforts. The Cowiche Creek Floods caused the preparation of the Cowiche Addendum to the Upper Yakima Comprehensive Flood Hazard Management Plan, that planning group had a very wide range of stakeholder participants, the frontispiece from that Plan which shows the participants is attached. That plan basically finalized the outline and sequence of infrastructure reconfiguration in the entire reach, with specific emphasis on this project area and its strong relationship to Nelson Dam and the network of irrigation ditches, diversions, screens and returns in the rapidly urbanizing, narrow valley bottom of this project area.

Stakeholder Involvement

o Describe what sector(s) the participating stakeholders represent and how they will engage in this effort, e.g., will they contribute funding or in-kind services, or otherwise engage in the study and design process?

This project has involved numerous stakeholders and included the signing of an Interlocal Agreement between The City of Yakima, WSDOT, and the County for cooperation towards the objectives developed in the CFHMP by a wide array of representatives. A number of letters of support are attached from various partners.

Funding provided through the Yakima Basin Integrated Plan ($497,000) has helped the County secure critical land surrounding the lower Cowiche Creek from US-12 downstream. The Department of Ecology and Floodplains by Design has also committed $516,000 of funding towards the construction of a setback levee on the right bank of Cowiche Creek between US12 and Powerhouse Rd. The City of Yakima purchased the parcel for that setback levee and gave the County an easement to perform the levee setback and floodplain restoration within the new floodplain. Several local fruit growers with land along the creek also provided the opportunity to purchase the properties or easements needed to improve the condition of the floodplain and reduce future flood risks. WSDOT has helped with the modeling and sizing of a potential bridge replacement, and we will continue to seek their guidance as we navigate this tight spot in the valley. The project also received $50,000 of funding from U.S. Fish and Wildlife Service for the riparian planting efforts at the setback levee site and another located north of US-12.

Going forward this project will rely on the continued support of our partners and community to ensure that the Cowiche Confluence Complex project is in alignment with all recovery goals and objectives. A recent article in the Yakima Herald-Republic regarding the project was published, at this gathering there was significant support for the related activities contained in this project proposal. The long list of partners for the project have shown consistent support for this project which represents many of the best elements of working with the Yakima Basin Integrated Plan to accomplish these types of large scale, multi benefit projects that require coordination and cooperation across authorities. The Nelson Project was implemented through a cooperative agreement between the City of Yakima and Yakima County, a companion agreement between those parties and the Washington State Department of Transportation will greatly facilitate the implementation of this project across those jurisdictional and property boundaries in the project area.

The largest proportion of cost share is from the Yakima Basin Integrated Plan through the Washington State Department of Ecology. Ecology's Floodplains by design program is also contributing to the Cowiche Creek realignment and levee setback portions of the project, as is the US Fish and Wildlife Service. The Washington State Department of Fish and Wildlife's Yakima Screen Shop will oversee and partially perform the salvage of the fish screen and bypass facilities. The City of Yakima has contributed more to past aspects of the project including

bonding for both the conveyance improvements in town, and over half of the $23 million (design and construction cost) of demolition of Nelson Dam and construction of the new Diversion.

There is no known opposition to these proposed actions.

Readiness to Proceed

• *Describe the implementation plan for the proposed study and design project. Please include an estimated project schedule that shows the stages and duration of the proposed study and design work, including major tasks, milestones, and dates.*

If awarded in late 2024 a stakeholder meeting would be held shortly thereafter to gauge the interests and best available information to inform our design choices. The scope put forward is well within the capability of the County and City to undertake and they have cooperated previously on these types of projects. The County has 2022 liDAR of the lower Naches River which would greatly benefit the design process by identifying topographic obstructions and debris piles and has preliminary elevation datasets for channel design. A working hydraulic model of the lower portion of Cowiche Creek has also been developed through the Counties contracted design consultant for the setback levee design funded by Floodplains by Design. The County has also performed a Cultural Resource and Archaeological Survey for the entire site and performed some geotechnical soil borings. Legal review would also begin directly after the award and would conclude with the transfer and recording of conservation status on lands dependent on the park design and need for title restrictions to meet public purposes and funding objectives of habitat restoration.

It is likely that the County would then contract a design and engineering consultant to take the information we have prepared and begin the design process for the majority of the scoped elements.

Traffic studies and coordination with local transportation authorities and WSDOT would be a critical early action for the design of a replacement bridge on Powerhouse Rd.

Estimated time from award to conceptual design of scoped elements, approximately 6 months (June 2025) possibly 9 months for the bridge given more needed coordination. Looking at about 1 year for 30% with continued coordination between the County, stakeholders, and engineering consultants and then incorporating changes from that design into the preliminary (60%) for all elements within 2, except the bridge which we have estimated an extra year of time to incorporate additional review and studies to ensure public safety as well as conveyance. Anticipated timeline of January of 2026 for deliverable designs for all of the proposed design elements and legal review/survey/recording with the exception of the bridge design over Powerhouse Rd. which would be completed January of 2026. It should be noted that the recently completed Nelson Dam project is very close to the project area and so there is a lot of assessment and environmental review already occurring that we can use to inform design.

Phase 2 of the Nelson Dam project is 100% designed and permitted. The County anticipates using the preliminary designs delivered as part of this project to facilitate permitting, final design, and construction of the project elements.

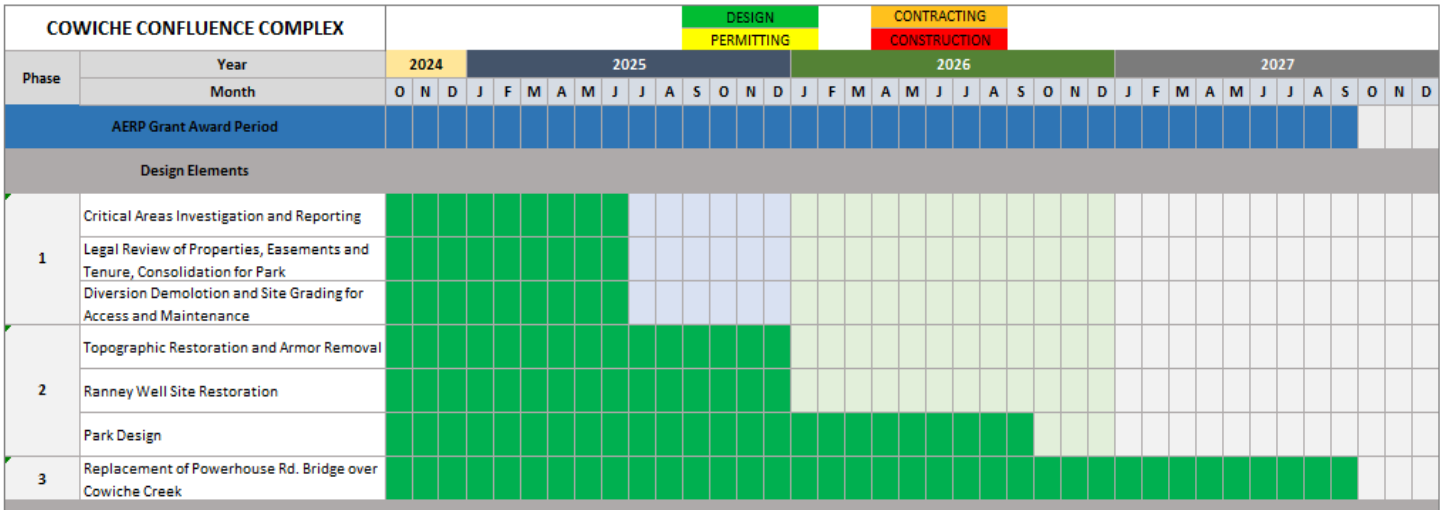

Figure 9 – Design estimated schedule.

o Describe the plan to conduct project specific outreach during your award period. What regional stakeholders will you target and how will you connect and engage with them and incorporate their feedback?

This study/design process will be tracked by the Yakima Basin Integrated Plan and through them to many of the stakeholders. There have been numerous newspaper and local broadcast media stories associated with the beginning and end of each of the major project phases thus far, we expect that to be the case with these actions.

o Describe the plan to carry out any relevant studies (e.g., Project-Specific Study and Analysis, Restoration Project Opportunities and Alternatives Analysis, Benefits Analysis, or Legal and Institutional Requirements Research).

Legal review and transfer of various conservation deed restriction to equivalent acreages of lands purchased by the County will be performed by a professional real estate attorney. This will facilitate the park development in contiguous parcels while not short-changing our granting partners who provided funding for riparian property acquisition with a conservation covenant attached by deed instrument. Will also include a legal survey.

The County will convene the local transportation planning group from YVCOG and WSDOT to inform the proposed bridge design.

There will likely be multiple potential configurations of the Cowiche Creek confluence along with side channel complexes possible within the land and topography available. Some careful study of the hydraulic modelling and existing vegetation will be needed to choose between alternative routes and orientations.

o Describe the current design status of the project and describe the design activities will need to be completed to advance the project to 60% design?

This proposed project incorporates the remaining priority actions for the lower Cowiche Creek put forth through basin planning documents such as the steelhead recovery plan, subbasin plan, and Cowiche addendum to the CFHMP. As such, the concepts are well formulated, and all the stakeholders are aware of the overall objectives for the creek and larger confluence area. As stated previously the County has geotechnical survey, cultural resources, liDAR, and wetland delineation complete for the project site as well as a working hydraulic model. This project would be starting out on a firm foundation of background research and assessment conducted over the last 5 years in this reach of the Naches River. The remaining design decisions concerning the layout of the park would be informed through public meetings or focus groups and solicitation for comments on the conceptual design for the park.

• *Proposals with a budget and budget narrative that provide a reasonable explanation of study and design project costs will be prioritized.*

See attached budget table and narrative.

• *If the applicant intends to do any on-site investigation or monitoring work, please provide documentation of permission and detail any permits or easements that may be required for access.*

All parcels proposed for this project are owned by the County except the bridge which is public right of way. See attached ownership map.

Required Permits or Approvals

It is anticipated that this project will require traffic studies at the intersection of Powerhouse Rd. and Cowiche Canyon Rd. to determine the appropriate design for a new bridge. Part of this effort has already begun under the auspices of the Yakima Valley Council of Governments (YVCOG) who have been engaged in discussion about this high accident area of the transportation network and the potential for improving efficiency of transport and connections for pedestrians to the local trail systems. Beyond that the decommissioning of the current diversions along lower Cowiche Creek will require consultation with WDFW to ensure proper timing and configuration of the confluence to facilitate increased fish use and limit any negative effects of removing the structures.

Presidential and Department of the Interior Priorities

o If applicable, describe how the project addresses climate change and increases resiliency. For example, does the project help communities respond to or recover from drought or reduce flood risk?

This project will directly address flood risk with the replacement of the Powerhouse Rd. bridge proposed here and the setback levee funded by the Department of Ecology. There will also be

some benefits to climate change resiliency as we have secured the lands for floodplain restoration and open space in perpetuity. Carbon capture and stream shading will improve over the long-term as plantings of previously unvegetated areas reach maturity and natural recruitment takes over. This confluence is at a critical point in the valley conducive to upwelling groundwater and overlapping migration corridors of organisms reliant on the riparian environment for refuge and forage. The park will be one of the only outdoor amenities available within walking distance of the new housing development along Powerhouse Rd. and will serve as a source of peace and respite for nearby residents as well as wildlife.

The levee setback and reconfiguration of Cowiche Creek to a more natural alignment, the preservation and restoration of floodplains and the vegetative conversion actions all have strong connection to climate resiliency and reduction of flood hazard to irrigation, flood control, and transportation infrastructure as well as the built environment and citizens of the City of Yakima

o How will the project build long-term resilience to drought? How many years will the project continue to provide benefits? Please estimate the extent to which the project will build resilience to drought and provide support for your estimate.

This project will actively seek to be in conformance with recently initiated programs in Washington State to retain riparian plant communities for both water quality protection and sequestration of carbon on the landscape. This project also improves resiliency of the overall Naches and Yakima River system to long term resiliency by restoration of sediment transport from areas of accumulation upstream, through this reach and to the sediment starved lower reaches of the Naches River and the Yakima River in the Gap-to-Gap reach.

o Will the proposed project reduce greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation? Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution? Does the proposed project contribute to climate change resiliency in other ways not described above?

Yes, though not as a primary objective. Plantings proposed through the design of riparian habitats and revegetation of disturbed sites will increase sequestered carbon. They will also contribute to improved shading and channel roughening which will contribute to lower stream temperatures, smaller peak flood flows, and more filtering of unwanted pollutants before entering the Naches River. Reconnecting this creek to its floodplain will contribute to floodplain recharge, especially if allowed to interact naturally with local beaver populations.

• *Disadvantaged or Underserved Communities: E.O. 14008 and E.O. 13985 affirm the advancement of environmental justice and equity for all through the development and funding of programs to invest in disadvantaged or underserved communities*.

There are disadvantaged communities to the east and west of the proposed project, with the largest factor being low income and related health effects. This project is linked to both those communities by the Yakima Greenway Trail and provides access to nature-based recreation. In

general, the City of Yakima ranks in the lower 10% when it comes to park lands per capita, and this is the basis for the Parks and Recreation Department of the City of Yakima proposing the development of a park at the project site.

o If applicable, describe how the project directly serves and/or benefits a Tribe, supports Tribally led conservation and restoration priorities, and/or if the project incorporates or benefits Indigenous Traditional Knowledge and practices.

This project is strongly linked to tribal natural resource programs, especially the tribal trust resources of anadromous fish and water. The Yakama Nation has been a key supporter of the project at the state legislature and is using many of the floodplain restoration and hydraulic principles in this project on their own projects and in attempting to modify fish passage and sediment transport conditions at other diversions in the basin, particularly the Wapato Diversion which supplies water to the irrigation system on the Yakama Reservation.

Table 1. Funding Sources

Funding Sources	Amount
Yakima Basin Integrated Plan	$ 952,148
USFWS Federal Contribution	$ 50,000
Requested USBR Funding	$ 1,002,149
Total Project Cost	$ 2,004,297

Environmental and Cultural Resources Compliance

• *Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.*

This project in and of itself will not impact the surrounding environment because it is a design-only grant. Impacts from implementation of the designs at a later date would be minimized to maintain the maximum acreage of intact functional floodplain habitat.

• *Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?*

No threatened or endangered terrestrial organisms are known to frequent the project site. Within the Naches River there are Steelhead trout from the Mid-Columbia River distinct population segment which are currently listed as threatened by NOAA fisheries. The project elements funded by this request would include designs for improved fish passage into Cowiche

Creek. It is anticipated that any affects to Mid-Columbia River steelhead will be positive as passage is restored and diversions are retired.

• *Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States"? If so, please describe and estimate any impacts the proposed project may have.*

A wetland delineation was performed by County staff in summer of 2021, two small depressional wetlands and one riverine wetland were identified and characterized within the project area. Other jurisdictional Waters of the U.S. would be Cowiche Creek and the Naches River. Anticipated impacts would include grading below OHWM at the confluence with the Naches River to reconnect the streams with a more natural alignment once the irrigation conveyance structures and channels are decommissioned and fish salvage/dewatering of the abandoned channels once the reconfigured channel was implemented.

• *When was the water delivery system constructed?*

There are 3 different ages of the systems affected by this project. The City of Yakima/General Diversion that come out of the Fruitvale Diversion were constructed as part of a power generation facility in the 1910s and abandoned in the 1920s. All those facilities were removed and replaced after WWII due to channel incision requiring the movement of the actual diversion points upstream to maintain grade. The fish screens and returns for that diversion and the Old Union diversion were built in the mid-1980s. The Old Union Ditch is one of the earliest private diversion companies in the Valley, dating from the 1870s. Like the Fruitvale, it has been forced to relocate over time as the side channels disappeared and the main channel incised due to the presence of Nelson Dam. All the structural facilities for these diversions have already been inventoried and the reports sent to the SHPO received approval as not qualifying under NHPA. The excavated channels themselves date from the 1980s and do not qualify under NHPA.

• *Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.*

This project will result in modification of the local irrigation system in that the construction of the general pipeline in Yakima County's Task B application would make these irrigation delivery systems near the confluence obsolete and the entirety of City irrigation would be supplied by the pipeline, allowing us to simplify and restore the lower end of Cowiche Creek. This new pipeline would be diverted from the recently completed Nelson Dam. Nelson dam uses a roughened channel design to divert irrigation water while maintaining fish passage at all flow ranges without the need for an engineered trap or ladder.

• *Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.*

These old irrigation structures are described within the archaeological report that Yakima County commissioned from Archaeological and Historical Services (AHS) out of Eastern Washington State University for the project. The Powerhouse Road bridge over Cowiche Creek would be eligible for listing on the national register because of it's age (ca. 1930) but the discussion within the report indicates it would likely not meet any of the criterion for significance that is required for inclusion.

• *Are there any known archeological sites in the proposed project area?*

The adjacent petroglyph site on Powerhouse Road adjacent to the Nelson Diversion, this site has been thoroughly documented in association with other vicinity project, specifically the removal of the dam, the impacts of pipeline construction in this area have already been addressed through the permitting for the pipeline. Also, directly adjacent to Nelson Dam and related floodplain restoration, as well as downstream, is the area known locally as "Rambler's Park", a dust bowl era camp for migrant workers. The portion of this site in the project area is a series of trash middens downstream of US 12 and the railroad tracks (now Yakima Greenway Trail), this site has already been documented under NHPA, this site may be impacted by restoration elements designed under this proposal.

• *Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?*

Regarding the impact of the project on low-income and minority populations, this project would be focused on restoring the Riparian area and providing recreational amenities to some of the lowest-income and highest minority sections of the City of Yakima. According to the 2020 Census, inflation-adjusted per capita income in Yakima County was $49,099 compared to the state at $67,126, and the nation at $59,510. The poverty rate was 14.8% in 2020, compared to the state rate (9.5%) and the nation (11.4%). Yakima County is over 50% non-white Hispanic, and that percentage is likely to increase. The project area is experiencing rapid development of multi-family housing, the ecosystem services and park amenity provided through this project would primarily benefit those living nearby.

• *Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands?*

The proposed project associated with the designs requesting funding under this program would not limit access to, or ceremonial use of, Indian sacred sites or other impacts on tribal land.

• *Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?*

The project will not contribute to the spread of invasive species as it is a design only request, however Yakima County has been contracting the North Yakima Conservation District to perform weed control on the project properties while the County secures funding and permits.

Overlap or Duplication of Effort

This project does contain some project overlap, the Yakima Basin Integrated Plan funding and the Floodplains by Designs funding through the Dept of Ecology are incorporated into this grant application as match.

Additionally, the county also applied for the NOAA's Transformational Habitat Restoration and Coastal Resilience Grant with the same design elements included in that proposal and a number of those elements were also duplicated in a Yakama Nation NOAA Transformational grant. These elements are identified in the Budget Narrative.

This River Runs Forever
Yakima Basin Integrated Plan

January 22, 2024

To: U.S. Bureau of Reclamation Aquatic Ecosystem Restoration Projects Program (R23AS00106) Reviewers

Re: Support for the Cowiche Creek Complex Proposal

Dear Review Committee,

As members of the Yakima Basin Integrated Plan (Integrated Plan), we are writing to express support for the City of Yakima and Yakima County's application under the U.S. Bureau of Reclamation Aquatic Ecosystem Restoration Projects Program for the *Cowiche Creek Complex Proposal near the confluence of the Naches River and Yakima River*.

This project is a critical component of the Habitat Protection and Enhancement and Fish Passage elements of the Integrated Plan. The Integrated Plan is a unique integrated water resource management effort supported by a coalition of 23 members, including conservation groups, agricultural interests, irrigators, and local, state, and federal agencies. The U.S. Bureau of Reclamation, Washington State Department of Ecology, and the Yakama Nation are leading plan implementation through partnership with these and other organizations. Federal legislation authorizing the Integrated Plan lays out an ambitious fishery goal:

> To protect, mitigate, and enhance fish and wildlife and the recovery and maintenance of self-sustaining harvestable populations of fish and other aquatic life, both anadromous and resident species, throughout their historic distribution range in the Yakima Basin.

To meet this goal, the Integrated Plan developed a Salmon and Steelhead 10-Year Restoration Strategy to accelerate actions to improve safe fish passage and to restore river flow and habitat. This strategy prioritizes a suite of actions aimed at the Lower Yakima River, where current fish passage conditions are a critical limiting factor to the entire Integrated Plan salmon and steelhead restoration effort. Addressing fish passage at the Naches River, which has tremendous fish habitat potential, is identified as a priority.

The confluence of Cowiche Creek and the Naches River has been heavily modified for irrigation diversions, reducing floodplain function and constricting the channel, and includes a diversion dam and steep pass fishway and consolidated fish bypasses that limit upstream and downstream passage and provide false attraction flows for steelhead and Coho. The Cowiche Confluence

Complex proposal encompasses a suite of projects that, together, address these issues. The proposal is expected to restore near pristine access from Cowiche Creek to the Naches River, ensure that floodplain and riparian areas in the Lower Naches River and on into the Yakima River are restored to a condition that supports aquatic productivity and reduces fish mortality, reduce current and future flood hazards, and improve recreation and public access.

The Cowiche Confluence Complex proposal builds on strategic efforts over the past 20 years by the City of Yakima, Yakima County, and other partners to enhance and protect the Creek's ability to produce steelhead and salmon. These efforts have entailed land acquisitions in the Upper Cowiche Basin, efforts to properly screen and provide fish passage at the Cowiche Creek diversions, riparian restoration and water acquisition to improve instream flow, and infrastructure work at the old Nelson Dam. The $23 million Nelson Dam Phase I project, completed in 2023 and funded by the City of Yakima and the Washington State Department of Ecology, eliminated the old diversion dam, antiquated fishway, and previous irrigation infrastructure, resulting in a consolidated, nature based diversion that eliminates the need for a dam.

With Phase I completed, the City of Yakima and Yakima County can pursue the Cowiche Confluence Complex projects. The Nelson Dam Phase II project would complete the overall goals of long term floodplain, irrigation, and other infrastructure management plans in this reach by constructing a pipeline that delivers water from the new Nelson Diversion to the irrigation system in the City and to the south and west. Phase II, in turn, would allow removal of two irrigation diversion and bypass systems and permit reconfiguration of Lower Cowiche Creek to provide unimpeded fish passage. After removal, adjacent floodplain areas would be restored to native upland and side channel habitats, and recreation and public access projects would be implemented.

Thank you for your consideration of City of Yakima and Yakima County's proposal.

Sincerely,

Urban Eberhart
Kittitas Reclamation District

Cory Wright
Kittitas County

Brandon Parsons
American Rivers

Crystal Elliot-Perez
Trout Unlimited

Phil Rigdon
Yakama Nation

Scott Revell
Roza Irrigation District

Mike Livingston
WDFW

Tom Tebb
WA State Dept. of Ecology

"Restoring the natural health and economy in the Yakima Basin."

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Office of Columbia River
1250 West Alder St., Union Gap, WA 98903-0009 • 509-575-2490

Date: November 16, 2023

To: NOAA Transformational Habitat Restoration and Coastal Resilience Reviewers (NOAA-NMFS-HCPO-2023-2008081)

RE: Letter of Funding Commitment for Cowiche Confluence Complex Proposal

I am writing to express support for the Yakima County's application under NOAA's Transformational Habitat Restoration and Costal Resilience funding opportunity. The Yakima Basin Integrated Plan Habitat Subcommittee authorized $500,000 in the 2017-2019 biennium (approximately $117,000 remains unspent) and $1.2 million in the 2023-2025 biennium in Washington Department of Ecology capital dollars from the Yakima River Basin Water Supply budget to the Yakima County Water Resources Division/Flood Control Zone District to support the infrastructure and habitat restoration of the Naches River-Cowiche Creek confluence. Additionally, the Office of Columbia River has authorized another $7.6 million in the 2023-2025 biennium in Washington Department of Ecology capital dollars also from the Yakima River Basin Water Supply budget to the Yakima County Water Resources Division/Flood Control Zone District to further support the infrastructure and habitat restoration of the Naches-Cowiche confluence.

This project will significantly improve salmon and steelhead habitat by restoring floodplain connectivity and riparian habitat, improving fish passage conditions, and enhancing instream spawning, rearing, and migratory habitat. These improvements are expected provide substantial co-benefits for local communities, including flood risk reduction, water quality improvements, and enhanced recreation and public safety.

A letter of support for a suite of partnership projects with the Yakama Nation (this Naches-Cowiche project would complement the Tribe's projects), attached hereto, in addition to the match commitments provided herein, demonstrates the strong ongoing support of the Yakima Basin Integrated Plan for this project. Ecology is extremely interested in making this project a success and we value the opportunity to be a cost-share funding partner with the county and a federal agency. The Yakima Basin Integrated Plan and its partners continue to be proactive in procuring funds and securing match for projects benefiting the Basin's water resources and aquatic ecosystems. Please accept this letter as our commitment to provide necessary matching funds for NOFO NOAA-NMFS-HCPO-2023-2008081. If you have any questions, please contact Kevin Haydon at (509)-823-6947 or by email at Kevin.Haydon@ecy.wa.gov.

Sincerely,

G. Thomas Tebb, L.H.G, L.E.G.
Director, Office of Columbia River

GT:jc (231115)

Enclosure: Support for Lower Yakima Basin Transformational Steelhead and Salmon Recovery Proposal

This River Runs Forever
Yakima Basin Integrated Plan

November 15, 2023

To: NOAA Transformational Habitat Restoration and Coastal Resilience Reviewers (NOAA-NMFS-HCPO-2023-2008081)

Re: Support for Lower Yakima Basin Transformational Steelhead and Salmon Recovery Proposal

Dear Review Committee,

As members of the Yakima Basin Integrated Plan (Integrated Plan), we are writing to express support for the Yakama Nation's application under NOAA's Transformational Habitat Restoration and Coastal Resilience funding opportunity for the *Lower Yakima Basin Transformational Steelhead and Salmon Recovery Restoration* proposal.

The proposal package is comprised of multiple projects critical to the Habitat Protection and Enhancement elements of the Integrated Plan. The Integrated Plan is a unique integrated water resource management effort supported by a coalition of 23 members, including conservation groups, agricultural interests, irrigators, and local, state, and federal agencies. The U.S. Bureau of Reclamation, Washington State Department of Ecology, and the Yakama Nation are leading plan implementation through partnership with these and other organizations. Federal legislation authorizing the Integrated Plan lays out an ambitious fishery goal:

> To protect, mitigate, and enhance fish and wildlife and the recovery and maintenance of self-sustaining harvestable populations of fish and other aquatic life, both anadromous and resident species, throughout their historic distribution range in the Yakima Basin.

To meet this goal, the Integrated Plan developed a Salmon and Steelhead 10-Year Restoration Strategy to accelerate actions to improve safe fish passage and to restore river flow and habitat throughout the Yakima Basin. The Yakama Nation, in collaboration with local government and conservation partners of the Integrated Plan, is putting forward two closely linked, transformative restoration proposals including high priority actions identified in this strategy. These proposals include projects in the Upper Basin to restore high quality salmon and steelhead habitat to improve fish populations and increase their resiliency, and projects in the Lower Basin to improve fish survival and support safe migration of salmon and steelhead to and from the Yakima River headwaters through the lower river.

In the Lower Yakima Basin, the Yakama Nation proposes restoration implementation and design for floodplain connectivity and function along 10 miles of the mainstem Yakima River, Tieton River, Little Naches River, as well as Cowiche, Ahtanum, Nile, Satus, and Toppenish Creeks. Their work, done in partnership with Yakima County, will significantly improve salmon and steelhead habitat by restoring floodplain connectivity and riparian habitat, improving fish passage conditions, and enhancing instream spawning, rearing, and migratory habitat. These improvements are expected to support the Yakama Nation's Treaty fishing rights and salmon economy and provide substantial co-benefits for local communities, including protection and restoration of cultural resources, flood risk reduction, water quality improvements, and enhanced recreation and public access.

Thank you for your consideration of the Yakama Nation's proposal.

Sincerely,

Urban Eberhart
Kittitas Reclamation District

Cory Wright
Kittitas County

Brandon Parsons
American Rivers

Crystal Elliot-Perez
Trout Unlimited

Scott Revell
Roza Irrigation District

Mike Livingston
WDFW

Tom Tebb
WA State Dept. of Ecology

"Restoring the natural health and economy in the Yakima Basin."

YAKIMA GREENWAY

August 3, 2020

Re: Support for the Naches Cowiche Confluence Park

Project 20-1728

WWRP Park Development, Acquisition and Development Category

Dear Mr. Freudenthal,

The Yakima Greenway Foundation is pleased to write this letter of support for the Naches Cowiche Confluence Park project. As a 501c(3) land trust, our mission is to pressure and conserve the Yakima River Corridor for generations. Retaining this land and protecting this property from future agriculture and residential development is very important.

The Yakima Greenway is a 20-mile continuous trail and park system that runs along the Naches and Yakima Rivers. The Greenway trail is used by visitors and residence living throughout the Yakima County, but primarily those living in the Upper Yakima Valley, North and Southeast Yakima, and those residing in neighborhoods along the 16th avenue to the west and Fruitvale boulevard.

This particulater development and acquisition project is especially important because it will provide a large number of underserved neighborhoods in the area access to the Naches River for recreational, educational, and conservation activities. A top priority in the Yakima Valley is to find and provide more free and equitable recourses for families to socialize and maintain their healthy lifestyle.

The Yakima Greenway Trail system runs adjacent to the proposed Park and river recreational use area. Trail users could have a safe and convenient way to enter the park and riverfront right off the Greenway pathway to the south. It is perfect!

During the current pandemic, the Yakima Greenway trail is experiencing an enormous increase in path and park traffic. The Confluence Park project will help to fill the high demand for more entry points for kayaking, fishing, and rediscovering our natural habitats.

More than ever, we need to support projects like Confluence Park to engage communities and continue providing free and equitable recreation for our valley.

Sincerely,

Kellie Connaughton, Executive Director
Yakima Greenway Foundation

American Rivers
RIVERS CONNECT US®

August 7, 2020

Joel Freudenthal
Senior Strategic Manager
Yakima County Flood Control Zone District
128 *N.* 2nd St.
Yakima, WA 98901

RE: Naches Cowiche Confluence Park, WWRP Park Development, Acquisition and Development Category Project 20-1728

Dear Mr. Freudenthal:

I am writing on behalf of American Rivers to express support for your application through the Washington Wildlife Recreation Program (WWRP) Local Parks program for the acquisition and development of the Naches Cowiche Confluence Park in Yakima County.

The proposed park would acquire a current orchard and would take advantage of adjacent properties already owned by the Flood Control Zone District and the City of Yakima to form the proposed Confluence Park. American Rivers has been working with the City, Yakima County Flood Control Zone District, the Resources Legacy Fund and other partners to implement floodplain acquisition and restoration, and the replacement of Nelson Dam with a more fish and boat passable design, in adjacent upstream and downstream reaches. The Naches Cowiche Confluence Park leverages those actions to provide improved recreational opportunities, habitat restoration, and sustainable river management and flood hazard reduction actions which provide benefits to the residential and industrial areas of the City of Yakima.

I look forward to following the progress of this project.

Sincerely,

Wendy D. McDermott
Director, Puget Sound-Columbia Basin

P.O. Box 1234 | Bellingham, WA 98227 | 206-213-0330 | AmericanRivers.org

DEPARTMENT OF PUBLIC WORKS
PARKS & RECREATION DIVISION
2301 Fruitvale Blvd., Yakima, Washington 98902
Phone (509) 575-6020 • Fax (509) 575-6238

"GET INTO THE FUNSHINE WITH PARKS & RECREATION"
"THE BENEFITS ARE ENDLESS"

June 22, 2020

Joel Freudenthal
Senior Natural Resource Specialist
Yakima County Public Services - Water Resources Division
128 N 2nd Street
Yakima, WA 98901

Dear Mr. Joel Freudenthal:

It has been a pleasure speaking with you regarding the purchase and possible development of the beautiful area along the Naches River in Yakima County, just outside of Yakima city limits. After visiting the property with RCO staff member Jesse Sims, potential project donors and other City of Yakima officials, I have become even more excited about the possibility of a public recreation space being developed there. The river is pristine and the area is a true example of the habitat of our region. I can envision so many recreation possibilities for our community, like walking trails, picnic areas, nature observation areas and a human powered watercraft launch. The Yakima Parks & Recreation Division completely supports your efforts and would like to partner with Yakima County in any way that we can. It is our commitment to help provide great outdoor recreation areas for people of all ages and ethnic origins and I know this project will be utilized by many. This project is within the urban growth area and is consistent with the City of Yakima 2017 – 2022 Parks & Recreation Comprehensive Master Plan. We hope to be a part of your master planning process and will assist with your community outreach and fund raising efforts.

This property is within walking distance of our Yakima Transit system, which stops at Chesterley Park. Such close proximity to our transit system allows anyone that lives within the city to have easy and inexpensive access to the area. Chesterley Park is also designated as a park and ride location and a great place for people to park their cars and ride their bicycles to the proposed recreation area.

Please let us know how we can assist you as you move forward with this grant application to the Washington Recreation and Conservation office. We look forward to seeing the progress made on the worthwhile project.

Respectfully,

Ken Wilkinson
Park & Recreation Manager for the City of Yakima

Cc: Yakima Parks & Recreation Commissioners
Alex Meyerhoff, Interim City Manager
Scott Schafer, Director of Public Works
File

Yakima Rotary Trust
Making Our Community A Better Place To Live.

June 3, 2020

Joel Freudenthal
Senior Natural Resource Specialist
Yakima County Public Services – Water Resources Division
128 North Second Street
Yakima, WA 98901

Dear Mr. Freudenthal:

Ken Wilkinson has made us aware of an opportunity to be involved in the planning and development of a potential project along the Naches River just to the west of Yakima. Over the years we have been able to work with the Yakima Parks Department and Ken to enhance the local parks with various projects. As Rotarians we are excited to be part of the development of a long-term plan for another opportunity for the families of our community to enjoy our wonderful area.

I am writing this letter to confirm that the Rotary Trust of Yakima is interested in being a part of this project and its development. Historically we have committed time and resources to projects of this type and that will most likely continue. The Rotary clubs and the Trust work together to identify the specific enhancements for these projects, and I would expect that to continue.

Sincerely,

Wes Morris
President
Yakima Rotary Trust

Mollie Davis

P.O. Box 464 • Yakima, WA 98907 • (509) 452-8332 • yakimarotarytrust.org