US Army Corps
of Engineers ®
Walla Walla District
BUILDING STRONG®

CITY OF KENNEWICK
COLUMBIA PARK LAND CONVEYANCE
Benton County, Washington

McNary Lock and Dam

ENVIRONMENTAL ASSESSMENT

In compliance with the
National Environmental Policy Act of 1970

ADMINISTRATIVE RECORD – DO NOT DESTROY

PROJECT FILE NUMBER: PPL-C-2019-0070

REMIS TASK Number 276182.

November 2023

Table of Contents

Figures

Tables

1.1 Project Name

Columbia Park Land Conveyance, Lease number W912EF-1-04-16; McNary Lock and Dam; City of Kennewick, Benton County, Washington.

1.2 References

a. Section 501(i) of the Water Resources Development Act of 1996 (P.L. 104-303).
b. ER 200-2-2 (33 CFR 230) Environmental Quality Procedures for Implementing the National Environmental Policy Act.
c. 40 CFR 1500-1508 Regulations for the Procedural Provisions of the National Environmental Policy Act.
d. McNary Project Final Environmental Impact Statement, Columbia River, Washington, and Oregon. 1976
e. Columbia Park Master Plan. 2010.

1.3 Project Location

The proposed action area is located within Columbia Park (Lease number W912EF-1-04-16), McNary Lock and Dam, Kennewick, Benton County, Washington. Columbia Park is on the right bank of the Columbia River as one faces downstream at approximately Columbia River Mile (RM) 330 (Figure 1-1). Section 36, Township 9 North, Range 30 East, Willamette Meridian.

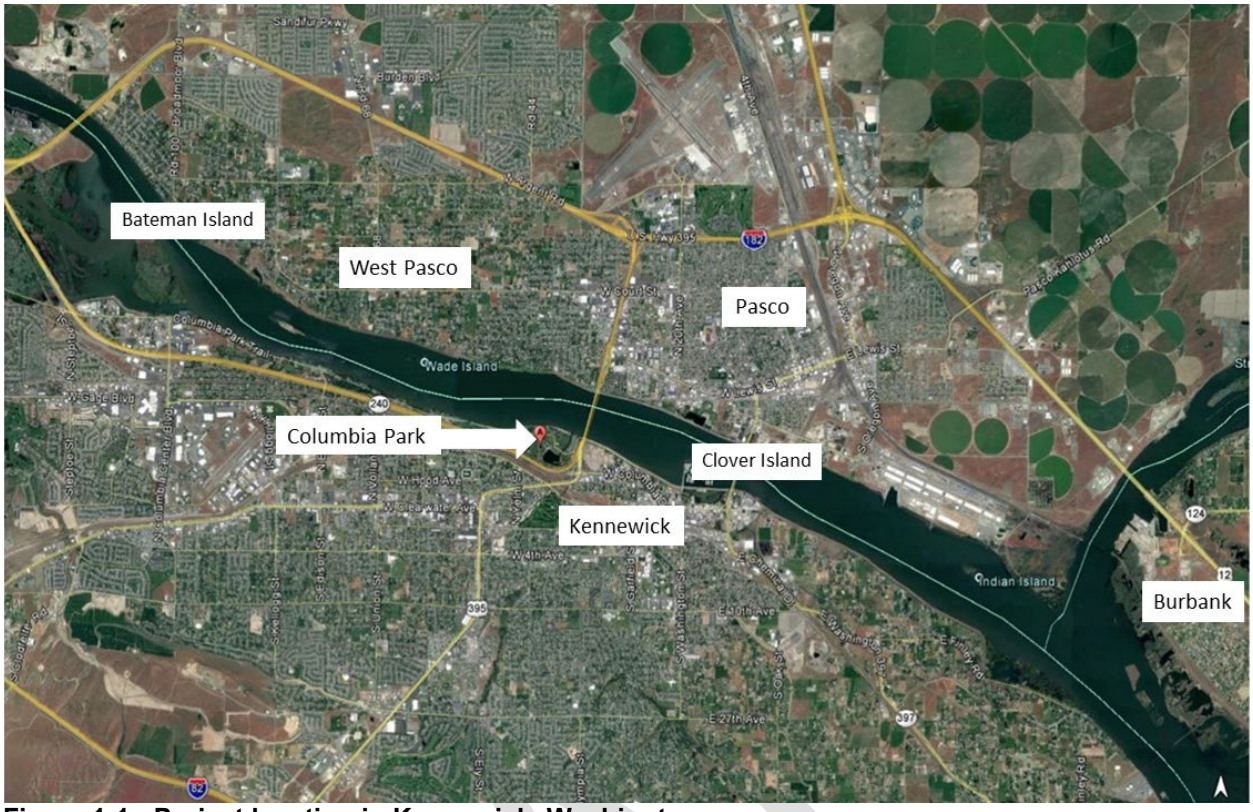

Figure 1-1: Project location in Kennewick, Washington.

1.4 Project Description

The U.S. Army, Corps of Engineers, Walla Walla District (USACE) is proposing to convey two parcels of land (A and B), comprising of approximately 72 acres of land in Columbia Park, Kennewick, Washington (Figure 1-2) to the City of Kennewick (City).

The two parcels of land are located in Columbia Park East (CPE) which is currently leased to the City for a public park, which is located on USACE-managed federal lands in Kennewick, Washington and encompassing roughly a mile and a half of Columbia River shoreline. CPE comprises approximately 300 acres of public park east of Edison Street and outside the limits of Columbia Park West. Facilities within CPE include Columbia Park Golf Course and Driving Range (18-hole privately run golf course), aquatic playground, the Playground of Dreams, fishing pond, boat launch, for-rent picnic areas, multi-use play fields, and surface parking.

The City operates and maintains Columbia Park (Park) under a long-term park and recreation lease agreement with USACE. On 26 March 2004, the City renewed its long-term P&R lease (Lease) for a 50-year term, including the CPE area. The Lease, along with other applicable laws and regulations, govern the uses that can be permitted in CPE. USACE-adopted policy document Recreation Operations and Maintenance Policies includes a chapter that discusses recreation development policy for out-granted USACE lands. The policies define the types of uses that can be permitted within USACE leaseholds such as CPE. USACE also reviews the City's proposed development of the CPE in a master plan and retains the authority to review and (when appropriate) approve certain recreational uses and development at the Park.

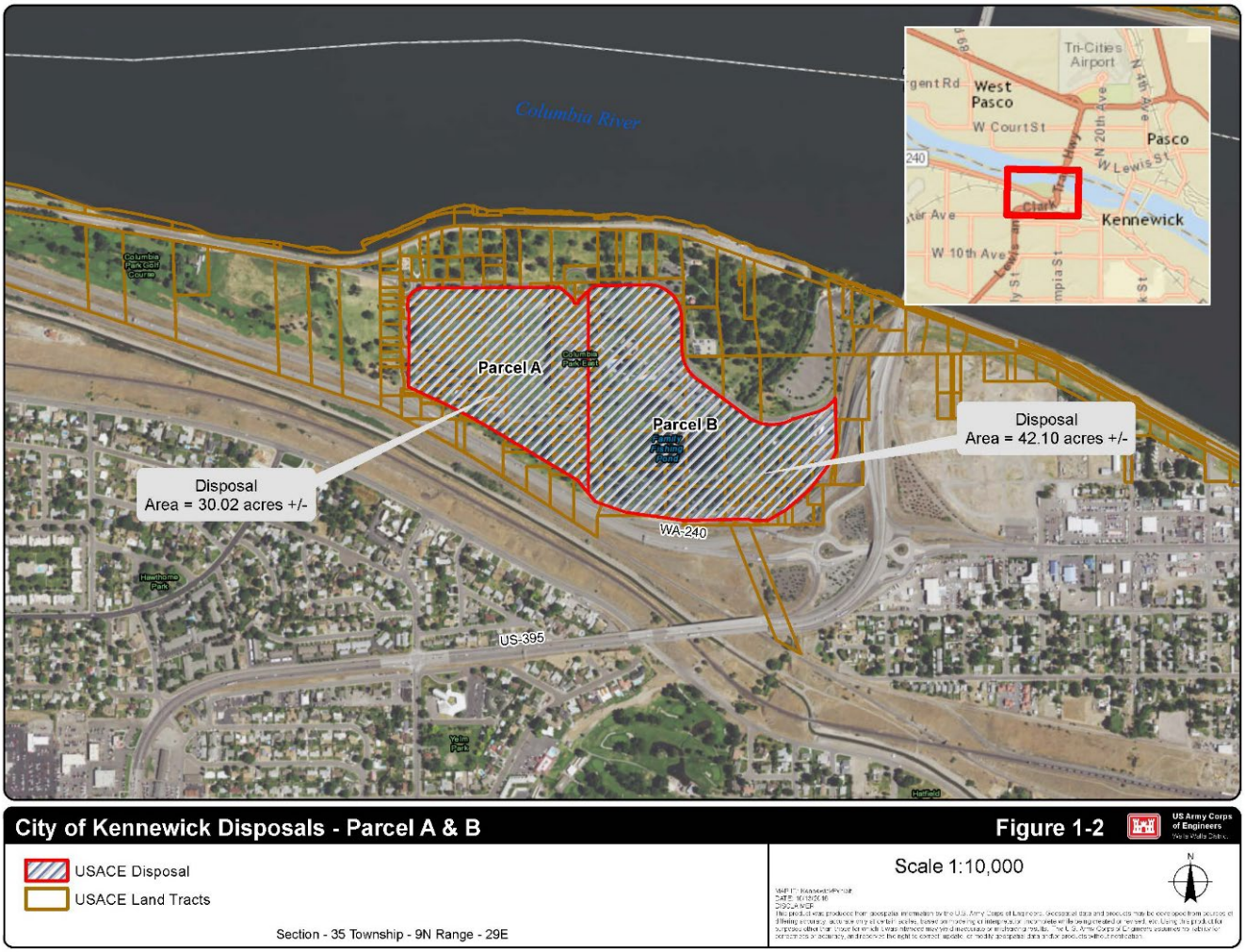

Figure 1-2. Parcel of land considered for disposal.

1.5 Background Information

Land conveyance negations between USACE and City lasted for four years after the passing of WRDA 1996 and resulted in the City not accepting any land due to the historic/cultural resources stipulations and conditions. As a result, the land was leased to the City on a long-term basis with special conditions to protect cultural resources.

The City requested to have car sales in Columbia Park in 2012, but commercial sales are not authorized in a recreational leased area. It was mentioned to the Mayor of Kennewick at that time that a land disposal option was available. The City submitted a 20-acre disposal request to USACE in 2012 (to cover the area where the car sales would happen) for review. USACE continued to allow commercial car sales until 1 June 2013 or until further guidance from the Northwestern Division Office or USACE Headquarters was received.

In 2018, the City completed their Columbia Park Master Plan outlining the current 72 acres of land requested for conveyance. USACE is proposing the request under a recreational land transfer. USACE would maintain a recreational use reversionary

interest meaning that the City's right to own and occupy the land is subjected to a condition that is it is used for recreational purposes. If the condition is violated, the federal land subject to the reversionary interest could return to federal ownership.

1.6 Authority

USACE is proposing to convey approximately 72 acres of USACE managed federal land in Columbia Park (72 acres) to the City for public park and recreation purposes, in accordance with Section 501(i) of the Water Resources Development Act of 1996 (P.L. 104-303 or WRDA 1996). WRDA1996 authorized the Secretary of the Army to convey certain lands in Tri-Cities, Washington, to six local entities. These entities are the cities of Richland, Kennewick, Pasco, the Port of Pasco, and Benton and Franklin Counties. Section 501(i)(3)(D)(i) of WRDA 96 states: "Properties to be conveyed under this subsection that will be retained in public ownership and used for public park and recreation purposes shall be conveyed without consideration. If any such property is no longer used for public park and recreation purposes, title to such property shall revert to the Secretary."

The conveyance of these 72 acres of land is also independent of the larger land conveyance proposed by Tri-City Development Council (TRIDEC). These actions are not dependent or interrelated. The transfer of the larger Columbia Park area is authorized by the Water Resources Development Act (WRDA) of 1996, there is currently no legislation for the transfer of 25-miles of shoreline to TRIDEC.

1.7 Purpose and Need

The purpose of the proposed action is to provide the City with more flexibility in managing the 72 acres and generating revenue to support park and recreation activities, including those in Columbia Park. The action is needed because the current lease between USACE and the City for such federal lands, and associated USACE policies, restricts the City's ability to engage in revenue generating events (for example, commercial car sales), which would not be the case if the City owned the lands outright under the authority of WRDA 1996. Such lands, however, would be subject to a reversionary interest in the federal government if the lands are not used for park and recreation purposes in the future, in accordance with Section 501(i)(3)(D)(i) of WRDA 96.

2 - Alternatives

Two alternatives are evaluated in this Environmental Assessment (EA); the No Action Alternative and the Proposed Action Alternative – Convey the requested federal land in Columbia Park to the City. An agency's obligation to consider alternatives under an EA is generally a lesser one than under an Environmental Impact Statement. Additionally, the legislative scheme/authority supporting federal action can reasonably limit the range of alternatives considered – in this case the disposal authority under WRDA 1996. It is not within USACE's control to limit/dictate the land disposal dimensions. Consequently, only the No Action and Proposed Action Alternatives were analyzed further.

Alternatives considered under the National Environmental Policy Act (NEPA) must include, at least, the Proposed Action and the No Action Alternatives, which provides a baseline from which to compare other alternatives. The No Action Alternative does not satisfy the project's purpose and need, but NEPA requires analysis of the No Action Alternative to set the baseline from which to compare other alternatives; however, no action does not mean there would be no environmental impacts from this alternative.

2.1 Alternative 1: No Action

Under the No Action Alternative, USACE would not convey the 72 acres of federal land to the City but would continue the federal land manager and administer the current lease with the City until its termination in 2074, unless terminated sooner under the terms of the lease.

2.2 Alternative 2: Convey Land to the City of Kennewick (Proposed Action)

Under the Proposed Action Alternative, USACE would convey approximately 72 acres of federal land to the City. The City would own the land and manage the land for recreational purposes and revenue generating events, in accordance with Section 501(i)(3)(D)(i) of WRDA 96 states: "Properties to be conveyed under this subsection that will be retained in public ownership and used for public park and recreation purposes shall be conveyed without consideration. If any such property is no longer used for public park and recreation purposes, title to such property shall revert to the Secretary."

3 – Affected Environment and Environmental Effects

This section describes the existing affected environment (existing condition of resources) and evaluates potential environmental effects on those resources for each alternative. Although only relevant resource areas are specifically evaluated for impacts, USACE did consider all resources in the proposed project area and made a determination as to which ones to evaluate. The following resource areas were evaluated: Recreation, Aesthetics/Visual Quality, Vegetation, Wildlife, Threatened and Endangered Species, Historic and Cultural Resources, Socioeconomics, Environmental Justice, and Cumulative Impacts. It was determined that it was not necessary to evaluate Water Quality, Aquatic Resources, Geology and Soils, Land Use, Noise, Climate Change, or Air Quality as implementation of the proposed action would not affect these resources in any meaningful way, as explained further in Table 3-1 below.

Table 3-1. Environmental Resources not evaluated further.

Environmental Component	Explanation
Water Quality	The proposed land conveyance does not include shorelines or any in-water work or over water structures. No change to water quality is anticipated as a result of the proposed action.
Aquatic Resources	The proposed land conveyance does not include shorelines or any in-water work or over water structures. No change to aquatic resources is anticipated as a result of the proposed action.
Geology and Soils	The proposed land conveyance would not change or alter the geology or soils within Columbia Park.
Land Use	The proposed land conveyance would not change or alter the current land uses within Columbia Park.
Noise	The proposed land conveyance would not increase noise levels within Columbia Park.
Air Quality	Columbia Park meets Washington State's ambient air quality standards and is in "attainment." Air quality would not be impacted by the proposed action.

The following descriptors are used in the body of this chapter for consistency in describing impact intensity in relation to significance.

- No or Negligible Impact: The action would result in no impact or the impact would not change the resource condition in a perceptible way. Negligible is defined as of such little consequences as to not require additional consideration or mitigation.

- Minor Impact: The effect to the resource would be perceptible; however, not major and unlikely to result in an overall change in resource character.

- Moderate Impact: The effect to the resource would be perceptible and may result in an overall change in resource character. Moderate impacts are not significant due to their limited context (the geographic, biophysical, and social context in which the effects would occur) or intensity (the severity of the impact, in whatever context it occurs).

- Significant Impact: The effect to the resource would be perceptible and severe. The effect would result in an overall change in resource character and require the completion of an Environmental Impact Statement.

3.1 Recreation

3.1.1 Affected Environment

Columbia Park is a public park located in Benton County, Washington. The park is comprised of the 400-acre Columbia Park East in Kennewick, and the adjacent 50-acre Columbia Park West in Richland; together, the parks function as a single 450-acre park with 4.5 miles of shoreline along the Columbia River. Columbia Park has numerous recreational features including a golf course, fishing pond, playground, boat launches, sport fields, picnic tables, and open green space. There are also several trails for hiking, bicycling, or running. The park is a popular destination for residents of the Tri-Cities.

Columbia Park East is a regional recreation and event zone. Major events take place in this area such as dog shows, car shows, car sales, civil war reenactments, the Water Follies hydroplane races, and 4th of July fireworks. It also hosts local events such as drone races, local plays, and strollers/striders.

3.1.2 Environmental Consequences

3.1.2.1 Alternative 1: No Action Alternative

There would be no change to recreation under the No Action Alternative. Columbia Park is managed by USACE and Leased to the City of Kennewick to provide recreation to the Tri-City area. The lease was renewed in 2004 for 50 years. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park.

3.1.2.2 Alternative 2: Proposed Action – Convey Land

Columbia Park would continue providing recreational opportunities to the Tri-City area. An increase in the frequency of commercial activities within the park could cause minor impacts to recreation during commercial events hosted by the City of Kennewick by temporarily limiting the amount of recreation during the time of the events. These events would occur within the conveyed land only, and all other areas of CPE would remain available for recreation, even during commercial events.

3.2 Aesthetics and Visual Quality

3.2.1 Affected Environment

Aesthetics or visual resources are the natural and cultural features of the landscape that can be seen and that contribute to the public's appreciative enjoyment of the environment. The aesthetic quality of an area is a measure of one's perception making it a subjective factor to quantify.

Columbia Park has large regularly spaced trees and green mowed grass. There are lighted paths throughout the park which illuminate the surroundings in the mornings and evenings. The park is located along the Columbia River which provides a nice back drop for enjoying the outdoor spaces.

3.2.2 Environmental Consequences

3.2.2.1 Alternative 1: No Action Alternative

There would be no change to aesthetics or visual resources under the No Action Alternative. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park.

3.2.2.2 Alternative 2: Proposed Action – Convey Land

No changes to aesthetics or visual resources are expected as a result of the land conveyance. Park management and operations would not change as a result of the conveyance, the aesthetic character of the proposed action area would not be altered.

3.3 Vegetation

3.3.1 Affected Environment

Columbia Park consists mostly of large sycamore (*Platanus occidentalis*) shade trees and irrigated grassy lawns. There is no riparian vegetation in CPE due to the armored levees along the shoreline. What few trees grow near the river are concentrated around the boat launch, which is not included in the land conveyance proposal.

3.3.2 Environmental Consequences

3.3.2.1 Alternative 1: No Action Alternative

There would be no change to vegetation under the No Action Alternative. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park.

3.3.2.2 Alternative 2: Proposed Action – Convey Land

No changes to vegetation are expected as a result of the land conveyance. Park management and operations would not change as a result of the conveyance, the vegetation in the proposed action area would not be altered.

3.4 Wildlife

3.4.1 Affected Environment

Columbia Park is located in an urban environment with no connectivity to unaltered, natural landscapes which severely limits terrestrial wildlife presence in the park. Terrestrial wildlife found within the park would include urban adopted species such as Eastern gray squirrels (*Sciurus carolinensis*), raccoons (*Procyon lotor*), and striped skunks (*Mephitis mephitis*); however, the most abundant wildlife species in the park are birds.

Bird species include waterfowl species such as the American coot (*Fulica americana*), American wigeon (*Mareca americana*), and Canada goose (*Branta canadensis*). Passerine species such as Brewer's blackbird (*Euphagus cyanocephalus*), chipping sparrow (*Spizella passerina*), brown creeper (*Certhia americana*), and black-capped chickadee (*Poecile atricapillus*). Waterbird species such as American white pelican (*Pelecanus erythrorhynchos*), California gull (*Larus californicus*), and Bonaparte's gull (*Chroicocephalus Philadelphia*). Raptor species such as American kestrel (*Falco sparverius*), osprey (*Pandion haliaetus*), and red-tailed hawk (*Buteo jamaicensis*). California quail (*Callipepla californica*) are also seen regularly at the park.

3.4.2 Environmental Consequences

3.4.2.1 Alternative 1: No Action Alternative

There would be no change to wildlife under the No Action Alternative. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park.

3.4.2.2 Alternative 2: Proposed Action – Convey Land

No changes to wildlife are expected as a result of the land conveyance. Park management and operations would not change as a result of the conveyance. Wildlife in the proposed action area are not expected to be affected or effects would be minor.

3.5 Threatened And Endangered Species

3.5.1 Affected Environment

USACE reviewed a list of threatened and endangered species that pertains to the proposed action area under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) generated through the Information for Planning and Consultation website on 4 October 2023 [2023-0041179] (Appendix A). A list of threatened and endangered species under the jurisdiction of the National Marine Fisheries Service (NMFS) was compiled through searching the NOAA Fisheries West Coast Region website (https://www.westcoast.fisheries.noaa.gov/protected_species/species_list/species_lists.html). The list of protected species is shown in Table 3-2.

Table 3-2. ESA listed species that may occur in the area potentially affected by this action.

Species	Listing Status and Reference	Critical Habitat
USFWS		
Yellow-billed cuckoo (*Coccyzus americanus*)	T: 10/3/14; 79 FR 59991	Yes, not in proposed action area
Bull trout (*Salvelinus confluentus*)	T: 06/10/98; 63 FR 31647	Yes; 09/02/05; 70 FR 56211
Gray Wolf (*Canis lupus*)		
NMFS		
Upper Columbia River steelhead	T:01/05/06; 71 FR 834	Yes: 09/02/2005; 70 FR 52630
Middle Columbia River steelhead	T:01/05/06; 71 FR 834	Yes: 07/10/00; 65 FR 42422
Snake River steelhead	T:01/05/06; 71 FR 834	Yes: 07/10/00; 65 FR 42422
Upper Columbia River spring Chinook salmon	E: 06/28/05; 70 FR 37160	Yes: 09/02/2005; 70 FR 52630
Snake River spring/summer Chinook salmon	T: 6/28/05; 70 FR 37160	Yes: 12/28/93; 58 FR 68543
Snake River fall Chinook salmon	T: 6/28/05; 70 FR 37160	Yes: 12/28/93; 58 FR 68543
Snake River sockeye salmon	E 6/28/05; 70 FR 37160	Yes: 12/28/93; 58 FR 68543

Western yellow-billed cuckoo

Western yellow-billed cuckoos were listed as threatened in the western portion of North America due to severe population declines over several decades in 2014. These declines were primarily due to the loss, degradation, and fragmentation of yellow-billed cuckoo riparian habitat from agricultural conversion, dam construction, river flow management, and lack of riverbank protection. Critical habitat has been proposed, though Washington is not included in the proposal.

Yellow-billed cuckoos prefer open woodlands with clearings and a dense shrub layer. Individuals may be on breeding grounds between May and August. Yellow-billed cuckoos can be found in woodlands near streams, rivers, or lakes, but occur most frequently and consistently in cottonwood forests with thick understory (Taylor 2000).

There are no known occurrences of yellow-billed cuckoo near Columbia Park.

Bull trout

The USFWS listed Columbia Basin bull trout as threatened in 1998, due to population declines through much of its historic range and habitat degradation. Critical habitat was designated for bull trout in 2010, and Columbia River was included in the designation. Bull trout are a wide-ranging species that formerly inhabited most of the cold lakes, rivers, and streams throughout the western United States and British Columbia. They eat fish and require an abundant supply of forage fish for vigorous populations. Resident bull trout spend their entire life cycle in the same (or nearby) streams where they were hatched. They display a high degree of sensitivity at all life stages to environmental disturbance. Bull trout growth, survival, and long-term population persistence depends on the availability of quality habitat, and they need cold water to survive.

Upper Columbia River Spring Chinook salmon

Several different strains of Chinook salmon can be found in Lake Wallula during part of the year. Unlisted upper Columbia River fall Chinook salmon are the most common. However, Upper Columbia River spring Chinook, Snake River spring/summer Chinook salmon, and Snake River fall Chinook salmon are also present. Migration timing and life stage development can be different between the strains as they migrate through and use the lake. The biological requirements of the Upper Columbia River spring Chinook salmon include high quality food, clean flowing water, clean spawning substrate, resting habitat, and unimpeded migratory access to and from spawning and rearing areas.

Adults enter the rivers from mid-April through July, and hold in deep pools with cover until spawning, with spawning occurring from late July through September (Bugert et al. 1998). Spawning occurs in the Wenatchee, Entiat, and Methow watersheds at elevations from 500 to 1,500 meters (Myers et al. 1998). Spawners return to the Wenatchee River from late April through June, and to the Methow and Entiat Rivers from late May through July (Bugert et al. 1998). Adults would be passing the action area from mid-April to mid-June (Chelan County PUD No. 1 1998).

Snake River spring/summer Chinook salmon

In the Snake River, spring and summer Chinook salmon share key life history traits. Both are stream-type fish, with juveniles that migrate swiftly to sea as yearling smolts. Depending primarily on location within the basin (and not on run-type), adults tend to return after either two or three years in the ocean. Both spawn and rear in small, high elevation streams (Chapman et al. 1991), although where the two forms co-exist, spring Chinook salmon spawn earlier and at higher elevations than summer Chinook salmon.

Spring/summer Chinook salmon use smaller, higher elevation tributary systems for spawning and juvenile rearing compared to fall run fish, which spawn in the main stem of larger rivers. Spring/summer Chinook salmon normally spawn in late July–September using gravel bars in smaller river and tributary streams. As with most salmon, adults die after spawning, providing a large nutrient source for juvenile fish. Juvenile spring/summer Chinook salmon behave differently than fall Chinook in that they remain

in headwater streams for a year and out–migrate the following spring. Optimal water temperatures range from 59–64°F (14–19°C) with temperatures exceeding 73°F (21°C) being lethal (Wydoski and Whitney 2003). Juvenile Chinook salmon feed on small aquatic invertebrates in both fresh and salt water, primarily arthropods in freshwater and crustaceans in marine environments. As they grow in saltwater, they quickly change to a fish diet (Quinn 2005).

Snake River fall Chinook salmon

Fall Chinook salmon in this ESU are ocean-type. Adults return to the Snake River at ages two through five, with age four most common at spawning (Waples et al. 1991). Spawning, which takes place in October through November, occurs in the mainstem and in the lower parts of major tributaries. Juveniles emerge from the gravels in March and April of the following year, moving downstream from natal spawning and early rearing areas from June through early fall. Juvenile fall Chinook salmon move seaward slowly as subyearlings, typically within several weeks of emergence (Waples et al. 1991).

Snake River fall Chinook salmon spawning and rearing occurs only in larger, mainstem rivers such as the Salmon, Snake, and Clearwater Rivers. Historically, the primary fall Chinook salmon spawning areas were located on the upper mainstem Snake River (Connor et al. 2005). A series of Snake River mainstem dams block access to the upper Snake River, which has significantly reduced spawning and rearing habitat for Snake River fall Chinook salmon. The vast majority of spawning today occurs upstream from the Lower Granite Dam, with the largest concentration of spawning sites in the Clearwater River, downstream from Lolo Creek. Currently, natural spawning is limited to the Snake River from the upper end of Lower Granite Reservoir to Hells Canyon Dam, the lower reaches of the Imnaha, Grande Ronde, Clearwater, Salmon, and Tucannon Rivers, and small areas in the tailraces of the lower Snake River hydroelectric dams (Good et al. 2005).

Snake River Sockeye salmon

Overall age of maturity in sockeye salmon ranges from three to eight years. Male sockeye salmon are capable of maturing at any of 22 different combinations of freshwater and ocean ages, while female sockeye salmon may mature at any of 14 different age compositions (Healey 1991). For a given fish size, female sockeye salmon have the highest fecundity and the smallest egg size among the Pacific salmon (Burgner 1991). Average fecundity across the range of sockeye salmon is from 2,000 to 5,200, and from about 300 to slightly less than 2,000 for kokanee (Burgner 1991, Manzer and Miki 1985). Emerging fry possess heritable directional responses that allow fry from outlet tributaries to move upstream and fry from inlet tributaries to move downstream, in order to reach the nursery lake habitat (Raleigh 1967, Brannon 1972a, Burgner 1991). Adult body size may also be affected by variations in stock abundance. Based on fishery catch data, which tends to select for larger fish than are present in the total run, Snake River sockeye salmon average about 1.58 kg after two winters at sea (Gustafson et al. 1997).

3.5.2 Environmental Consequences

3.5.2.1 Alternative 1: No Action Alternative

There would be no change to Threatened and Endangered Species under the No Action Alternative. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park.

3.5.2.2 Alternative 2: Proposed Action – Convey Land

There would be no impact to yellow-billed cuckoos caused by the land conveyance. The yellow-billed cuckoo has been a very rare migrant and summer resident since 1940, when it was last known to breed in Washington. Yellow-billed Cuckoos are currently considered extirpated (locally extinct) in Washington.

There would be no/speculative impact to any of the endangered fish species, given the distance from the water and the land conveyance will not include any shoreline. Potential effects associated with increased visitation at sales events, etc. are speculative (at best). There no expectation that riparian habitat on the shoreline or near the boat launch would be affected. This resource, could, therefore be reasonably listed in Table 3-1 above, but given the clear concern/sensitivity in the region for T&E species/habitat, USACE independently evaluated potential effects.

3.6 Historic and Cultural Resources

3.6.1 Affected Environment

The area around the Lake Wallula shoreline is an area of rich cultural heritage. Recorded sites of the prehistoric and historic eras are numerous around the reservoir shoreline. The historic era began with the Lewis and Clark Expedition in 1805. Bateman Island at the upstream end of the park is the farthest up the Columbia River that Lewis and Clark explored.

Native Americans have lived in this region for more than ten thousand years. The confluence of the Columbia River and the Snake River, just upstream of the project area, was frequented by the Cayuse, Umatilla, Walla Walla, and other peoples. Types of prehistoric and historic cultural sites which might be encountered include rockshelters, pithouses, fishing stations, fort/trading post remains, townsites, roadways/trails, homesteads and other remains of the long history of human use of the area. Besides remnants of prehistoric and historic daily life, there are areas and specific locations of great traditional significance represented around the Lake Wallula shoreline (USACE 2011). Columbia Park is the site where the “Kennewick Man” was unearthed in 1996, a discovery which shed light on the early man in North America.

The first Federal Highway in the Northwest was Columbia Drive, which follows the right bank of the Columbia River through where Columbia Park is currently located. An interpretive sign located at the intersection of Edison Street and Columbia Drive commemorates this significant historic achievement.

3.6.2 Environmental Consequences

3.6.2.1 Alternative 1: No Action Alternative

There would be no changes in process or procedures under the No Action Alternative. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park. USACE would continue consulting with the Tribes for all Federal Actions proposed within Columbia Park.

3.6.2.2 Alternative 2: Proposed Action – Convey Land

The National Historic Preservation Act (NHPA) Section 106 implementing regulations provides examples of adverse effects. Specifically, 36 CFR § 800.5(2)(vii) identifies the "Transfer, lease, or sale of property out of Federal ownership or control…" as an adverse effects. The conveyance of the 72 acres of Columbia Park from USACE to the City will have impacts on cultural resources. In accordance with 36 CFR § 800.6 USACE has worked with the appropriate consulting parties to resolve the adverse effects. This process has resulted in the development of a memorandum of agreement amongst the consulting parties containing measures designed to avoid, minimize, or mitigate for these adverse effects.

The *Memorandum Of Agreement (MOA) Amongst the U.S. Army Corps Of Engineers, Walla Walla District, And the Confederated Tribes of the Umatilla Indian Reservation, and the Wanapum Band, and the Washington State Department of Archaeology and Historic Preservation, and the City of Kennewick Regarding the Transfer of 72 Acres of Land within Columbia Park to the City of Kennewick, Washington* (MOA – Appendix B) establishes the mitigation, stipulations, and actions of the USACE and City in response to effects to cultural resources associated with the land conveyance. The MOA was signed by USACE on 24 August 2023 and by the City on 19 September 2023. The required stipulations are as follows:

1. The City of Kennewick shall maintain the transferred property in its current status as public recreation Open Space per Municipal Code 18.09.1440: "a landscape that is primarily unimproved, such as wooded areas; parks; golf courses, trails; privately owned nature reserves; abandoned railroad lines; utility corridors; and other vacant rights-of-way". If the property is no longer used as Open Space or equivalent zoning for public park and recreation purposes as indicated by re-zoning by the City, title to such property shall revert to the Secretary of the Army as stated in the requirements of the Water Resources Development Act of 1996, PL 104–303, October 12, 1996, 110 Stat 3658 § 501(i)(3)(D)(i).

2. The City of Kennewick shall, in collaboration with the invited signatories (whether or not they chose to sign), propose a schedule to complete a Cultural Resources Management Plan (CRMP) for the Area of Potential Effect (APE) within 90 days of execution of this MOA, with a target completion date of two years from the date of execution. The CRMP shall include considerations for potential effects to Traditional Cultural Properties (TCPs) and Historic Properties of Religious and Cultural Significance to Indian Tribes (HPRCSITs), including the integrity of phenomena and conditions that contribute to their character: such as natural sounds, natural viewsheds, natural lighting, animal, plant, and bird habitat quality, and air and water quality. The CRMP shall be reviewed by the City and invited signatories every five years, at maximum.

3. Concurrent with provision of the schedule for development of the CRMP, the City shall provide invited signatories a listing of anticipated undertakings for the following year.

4. The City of Kennewick will host a meeting at least once annually, or more often as needed, with Tribal cultural resources staff-representatives to discuss the status of management of the Tri-Cities parks and how proposed actions for the following year may affect cultural resources. The first meeting shall be scheduled not later than 60 days after execution of the MOA. The City may invite other participants as appropriate, including staff from the USACE, or City Parks staff from in Richland or Pasco.

5. Each following year, the City shall issue invitations to each invited signatory tribe and the DAHP to the annual meeting. A listing of anticipated undertakings for the upcoming year will be provided to invited signatories at a minimum of two months before the meeting. During annual meetings, the City shall facilitate a discussion to identify anticipated undertakings of concern, address questions, and scope measures to avoid or mitigate for impacts to historic properties. The City shall document all meeting proceedings and provide to participants no later than 30 days afterward. The City shall follow up with invited signatories no later than 90 days after each meeting regarding proposed steps to avoid, minimize, or mitigate impacts.

6. For undertakings that arise outside the annual planning process the City shall send a letter and detailed project plans to all invited signatories, allow for 30 days to comment, and take such comments into substantive and meaningful consideration prior to proceeding with implementation of the undertakings.

7. For emergency actions, the City shall inform invited signatories by the most efficient means available and provide as much time as possible for comment before action must be taken. The CRMP shall discuss what constitutes emergency actions.

8. No later than 30 days from execution of the MOA, the City shall appoint a Responsible Official/Point of Contact to fulfill the obligations of the MOA and all applicable state law.

9. The City shall, as appropriate, obtain professional expertise that meets the Secretary of the Interior's Standards for Archeology or History, and has familiarity and experience with Section 106 requirements as well as all Washington State Historic Preservation Laws, Washington State Environmental Policy Act (SEPA), Executive Order 21-02, and tribal consultation. This may be accomplished through contracts or other instruments such as those that flow from the 2021 Memorandum of Understanding for Partnership Between the Confederated Tribes of the Umatilla Indian Reservation and the City of Kennewick

10. The USACE shall include in the deed of transfer a clause requiring compliance with all state laws, including cultural resource protection laws as stated here: "Grantee is required to comply with Washington State Laws, including but not limited to those for cultural resource protection."

11. The Deed of Transfer shall include the following covenant: "Grantee will comply with the terms of the Section 106 Memorandum of Agreement (MOA), attached hereto and made a part hereof as Exhibit XX."

By adhering to the stipulations outlined in the MOA, USACE and the City would ensure that there are no significant adverse effects to Cultural Resources as a result of the proposed land conveyance.

3.7 Socioeconomics And Environmental Justice

3.7.1 Affected Environment

Population

Benton County currently has a population of approximately 201,877 residents, which is a 15.2% increase from the 2010 population estimates (U.S. Census Bureau 2017 Census). Kennewick is the largest city in Benton County with a population of 81,607. The highest level of education among people age 25 years and older is shown in Table 3-3 below.

Table 3-3. Highest level of education among people age 25 years and older in Benton County

Level of Education	Percent (%) of Population
Doctorate	1.6
Professional	1.1
Master's	6.7
Bachelor's	16.0
Associates	10.4
Some College	24.1
High School	25.0
Some High School	6.3
Less than High School	6.5
None	2.2

Source: Statistical Atlas retrieved on July 6, 2018 from https://https://statisticalatlas.com/metro-area/Washington/Kennewick/Educational-Attainment

Employment and Income

Median household income in 2017 for Benton County was $63,001 which is above the national average of $61,372 (American Community Survey, US Census 2017). The poverty rate of Benton County is 13.4% of the population which is slightly above the national average of 12.3%. The unemployment rate in Benton County as of May 2018 was 5.5%, while the national unemployment rate as of May 2018 was 4.1% (U.S. Bureau of Labor Statistics 2017).

The economy of Benton County employed around 85,352 people in 2017. The economy is specialized in agriculture, forestry, fishing, and hunting, and mining. The largest industries in Benton County are Health Care and Social Assistance (10,814 people), Retail Trade (10,377 people), and Professional, Scientific, and Technical Services (9,644 people). The highest paying industries are professional Utilities ($88,030), Professional, Scientific, and Technical Services ($80,535), and Professional, Scientific, & Management, and Administrative and Waste Management Services ($70,833) (American Community Survey, US Census 2017).

Housing and Living

The median property value in Benton County is $198,600, and the homeownership rate is 68.1%; median property value in the United States in 2017 was $217,600. Most people in Benton County “Drove Alone” in 2017, and the average commute time was 20.8 minutes; the average national commute time was 26.9 minutes (American Community Survey, US Census 2017).

Diversity

The racial composition of Benton County is predominantly White (86.25%) followed by Hispanics (22.3%), Asian (3.3%), Black or African American (1.8%), and Native Americans (1.3%) (U.S. Census Bureau 2018).

Environmental Justice

The Council on Environmental Quality (CEQ) has developed a Climate Change and Economic Justice Screening Tool (CEJST) to identify disadvantaged communities. The tool identifies census tracts that are burdened in one or more categories, including climate change, energy, health, housing, pollution, transportation, water, and workforce. A community is highlighted as disadvantaged on the CEJST map if it is in a census tract that is (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden. Federally Recognized Tribes, including Alaska Native Villages, are also considered disadvantaged communities.

The tool was accessed on 4 October 2023 to assess the potential action area. The CEJST identified the location of the proposed land conveyance as disadvantage because it met the burden threshold for Health (above the 90th percentile for Asthma occurrence) and the associated socioeconomic threshold – Low Income (above the 65th percentile for low income).

3.7.2 Environmental Consequences

3.7.2.1 Alternative 1: No Action Alternative

There would be no impact to socioeconomics and environmental justice under the No Action Alternative. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park.

3.7.2.2 Alternative 2: Convey Land

An increase in the frequency of commercial activities within the park could have minor impacts to socioeconomics and environmental justice by temporarily limiting the amount of free recreation during the time of the events. There would still be ample recreation available in other areas of the park. The proposed action would not affect any driver of asthma rates or income. The proposed action would not have disproportionate effects on any disadvantaged population.

3.8 Climate Change

3.8.1 Affected Environment

Greenhouse gases (GHG), such as CO_2, methane (CH_4), and nitrous oxide (N_2O), contribute to climate change, including alteration of temperatures and precipitation patterns (EPA 2023a). Consistent with EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, CEQ has issued interim National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change. This guidance includes direction for agencies to quantify a proposed action's GHG emissions and to disclose and provide context for a proposed action's GHG emissions and climate effects.

There is no known readily available GHG emissions data for CPE. However, estimates can be made given the usage and maintenance of the 72 acres under consideration. Of the 72 acres to be conveyed, approximately 44 acres are vegetated, primarily as lawns, while the remaining 28 acres consists of roadways, playgrounds, parking lots, and the nine-acre family fishing pond. Literature suggests that over 90% of the carbon emissions associated with park maintenance are associated with mowing lawn areas (Park & Jo 2021), and that emissions from mowing are more than double those sequestered by the lawn (Lively et al. 2010, Townsend-Small & Czimiczik 2010). Annual net emissions for maintained park lawns in recent literature ranges from 0.03 kilogram per square meter of lawn surface (kg/m^2) to 0.14 kg/m^2(Nicese et al. 2020, Park & Jo 2021). Over 44 acres of vegetated areas at the proposed action area, that could amount to as much as 25 Metric tons of carbon dioxide (CO^2) annually.

The remainder of the proposed project area consists of the family fishing pond, roadways, and parking. Actual road usage within the proposed conveyance is unknown, but the City estimates approximately 150,000 visitations to Columbia Park annually. The cities of Kennewick and Pasco primarily lie within three miles of Columbia Park, and Richland is within eight miles. If each visitor drove an average of five miles each way, park visits would represent approximately 1,500,000 miles driven per year. At an average of .21 kilograms per mile driven (CBO 2022), the entirety of visits to Columbia Park would represent approximately 315 Metric tons of CO^2 annually.

3.8.2 Environmental Consequences

3.8.2.1 Alternative 1: No Action Alternative

There would be no impact to climate change under the No Action Alternative. USACE would not convey the 72 acres and would continue to lease the land to the City for operation as a park. Maintenance and use of the park and the associated carbon emissions would not change.

3.8.2.2 Alternative 2: Convey Land

There would be no impact to climate change under the Alternative 2. Maintenance and use of the park and the associated carbon emissions would not change as a result of the land conveyance.

3.9 Cumulative Effects

NEPA and the CEQ regulations implementing the Act require federal agencies to consider the cumulative effects of their actions. Cumulative effects are defined as, “the impact on the environment which results from the incremental impact of an action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR § 1508.7). Cumulative impacts can result from individually small, but collectively significant actions taking place over a period of time.

The primary goal of a cumulative effects analysis is to determine the magnitude and significance of the environmental consequences of the proposed action in the context of the cumulative effects of other past, present, and reasonably foreseeable future actions. USACE used the technical analysis conducted in this EA to identify and focus on cumulative effects that are “truly meaningful” in terms of local and regional importance. While the EA addresses the effects of alternatives on the range of resources representative of the human and natural environment, not all of those resources need to be included in the cumulative effects analysis – just those that are relevant to the decision to be made on the proposed action.

USACE determined that the proposed action would not cumulatively add to past, present, and/or foreseeable future actions on any of the listed environmental components at a significant level. Past, present, and/or foreseeable future actions are discussed below, but there is no analysis of environmental components beyond the present study.

3.9.1 Geographic and Temporal Scope of Cumulative Effects Analysis

The geographic boundary for the cumulative effects analysis ranges from the confluence of the Snake River to Bateman Island (Table 3-4). The 65-year timeframe was identified based on the construction of McNary Lock and Dam. A timeframe of five years into the future has been considered. Only actions that are reasonably foreseeable are included. To be reasonably foreseeable, there must be a strong indication that an action/event will occur or be conducted.

Table 3-4. Summary of geographic and temporal boundaries used in this cumulative effects analysis

Geographic Boundary	Temporal Boundary
Columbia River Mile 325-335	65 years

Past

As development increased in the middle Columbia River Basin, the amount of human-caused impact on the rivers and associated resources increased. Development in the region included building numerous dams throughout the watershed and the subsequent formation of their reservoirs.

McNary Lock and Dam was built at RM292 in 1954. McNary Dam provides for slackwater navigation, hydroelectric power generation, recreation, wildlife habitat, and incidental irrigation. There are two fish ladders for salmon, steelhead, and lamprey passage one on each shore of the dam. The Washington side also has an 86-foot wide, 683-foot-long navigation lock that lifts boats an average of 75 feet. McNary Dam was designed to pass a flood of 2,200,000 cubic feet per second. .

Lake Wallula reservoir formed behind McNary Lock and Dam in 1957 which begins at Columbia River RM 292.5 and extends 64 miles upstream. The Lake Wallula shoreline extends past McNary Beach, Hat Rock State Park, McNary National Wildlife Refuge, and Warehouse Beach, through the Wallula Gap, past the confluence of the Walla Walla River and Sacajawea State Park and the confluence of the Snake River, through the Tri-Cities of Kennewick, Pasco, and Richland, and to the Department of Energy's Hanford Site. Lake Wallula ends at the Priest Rapids Dam on the Columbia River and at Ice Harbor Lock and Dam on the Snake River. Lake Wallula has a water surface area of 38,800 acres, with 242 miles of shoreline, and a normal operating range between 340 and 335 feet above sea level.

Other past actions along the middle Columbia River that could have had a cumulative impact include the construction of marinas, highways, roads, and railroads, the installation of underground irrigation lines, installation of overhead powerlines and associated infrastructure, urban development, industrial growth, agriculture/farming, timber harvest, and mining.

Present

Present actions include the current operations of McNary Lock and Dam, operation of irrigation water pumping stations, recreation activities, current land use, and development around the reservoirs.

The 16,908 acres surrounding Lake Wallula are public lands used for recreation, wildlife habitat, wildlife mitigation, and water-connected industrial development. Approximately 2,400 acres are licensed either to state or local park agencies, and the USFWS leases approximately 3,500 acres of public lands as part of the McNary National Wildlife Refuge. Port districts own approximately 1,500 acres within the boundary for industrial development. Facilities operated by commercial concessionaires, or boat clubs, are available at eight locations. Public boat launching facilities are available at 17 locations along the shoreline.

Future

Human population in the region may reach 40 to 100 million by the end of the twenty-first century. Estimates of population growth for the interior Columbia River Basin range

from 0.3 percent per year (based on birth and death rates in the 1980s) to 1.6 percent per year (including immigration) by 2040 (McCool and Haynes 1996). The pressures for water uses and related services (e.g., hydroelectricity) would grow as the region's population grows likely requiring additional diversions of water from the Columbia River mainstem and tributaries.

The continued warming rate in the Pacific Northwest could increase agricultural water use demands associated with higher plant water consumption, longer growing seasons, and increased surface water evaporation. Any changes in snowpack or streamflows due to rising temperatures could cause a marked decrease in surface water runoff during the irrigation season. Shifts in runoff timing or magnitude could cause more reliance on limited water storage aquifers or other water supplies which would also increase the demand for additional diversions from the Columbia River mainstem and tributaries. Additionally, in-stream water demands associated with ecosystem requirements, hydropower and thermoelectric power production, industrial cooling, navigation, and recreation may increase with rising temperatures (BOR 2016).

4 – Compliance with Applicable Environmental Laws, Treaties, and Regulations

4.1 National Environmental Policy Act

This EA was prepared pursuant to regulations implementing NEPA, (42 U.S.C. 4321 et seq.). NEPA provides a commitment that federal agencies will consider the environmental effects of their proposed actions prior to implanting those actions.

USACE held a scoping period between July 8 and August 8, 2019. Eleven pieces of correspondence were received during the scoping period. Additionally, USACE held a scoping meeting in Kennewick, Washington on July 30, 2019 from 5:00 to 7:00 pm. All scoping comments were considered in the preparation of this document.

Eleven pieces of correspondence were received either at the public meeting or through the USACE website. The correspondence contained 47 total comments. 11 comments addressed the potential effects to recreation from the proposed land conveyance. These comments were generally supportive of recreation in general; two stressed the need to maintain the recreational value of Columbia Park specifically. 10 comments focused on the NEPA process related to the transfer, several of which encourage an environmental impact statement to analyze the impacts of the proposed transfer. 9 other comments were related to the mechanics of the environmental review, including comments requesting reviews focused on fish, wildlife, and vegetation. 16 comments voiced opposition or support towards land transfers in general and this land transfer specifically. Finally, 8 comments were focused on cultural and treaty rights.

All scoping comments were considered in the development of this EA.

Completion of this EA and signing of a Finding of No Significant Impact (FONSI), if an EIS is not determined unnecessary after public comment, which will fulfill the requirements of NEPA. The final, signed FONSI will be posted to the USACE website and made available to the public.

4.2 Endangered Species Act

The ESA established a national program for the conservation of threatened and endangered fish, wildlife and plants and the habitat upon which they depend. Section 7(a)(2) of the ESA requires federal agencies to consult with the USFWS and NMFS, as appropriate, to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or adversely modify or destroy their critical habitats. Section 7(c) of the ESA and the federal regulations on endangered species coordination (50 CFR §402.12) require that federal agencies prepare biological assessments of the potential effects of major actions on listed species and their critical habitat.

USACE has determined that the Proposed Action would have no effect on listed species or their designated critical habitats. No formal or informal consultation is required for projects that result in a no effect determination. However, the USFWS was consulted

through their Information for Planning and Consultation (IPaC) website to coordinate the identification of potential listed and protected resources.

4.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions, primarily for Native American Tribes. Take under this Act includes both direct taking of individuals and take due to disturbance.

Bald and golden eagles are known to nest throughout USACE managed lands in the Walla Walla District. While all nest sites have not been documented, locations of some are known. None are known to occur in or near the proposed action area, therefore, there would be no effect or take (to include disturbance) of either bald or golden eagles.

4.4 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703-712, as amended) prohibits the taking of and commerce in migratory birds (live or dead), any parts of migratory birds, their feathers, or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof.

No change to vegetation or recreation within the park is expected. Increased commercial activities would not cause the take of any birds covered under the MBTA. There would be no effect to birds under the MBTA.

4.5 National Historic Preservation Act

NHPA of 1966 as amended directs federal agencies to assume responsibility for all cultural resources under their jurisdiction. Section 106 of NHPA requires agencies to consider the potential effect of their actions on properties that are listed, or are eligible for listing, on the National Register of Historic Places. The NHPA implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, requires that the federal agency consult with the State Historic Preservation Officer, Tribes and interested parties to ensure that all historic properties are adequately identified, evaluated and considered in planning for proposed undertakings.

Specifically, 36 CFR § 800.5(2)(vii) identifies the “Transfer, lease, or sale of property out of Federal ownership or control…” as an adverse effects. The conveyance of the 72 acres of Columbia Park, containing historic properties, from USACE to the City will have adverse effects on historic properties. In accordance with 36 CFR § 800.6, USACE has worked with the appropriate consulting parties to resolve the adverse effects. This process has resulted in the development of a memorandum of agreement amongst the consulting parties containing measures designed to avoid, minimize, or mitigate for these adverse effects.

The Memorandum Of Agreement (MOA) Amongst the U.S. Army Corps Of Engineers, Walla Walla District, And the Confederated Tribes of the Umatilla Indian Reservation, and the Wanapum Band, and the Washington State Department of Archaeology and Historic Preservation, and the City of Kennewick Regarding the Transfer of 72 Acres of Land within Columbia Park to the City of Kennewick, Washington (MOA – Appendix B) establishes the mitigation, stipulations, and actions of USACE and City in response to effects to cultural resources associated with the land conveyance. The MOA was signed by USACE on 24 August 2023 and by the City on 19 September 2023.

4.6 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) (25 USC 3001 et seq.) addresses the discovery, identification, treatment, and repatriation of Native American (and Native Hawaiian) human remains, associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony. This Act also establishes fines and penalties for the sale, use, and transport of Native American cultural items.

Conveyance of the 72 acres would not (itself) trigger any requirement under NAGPRA. Also, USACE would no longer manage the lands within Columbia Park after the transfer outside of Federal control, which would remove the applicability of the NAGPRA to the 72-acre parcel to be transferred. Those lands would then be under the jurisdiction of the state, and subject to state law concerning unmarked burials.

4.7 Clean Water Act

The Clean Water Act of 1972 (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States (WOTUS) and regulating quality standards for surface waters. Section 401 of the CWA requires that any federal activity that may result in a discharge to WOTUS must first receive a water quality certification from the state in which the activity will occur. Section 404 of the CWA established a program to regulate the discharge of dredged or fill material into waters of WOTUS.

There is no in-water work or discharge into WOTUS under the proposed action. There is no shoreline in the proposed conveyance and no changes to water quality. There would be no effect to WOTUS covered under the CWA.

4.8 Treaties

Treaties are legally binding contracts between sovereign nations that establish those nations' political and property relations. Treaties between Native American Tribes and the United States confirm each nation's rights and privileges. In most of these treaties, the Tribes ceded title to vast amounts of land to the United States but reserved certain lands (reservations) and rights for themselves and their future generations. Like other treaty obligations of the United States, Indian treaties are considered to be "the supreme law of the land," and they are the foundation upon which Federal Indian law and the Federal Indian trust relationship is based.

Treaty negotiations with area Tribes were conducted quickly by Isaac Stevens, Governor of Washington Territory. Treaties with area Tribes (e.g., Treaty of June 9, 1855, Walla Walla, Cayuse, Etc., 12 Stat. 945 [1859]) explicitly reserved unto the Tribes certain rights, including the exclusive right to take fish in streams running through or bordering reservations, the right to take fish at all usual and accustomed places in common with citizens of the territory, and the right of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed lands.

The Treaty between the Cayuse, Umatilla, and Walla Walla Tribes, in Confederation, and the United States, June 9, 1855, (12 Stat. 945 [1859]) resulted in the ceding of at least 6.4 million acres destined for private, non-Indian land ownership and formation of a 155,000-acre reservation for the Confederated Tribes of the Umatilla Indian Reservation. Columbia Park is within the ceded lands.

Given the location of this transfer (not including the shoreline), the fact that rights to fish at usual and accustomed fishing areas remain in place regardless of land ownership, and the long-term use of the property as a high density recreation park/manicured lawn, this action does not contain any visible potential for effects to treaty rights or resources.

4.9 Executive Order 11988, Floodplain Management

This Executive Order outlines the responsibilities of federal agencies in the role of floodplain management. Each agency must evaluate the potential effects of actions on floodplains and avoid undertaking actions that directly or indirectly induce development in the floodplain or adversely affect natural floodplain values.

There is no land use change associated with the proposed action. The City's Master Plan, written in 2018, does indicate the possibility of future park development, but there is nothing proposed at this time. Required Shoreline Management Act (Chapter 90.58 RCW) permits will be obtained from the Washington Department of Ecology if development along the shoreline is proposed.

Federal Agencies
U.S. Fish and Wildlife Service
National Marine Fisheries Service
Environmental Protection Agency
U.S. Bureau of Reclamation

State Agencies
Washington Department of Ecology
Washington Department of Archaeology and Historic Preservation
Washington Department of Transportation
Washington Department of Fish and Wildlife

Local Governments
City of Kennewick
Port of Benton
Tribes
Confederated Tribes of the Umatilla Indian Reservation

Public Involvement
The scoping period for the Proposed Action was from 8 July 8 2019 to 8 August 2019. Scoping letters were sent to federal and state agencies, Tribes, and stakeholders. Additionally, USACE held a scoping meeting in Kennewick, Washington on 30 July 2019 from 5:00 to 7:00 pm.

USACE will distribute this EA and an accompanying FONSI for a 30-day public comment period between 2 January and 2 February 2024.

Section 6 – References

Bureau of Reclamation (BOR). 2016. Chapter 4: Columbia River Basin. Reclamation, managing water in the west. SECURE Water Act Section 9503(c)-Reclamation Climate Change and Water 2016.

Brannon, E. L. 1972. Mechanisms controlling migration of sockeye salmon fry. The International North Pacific Fisheries Commission Bulletin 21:86.

Bugert, R., D. Bambrick, L. LaVoy, S. Noble, B. Cates, K. MacDonald, S. Carlon, S. Hayes, J. Lukas, P. Archibald, K. March, K. Bauersfield, and S. Bickford. 1998. Aquatic species and habitat assessment: Wenatchee, Entiat, Methow, and Okanogan watersheds. Exhibit C. in Rocky Reach Anadromous Fish Agreement & Habitat Conservation Plan, Rocky Reach Hydroelectric Project, FERC No. 2415. Public Utility District No. 1 of Chelan County, Washington. Wenatchee, Washington.

Burgner, R. L. 1991. Life history of sockeye salmon. Pages 1-118 in C. Groot and L. Margolis, editors. Pacific salmon life histories. University of British Columbia Press, Vancouver, BC.

Chapman, D. A., A. Giorgi, M. Hill, A. Maule, S. McCutcheon, D. Park, W. Platts, K. Pratt, J. Seeb, L. Seeb, and F. Utter. 1991. Status of Snake River Chinook salmon. Final Report submitted to ESA Administrative Record for Snake River Chinook salmon. Pacific Northwest Utilities Conference Committee. Portland, Oregon. 531p.

Chelan County PUD. No. 1. 1998. Rock Island background biology, Exhibit F. in Rock Island anadromous fish agreement & habitat conservation plan, Rock Island Hydroelectric Project, FERC No. 943. Public Utility District No. 1 of Chelan County, Washington. Wenatchee, Washington.

Congressional Budget Office (CBO). 2022. Emissions of Carbon Dioxide in the Transportation Sector.

Connor, W. P., J. G. Sneva, K. F. Tiffan, R. K. Steinhorst, and D. Ross. 2005. Two alternative juvenile life history types for fall Chinook salmon in the Snake River Basin. American Fisheries Society 134:291-304.

Good, T. P., R. S. Waples, P. Adams (eds.). 2005. Updated status of federally listed ESUs of West Coast salmon and steelhead. National Marine Fisheries Service Technical Memorandum, NMFS-NWFSC-66.

Gustafson, R. G., T. C. Wainwright, G. A. Winans, F.W. Waknitz, L. T. Parker, and R. S. Waples. 1997. Status review of sockeye salmon from Washington and Oregon. U.S. Dept. Commerce. NOAA Technical Memo. NMFS-NWFSC-33, 282 p.

Healey, M. C. 1991. Diets and Feeding Rates of Juvenile Pink, Chum, and Sockeye Salmon in Hecate Strait, British Columbia. Transactions of the American Fisheries Society 120:303-318.

Livesley, S.J., Dougherty, B.J., Smith, A.J., Navaud, D., Wylie, L.J., & Arndt, S.K. 2010. Soil-atmosphere exchange of carbon dioxide, methane and nitrous oxide in urban garden systems: impact of irrigation, fertiliser and mulch. Urban Ecosystems, 13, 273-293.

Manzer, J. I., and I. Miki. 1985. Fecundity and egg retention of some sockeye salmon (*Oncorhynchus nerka*) stocks in British Columbia. Can. J. Fish. Aquatic Sciences 43:1643-1655.

Myers, J. M., R. G. Kope, G. J. Bryant, D. Teel, L. J. Lierhaimer, T. C. Wainright, W. S. Grant, F. W. Waknitz, K. Neely, S. T. Lindley, and R. S. Waples. 1998. Status review of Chinook salmon from Washington, Idaho, Oregon, and California. U.S. Department of Commerce, NOAA Technical Memo. NMFS-NWFSC-35, 443p.

Nicese, F.P., Colangelo, G., Comolli, R., Azzini, L., Lucchetti, S., Marziliano, P.A., & Sanesi, G. 2020. Estimating CO2 balance through the Life Cycle Assessment prism: A case – Study in an urban park. Urban Forestry & Urban Greening, 126869.

Park, H., & Jo, H. 2021. Ecological Design and Construction Strategies through Life Cycle Assessment of Carbon Budget for Urban Parks in Korea. Forests.

Quinn, T. P. 2005. The Behavior and Ecology of Pacific Salmon and Trout. American Fisheries Society. Bethesda, Maryland. 378p.

Raleigh, R. F. 1967. Genetic control in the lakeward migrations of sockeye salmon (*Oncorhynchus nerka*) fry. Journal of the Fisheries Research Board of Canada 24:2613–2622.

Taylor, D. 2000. Status of the Yellow-Billed Cuckoo in Idaho. Western Birds 31:252-254.

Townsend-Small, A., & Czimczik, C.I. 2010. Carbon sequestration and greenhouse gas emissions in urban turf. Geophysical Research Letters, 37.

U.S. Army Corps of Engineers (USACE). 2011a. McNary Shoreline Management Plan. Revised Programmatic Environmental Assessment. Walla Walla District, Environmental Compliance Section.

Waples, R. S., R. P. Jones, B. R. Beckman, and G. A. Swan. 1991. Status review for Snake River fall Chinook salmon. U.S. Department of Commerce, NOAA Technical Memo. NMFS-NWFSC, 73p.

Wydoski, R. S., and R. R. Whitney. 2003. Inland Fishes of Washington. 2nd ed. American Fisheries Society and University of Washington Press, Seattle, Washington. 322p.

Appendices

Appendix A: U.S. Fish and Wildlife Service Species List dated 4 October 2023
Appendix B: Memorandum of Agreement Amongst the U.S. Army Corps of Engineers, Walla Walla District, And the Confederated Tribes of the Umatilla Indian Reservation, and the Wanapum Band, and the Washington State Department of Archaeology and Historic Preservation, and the City of Kennewick Regarding the Transfer of 72 Acres of Land within Columbia Park to the City of Kennewick, Washington. 2023.