



May 2021  
Confluence Parkway Project



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# Air Quality Technical Study

Prepared for the City of Wenatchee

May 2021  
Confluence Parkway Project

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**Prepared for**  
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Appendix A Project Description

## ABBREVIATIONS

CAA	Federal Clean Air Act
CFR	Code of Federal Regulations
Chelan PUD	Public Utility District No. 1 of Chelan County
BNSF	Burlington Northern Santa Fe
Ecology	Washington State Department of Ecology
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
MSATs	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
USC	United States Code
USEPA	U.S. Environmental Protection Agency
WAAQS	Washington Ambient Air Quality Standards

# 1 Introduction and Project Description

The Confluence Parkway Project (Project) is a proposed 2.5-mile bypass corridor that is intended to reduce vehicle congestion on SR 285/North Wenatchee Avenue. The Project is located in the City of Wenatchee (City) in Chelan County. Wenatchee is located in a valley in central Washington at the confluence of the Columbia and Wenatchee rivers. Currently, Wenatchee is the largest city in central Washington and is an urban hub for north-central Washington.

The Project extends from the U.S. 2/Euclid Avenue interchange, crosses the Wenatchee River on a new bridge, and extends south to the intersection of North Miller Street and SR 285/North Wenatchee Avenue. The Project area is primarily to the east of the Burlington Northern Santa Fe (BNSF) railroad tracks with a large portion adjacent to the Wenatchee Confluence State Park, including the Horan Natural Area. The sections that follow provide a description of key Project elements and construction methods. The Project will provide relief from the current North Wenatchee Avenue Bridge bottleneck and alleviate vehicle congestion in this area. A full project description can be found in Appendix A.

## 2 Regulatory Context

State and local regulations and policies related to the Air Quality study area are discussed in this section. These guiding regulations will be followed throughout the design and construction of the Confluence Parkway Project.

In addition to the regulations described in this section, there are regulatory considerations related to the Federal Energy Regulatory Commission's (FERC) license for the Rock Island Hydropower Project. The Public Utility District No. 1 of Chelan County (Chelan PUD) purchased the Wenatchee Confluence State Park and the Horan Natural Area as part of the Rock Island license. Any changes to these recreational resources will require FERC approval.

### 2.1 Federal Laws, Plans, and Policies

#### 2.1.1 *Federal Clean Air Act (42 United States Code 7401)*

The Clean Air Act (CAA) and its subsequent amendments establish air quality regulations and the National Ambient Air Quality Standards (NAAQS). The U.S. Environmental Protection Agency (USEPA) oversees the CAA and has delegated enforcement of these standards to the states. The NAAQS establish allowable levels of harmful pollutants set by USEPA in accordance with the CAA. The CAA establishes two types of standards for ambient air quality: primary and secondary standards. Primary standards concern the minimum level of air quality necessary to keep people from becoming ill and are aimed at protecting public health. Secondary standards are aimed at the promotion of public welfare and the prevention of damage to animals, plants, and property. Section 176(c) of the CAA

establishes the General Conformity rule. This rule states that a federal agency cannot support an activity unless the agency determines that the activity will conform to the most recent USEPA-approved State Implementation Plan. This means that projects using federal funds or requiring federal approval must not: 1) cause or contribute to any new violation of a NAAQS; 2) increase the frequency or severity of any existing violation; or 3) delay the timely attainment of any standard, interim emission reduction, or other milestone. The area is in attainment and therefore a conformity analysis is not required.

### 2.1.2 *Emission Standards for Non-Road Diesel Engines*

To reduce emissions from off-road diesel equipment, USEPA established a series of increasingly strict emission standards for new off-road diesel engines. Tier 1 standards were phased in from 1996 to 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006, Tier 3 standards were phased in from 2006 to 2008, and Tier 4 standards were phased in from 2008 to 2015. These standards apply to project-related off-road construction equipment, based on year of manufacture.

### 2.1.3 *Mobile Source Air Toxics Analysis in NEPA Documents*

The National Environmental Policy Act (NEPA) requires, to the fullest extent possible, that the policies, regulations, and laws of the federal government be interpreted and administered in accordance with its environmental protection goals, and that federal agencies use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment (42 United States Code [USC] 4332). In addition to evaluating the potential environmental effects, the Federal Highway Administration (FHWA) must also consider the need for safe and efficient transportation in reaching a decision that is in the best overall public interest (23 USC 109(h)). The FHWA policies and procedures for implementing NEPA are contained in regulation 23 Code of Federal Regulations (CFR) Part 771.

The FHWA, USEPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from Mobile Source Air Toxics (MSAT) emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field. The FHWA developed a tiered approach with three categories for analyzing MSAT in NEPA documents, depending on specific project circumstances:

- *No analysis for projects with no potential for meaningful MSAT effects:* For projects that are categorically excluded under 23 CFR 771.117, or are exempt from conformity requirements under the CAA pursuant to 40 CFR 93.126, no analysis or discussion of MSAT is necessary. For other projects with no or negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is recommended.

- *Qualitative analysis for projects with low potential MSAT effects:* The types of projects included in this category are those that serve to improve operations of highway, transit, or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase MSAT emissions.
- *Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects:* This category includes projects that have the potential for meaningful differences in MSAT emissions among project alternatives. Projects in this category would create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location, involving a significant number of diesel vehicles for new projects or accommodating a significant increase in the number of diesel vehicles for expansion projects. Projects that create new capacity or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes would also be in this category.

## 2.2 State Laws, Plans, and Policies

### 2.2.1 *Washington Clean Air Act (Revised Code of Washington 70.94)*

The Washington Clean Air Act sets forth the state law regarding outdoor air pollution and establishes a system of regional air pollution control authorities to implement federal and state air pollution control regulations. The rules and regulations adopted by an air pollution control authority, pursuant to the Washington Clean Air Act, preempt local ordinances for the regulation of air pollution.

### 2.2.2 *Washington Ambient Air Quality Standards*

The Washington State Department of Ecology (Ecology) establishes Washington Ambient Air Quality Standards (WAAQS). Local air quality is measured against these national and state air quality standards. If measured data indicates that an area meets the standards, the area is designated by USEPA as an “attainment area.” Areas that do not meet the standards are designated as “nonattainment areas.” After air monitoring shows that a nonattainment area is meeting health-based air quality standards and has a 10-year plan for continuing to meet and maintain air quality standards, USEPA re-designates the area as a “maintenance area.” Ecology’s Central Regional Office monitors regional air quality and reports air pollutant concentrations at the county level.

## 3 Methodology

Direct impacts would occur as a result of the Project. This would include short-term emissions from construction equipment used to construct the roadway. The potential effects associated with emissions from operation of heavy-duty diesel equipment, dust-generating activities, and trucking activities within major construction areas was qualitatively assessed. The analysis also considered the potential of longer term effects associated with changes in traffic conditions during major



construction (as a result of changes in traffic patterns during major phases of construction and construction related trucking activities on the local roadway network) and after construction.

## 4 Affected Environment

Air quality is a measure of how clean or polluted the air is. Air pollution occurs when harmful or excessive quantities of substances, including gases, particles, and biological molecules, are introduced into Earth's atmosphere. Regulatory agencies regularly monitor air quality by measuring the amount of criteria pollutants (defined as carbon monoxide [CO], ground-level ozone [O<sub>3</sub>], lead [pb], nitrogen dioxide [NO<sub>2</sub>], particulate matter [PM], and sulfur dioxide [SO<sub>2</sub>]) and fugitive dust present in the air and comparing levels to federal and state standards. Criteria pollutants and fugitive dust are generated from a variety of sources, including vehicle exhaust, construction and landscaping equipment, electricity production, fires, and activities that generate dust, such as vehicle movements on dirt roads.

### 4.1 Study Area

Effects on air quality were evaluated in areas likely to be affected by changes in pollutant concentrations due to changes in traffic conditions resulting from the bypass corridor. It also includes areas that are likely to be affected by increased emissions during construction. Because air emissions move through the air and can be influenced by regional conditions such as weather, local air quality is measured at regional levels against national and state standards. Ecology's Central Regional Office monitors regional air quality and reports air pollutant concentrations at the county level. Therefore, the study area for criteria pollutants includes all of Chelan County rather than a smaller area around the proposed activities.

### 4.2 Regional Setting

This section describes the existing conditions in the study area that contribute to air quality. As noted above, air quality is influenced by the amount of pollutants in the air, as well as regional weather patterns and geography. In Chelan County, the climate is characterized by warm, relatively dry summers and freezing, snowy, and partly cloudy winters. Over the course of the year, the temperature typically varies from 21°F to 88°F and is rarely below 8°F or above 97°. Winds within the study area vary throughout the year, but are predominantly from the west, except during the winter when winds are from the north.

As described in Section 2, USEPA establishes the NAAQS, which are used by state air agencies to monitor air quality levels and develop regulations. Ecology has established the WAAQS. Both criteria standards are shown in Table 1.

**Table 1  
Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	NAAQS	WAAQS
Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	No Standard	50 µg/m <sup>3</sup>
	24-hour	150 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
Particulate Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	15 µg/m <sup>3</sup>	No Standard
	24-hour	35 µg/m <sup>3</sup>	No Standard
Ozone (O <sub>3</sub> )	8-hour	0.08 ppm	No Standard
	1-hour	0.12 ppm	0.12 ppm
Carbon Monoxide (CO)	8-hour	9 ppm	9 ppm
	1-hour	35 ppm	35 ppm
Sulfur Dioxide (SO <sub>2</sub> )	Annual 24-hour	0.03 ppm	0.02 ppm
	3-hour	0.14 ppm	0.10 ppm
	1-hour	0.50 ppm	0.40 ppm
		No Standard	No Standard
Nitrogen Dioxide (NO <sub>2</sub> )	Annual	0.053 ppm	0.05 ppm
Lead (Pb)	Quarterly	1.50 µg/m <sup>3</sup>	No Standard
Total Suspended Particulates	Annual Geometric Mean	No Standard	60 µg/m <sup>3</sup>
	24-hour	No Standard	150 µg/m <sup>3</sup>

Notes:

µg/m<sup>3</sup>: micrograms per cubic meter

ppm: parts per million

Source: Ecology 2017

Local air quality, referred to as the ambient air quality, is measured against the national and state air quality standards presented in Table 1. If measured data indicates that an area meets the standards, the area is designated by USEPA as an “attainment area.” Areas that do not meet the standards are designated as “nonattainment areas.” States must develop plans for meeting standards in non-attainment areas. Additionally, individual federal projects must show that a project is meeting standards in nonattainment areas (known as a conformity analysis). Chelan County is in attainment of the NAAQS for all criteria pollutants.

Existing criteria pollutants in the study area are largely produced by vehicles, construction activities, and fugitive dust. Vehicle emissions occur along transportation corridors, including US 2 and SR 28 and in surrounding communities.

### 4.3 Existing Conditions

The North Wenatchee Avenue corridor is currently the region’s primary traffic bottleneck affecting residents, businesses, and visitors throughout Chelan and Douglas counties. The North Wenatchee

Avenue corridor serves, and will continue to serve, much of the travel demand for Wenatchee's growing economy. The Project area is in-filling with mixed-use development and expanded industrial and commercial uses as described in the 2016 North Wenatchee Master Plan, all of which are currently dependent on North Wenatchee Avenue as the sole route across the Wenatchee River and through the North Wenatchee area. Existing emission sources in the study area are produced by vehicle emissions along transportation corridors and from commercial heavy-duty equipment and dust from roadways.

## 5 Impacts Analysis

### 5.1 Construction Impacts

Construction is anticipated to occur over multiple years, although not continuously over this period. Confluence Parkway would include a combination of new road construction and upgrades to the existing roadway. Construction equipment would include cranes, backhoes, excavators, front loaders, pavement grinders, jack hammers, drilling rigs, pile drivers, trucks, and concrete pumping equipment.

#### 5.1.1 *Direct Impacts*

Air quality emissions are expected to be minor from construction. Direct impacts from construction will occur through use of construction equipment as well as trucks to move equipment and material. Air emissions generated by Project construction activities will consist of exhaust emissions from the operation of construction equipment and construction vehicles and fugitive dust particles from ground disturbance associated with construction of the roadway and Apple Capital Recreation Loop Trail. Construction emissions would also affect recreational users in the park and natural areas. While most emissions would dissipate, there may be localized dust and odors.

Construction activities would follow standard environmental controls and practices, which are assumed to be the responsibility of the contractors doing the work. Examples of these practices include using best management practices for dust control, and using equipment that meets all applicable federal and state requirements, including maintenance standards.

Fugitive dust would be generated from the movement of construction equipment over roads, excavation, earthwork operations, and soil movement. A dust control plan would be developed and implemented to reduce dust levels. Because the study area is in attainment for criteria pollutants, construction emissions would not affect regional air quality.

#### 5.1.2 *Indirect Impacts*

Air quality emissions are expected to be minor from indirect construction sources. Indirect criteria pollutant emissions, fugitive dust, and odors would be generated from truck trips related to construction and diverted traffic during construction. A large portion of Confluence Parkway,

including the new bridge structure, would be constructed without requiring road closures or detours as it will be along a new roadway alignment. It is anticipated that Miller Street would be closed during constructing of the railroad underpass, with local access provided via Maple Street to the south and McKittrick Street to the north. Periodic short-term local detours will be required during construction along existing roadways. The Apple Capital Recreation Loop Trail would be kept open to the extent possible during construction of the roadway and trail realignment.

Because the study area is in attainment for criteria pollutants, emissions from traffic diversions would not affect regional air quality.

## 5.2 Operational Impacts

### 5.2.1 *Direct Impacts*

Long-term air quality emissions are expected to be minor and beneficial from operational sources for the proposed Project. The Project will redistribute a portion of the traffic from North Wenatchee Avenue to Confluence Parkway, a new parallel arterial. Criteria pollutant emissions would be generated from vehicle trip-related travel over the new roadway.

As detailed in the traffic study completed for the Project, the addition of Confluence Parkway will result in lower 2040 traffic levels on North Wenatchee Avenue, resulting in lower levels of congestion and improved operations along the North Wenatchee Avenue corridor. Overall traffic volumes are not anticipated to increase with the addition of the Confluence Parkway. Rather, the Project will accommodate a portion of the traffic that will exist in the future, independent of the Project, in a more efficient manner. The Project also includes intersection improvements at the US 2/Euclid Avenue interchange on- and off-ramps and at the North Wenatchee Avenue/Miller Street intersection to accommodate the expected traffic volumes using Confluence Parkway. These improvements will include signal and channelization improvements.

While the Project will result in lower regional traffic, there will be vehicle trips, and therefore emissions, in areas where there was no roadway before, namely adjacent to the park and natural areas. While most emissions from vehicle trips in these areas would dissipate, there may be localized dust and odors. A vegetative buffer area would be established between the roadway and natural areas where space allows. Trees and evergreen shrub plantings in this area would reduce localized impacts to air quality.

Because the Project will improve operations of a highway by adding capacity to meet the future forecasted needs in a more efficient manner, the proposed Project would reduce air quality emissions by reducing traffic and congestion. The proposed Project will also increase the capacity of bicycle and pedestrian lanes, which will likely reduce vehicle trips, thereby further reducing emissions.

Because the Project has no or negligible traffic impacts, a MSAT analysis is not required as there will be no increase in regional toxics as a result of additional traffic.

### 5.2.2 *Indirect Impacts*

At the conclusion of construction there will be no indirect operational impacts as a result of the Project.

## 5.3 Cumulative Impacts

Cumulative air quality emissions are expected to be minor from direct and indirect construction sources for the proposed Project. The proposed action would contribute to emissions from other area construction projects. However, as the area is in attainment, construction emissions are not expected to be cumulatively considerable.

There are additional transportation projects planned in the region, as reflected in the 2020-2023 Regional Transportation Improvement Program. They primarily include striping, a roundabout, signal upgrades, and pedestrian improvements, without substantial added capacity. Therefore, cumulative impacts from increased emissions due to traffic is minimal.

For a discussion of the Project and greenhouse gasses, please see the Climate Resiliency Technical Study (Anchor QEA 2020).

## 6 Potential Mitigation

The following mitigation measures would be implemented:

- **Dust Control Plan:** A dust control plan would be developed and implemented to reduce dust levels.
- **Equipment Standards:** All equipment will meet all applicable federal and state requirements, including maintenance standards and be equipped with diesel particulate filters where available.
- **Construction Idling Reductions:** Construction contractors will minimize heavy-duty construction idling time to 2 minutes where feasible. Exceptions include vehicles that need to idle to perform work (such as a crane providing hydraulic power to the boom), vehicles being serviced, or vehicles in a queue waiting for work.
- **Vegetative Buffers:** Vegetative buffers will be established in areas between the new roadway and recreational areas where feasible.

## 7 References

Anchor QEA, 2020. *Climate Resiliency Technical Study*. Prepared for City of Wenatchee. October 2020.

Ecology (Washington State Department of Ecology), 2017. Criteria Pollutants and Standards.  
Available at: [http://www.ecy.wa.gov/programs/air/other/Criteria\\_Stnds.htm](http://www.ecy.wa.gov/programs/air/other/Criteria_Stnds.htm).

Appendix A  
Project Description

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Figure 2e	Project Study Area – McKittrick Street to North Mission Street

## ABBREVIATIONS

ADA	Americans with Disabilities Act of 1990
BNSF	Burlington Northern Santa Fe
Chelan PUD	Public Utility District No. 1 of Chelan County

# 1 Introduction

The Project is a proposed 2.5-mile bypass corridor that is intended to reduce vehicle congestion on SR 285/North Wenatchee Avenue. The Project is a part of a larger effort known as the Apple Capital Loop Project, which is a network of projects that, together, will complete an integrated highway, transit, and non-motorized trail loop that functions as the backbone of the Wenatchee Valley's transportation system. The Project will provide relief from the current North Wenatchee Avenue Bridge bottleneck and alleviate congestion in this area.

The Project connects the central downtown area with the U.S. 2/Euclid Avenue interchange on the north end of Wenatchee. The Project area is primarily to the east of the Burlington Northern Santa Fe (BNSF) railroad tracks with a large portion adjacent to the Wenatchee Confluence State Park, including the Horan Natural Area. The sections that follow provide a description of key Project elements and construction methods.

## 1.1 Location

The Project is located in the City of Wenatchee in Chelan County (Figure 1). Wenatchee is located in a valley in central Washington at the confluence of the Columbia and Wenatchee rivers. Currently, Wenatchee is the largest city in north-central Washington and is an urban hub for the region.

## 1.2 Project Elements

### 1.2.1 Roadway Alignment

Confluence Parkway would be a new two-lane arterial street that would begin at the existing U.S. 2/Euclid Avenue interchange, cross the Wenatchee River on a new bridge, and extend south to the intersection of North Miller Street and SR 285/North Wenatchee Avenue. The corridor would have one vehicle travel lane and bicycle lane in each direction. Two-way left turn lanes would be included between Wenatchee Confluence State Park and the U.S. 2/Euclid Avenue interchange as well as south of the junction of Hawley Street and North Miller Street. All Project elements would meet current design standards, including compliance with the Americans with Disabilities Act of 1990 (ADA), where applicable. New traffic signals, illumination upgrades, and safety measures for at-grade railroad crossings would be part of the Confluence Parkway.

Traffic signals would be installed at, and other modifications made to, the existing U.S. 2/Euclid Avenue interchange to accommodate the additional traffic associated with the Confluence Parkway (Figure 2a). The new roadway would continue southwest along the existing Euclid Road alignment, cross the railroad tracks on a new at-grade railroad crossing at Euclid Avenue, and follow along the existing Isenhardt Avenue alignment. The existing at-grade crossing at Penny Road would remain and the intersection of Confluence Parkway with Euclid Avenue would be upgraded from a three-leg to

four-leg intersection to accommodate the through movement on the Confluence Parkway. From there, the new roadway would continue south along the current alignment of Isenhart Avenue to Olds Station Road (Figure 2b). Olds Station Road would end on the west side of the railroad in a cul-de-sac and the at-grade railroad crossing would be removed.

South of Isenhart Avenue, the new road would turn slightly west and continue through the west side of the existing McDougall & Sons warehouses. The existing Wenatchee Confluence State Park entrance would remain in its current location. Modifications would be required to the southwestern portion of the park for the roadway. The existing Wenatchee Confluence State Park staff housing will be removed and replaced with a new housing facility within the park.

Confluence Parkway would cross the Wenatchee River on a new bridge approximately midway between the existing BNSF rail bridge and the Apple Capital Recreation Loop Trail pedestrian/bicycle bridge (Figure 2c). The bridge would be a combined two-level vehicle and pedestrian bridge. The top portion would consist of a vehicle travel lane and bike lane in each direction, and the bottom would consist of a shared use bicycle and pedestrian path that replaces the existing narrow and aging pedestrian bridge. The new bridge would include three piers in the water, which would likely be in the same alignment as those on the existing railroad bridge. The existing pedestrian bridge would be removed after the new bridge is open.

From the river crossing south to Hawley Street, Confluence Parkway would create a new roadway along the east side of the BNSF railroad tracks, which are east of and parallel to the existing alignment of North Wenatchee Avenue, requiring a portion of the western edge of the Horan Natural Area (Figure 2d). It would join the existing alignment of Hawley Street just south of where Hawley Street currently crosses the BNSF mainline at-grade. The at-grade crossing would be closed, with Hawley Street becoming a cul-de-sac west of the railroad tracks.

Confluence Parkway would follow the existing alignment of North Miller Street (Figure 2e). The existing North Miller Street at-grade railroad crossing would be replaced with a new railroad underpass. New signals would be installed at the Walla Walla Avenue and Maple Street intersections. The existing SR 285/North Wenatchee Avenue and Miller Street intersection would be reconfigured to accommodate the new traffic volumes associated with Confluence Parkway. Approximately 450 feet south of that intersection, a new street would connect Miller Street and North Wenatchee Avenue with traffic signals at each intersection. These improvements in the vicinity of the existing Miller Street/North Wenatchee Avenue intersection represent the southern end of Confluence Parkway.

### 1.2.2 *Bicycle and Pedestrian Facilities*

Confluence Parkway would include bicycle lanes in each direction along its entirety. Bike lane buffers would be provided in the more developed areas of the Project to the south of the existing Hawley Street railroad crossing.

Between the north end of the Project and the Wenatchee Confluence State Park entrance, there would generally be a planted buffer and sidewalk on both sides of the roadway. The Project does not propose sidewalks between the Wenatchee Confluence State Park entrance on the north and Hawley Street on the south because pedestrians will use the parallel Apple Capital Recreation Loop Trail along this stretch of roadway and there are no business or residential properties to generate a need for pedestrian access at the street. The sidewalk and planted buffer would continue between approximately Hawley Street and the southern extent of the Project at North Miller Street and North Wenatchee Avenue.

Connections would be provided between the roadway pedestrian and bicycle facilities and the Apple Capital Recreation Loop Trail at both Walla Walla Park and Wenatchee Confluence State Park. North of the Wenatchee River, pedestrians would connect from the sidewalk to the existing Apple Capital Recreation Loop Trail and would use the new combined vehicle and pedestrian bridge to cross the river.

On the north side of the Wenatchee River, the Apple Capital Recreation Loop Trail would largely remain in its current configuration. The trail would be rerouted slightly to align with the new combined vehicle and pedestrian bridge. A new connection from the street level to the trail will also be provided at the Wenatchee Confluence State Park entrance in order to separate non-motorized trail users from vehicular access to the park.

The trail would cross the Wenatchee River on a new combined vehicle and pedestrian bridge, with a travel lane for vehicles on the top deck and a bicycle and pedestrian lane below. On the south side of the Wenatchee River, the trail would converge with the roadway, running parallel on its east side with a vegetated berm separating the trail from vehicle traffic. Retaining walls would also be installed in this area where necessary to minimize impacts to the Horan Natural Area. At the north end of the Public Utility District No. 1 of Chelan County (Chelan PUD) maintenance yard, located between Hawley Street and Wenatchee Confluence State Park, the trail would diverge from the road alignment, continuing to the south between the Chelan PUD property and the Horan Natural Area. It would converge back with the existing trail near the intersection of Hawley Street and Miller Street and Walla Walla Point Park.

The existing pedestrian bridge would remain open to the extent possible. Portions of the trail may need to be temporarily rerouted during construction. The City of Wenatchee will provide notice to the bicycle commuters and recreational trail users in advance of trail closures or rerouting.

Demolition of the pedestrian bridge will be scheduled to occur after the new bridge is operational, if feasible.

### 1.2.3 *Property Acquisition*

The Project would require property acquisition in several areas along the alignment. All acquisitions and relocations would be compliant with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970. A total of approximately 10 acres will be acquired. The acquisition process for most of these properties has not yet begun, except that the City has had preliminary conversations with the owners of the McDougall & Sons warehouses.

Key property acquisitions including those that require building demolition and/or relocations include the following:

- Three residential structures north of Euclid Court, which currently house commercial businesses, would be acquired and demolished to construct the upgrades to the Penny Road/Isenhardt Avenue intersection. One additional residential structure in this area may need to be demolished, pending further design.
- The McDougall & Sons warehouses, which are used for apple packing, would be acquired, and most structures would be demolished. The existing office space on the north side of the property would be preserved.
- Approximately 1 acre of the Wenatchee Confluence State Park would be acquired between the park entrance and the new Wenatchee River bridge. The existing park staff housing would be relocated.
- Approximately 3 acres of the Horan Natural Area would be acquired for the Confluence Parkway alignment and the relocated Apple Capital Recreation Loop Trail. An additional 1.5 acres of Chelan PUD property between the railroad tracks and the PUD maintenance yard would also be acquired.
- The drive-through of the Taco Bell located on North Miller Street would be acquired. The property could be reconfigured with the drive through located on a different part of the property. Business relocation is not anticipated.
- The following properties would be acquired in their entirety. The buildings would be removed and the businesses would be relocated.
  - The Igloo bar and restaurant located on North Miller Street.
  - Denny's located on North Wenatchee Avenue.
  - Valley North Service Center gas station located on North Miller Street.

### 1.2.4 *Utilities*

Construction of the Confluence Parkway offers opportunities to consolidate utility corridors for sanitary sewer, water, electrical transmission and distribution, telecommunications service, and

natural gas. Portions of existing utility infrastructure would require relocation in coordination with roadway construction.

The existing sanitary sewer force main beneath the Wenatchee River would be relocated to the new Confluence Parkway Bridge and extend from the existing Olds Station Lift Station to the approximate location of the existing at-grade railroad crossing at Hawley Street. A portion of the 30-inch regional waterline would be relocated from its current location beneath the Wenatchee River to be suspended from the Confluence Parkway Bridge. Aerial electrical transmission, distribution, and telecommunications lines would be relocated parallel to and adjacent to the new roadway. Electrical distribution and telecommunications would be installed underground within the roadway right-of-way where feasible. Natural gas relocations are anticipated at some locations where they would otherwise conflict with new gravity stormwater facilities.

### *1.2.5 Stormwater*

New stormwater facilities would be installed along the entire Project corridor. Conveyance and treatment facilities will be designed to meet the requirements of the August 2019 Stormwater Management Manual for Eastern Washington and Wenatchee City Code Chapter 9.20, as described in the Project Preliminary Stormwater Report (KPG 2021).

### *1.2.6 Relation to the McKittrick Street/BNSF Grade Separation*

The McKittrick Street/BNSF Grade Separation is a planned project with independent utility and logical termini, located in the southern portion of the Confluence Parkway Project vicinity, at the intersection of Hawley and North Miller streets. McKittrick Street currently ends in a "T" intersection with North Wenatchee Avenue. It will be extended to the east as a grade-separated underpass of the railroad tracks. The extension will continue to a planned round-about at the intersection of Hawley and North Miller streets. The portion of the McKittrick Street project west of the railroad tracks is funded and scheduled for construction in 2021. The railroad undercrossing and the connection to North Miller and Hawley streets is currently unfunded. The City of Wenatchee is working to secure additional funds.

## **1.3 Construction Methods and Timing**

### *1.3.1 Construction Methods*

Confluence Parkway would include a combination of new road construction and upgrades to the existing roadway. The existing roadway would be preserved to the largest extent possible and will follow the existing alignment and profile. In many areas, construction would include grinding the roadway and placing asphalt in the travel lanes and constructing planters and sidewalks adjacent to the roadway. In other places, construction of the roadway would include the removal of existing



asphalt and concrete surfaces, clearing and grading of adjacent areas, and placing subgrade material to form a stable roadbed. New road surfaces would be primarily asphalt and concrete.

Fill would be required on both sides of the new bridge and in the area where the roadway would be constructed on a new alignment. Fill would also be required between the BNSF right-of-way and the top of the portion of roadway that borders the west edge of the wetlands in the Horan Natural Area. All fill would come from existing off-site, permitted sources.

Construction equipment could include, but is not limited to, cranes, backhoes, excavators, front loaders, pavement grinders, jack hammers, drilling rigs, pile drivers, trucks, and concrete pumping equipment. Staging areas would be located within the right-of-way and adjacent City-owned parcels where possible to allow for parking, large equipment storage, and material stockpiles.

The new bridge across the Wenatchee River would likely be supported on drilled shaft foundations within the river. Drilled shafts are created by installing a steel casing, excavating the soil and sediment from within the casing, and placing steel and concrete within the excavated casing.

Construction of the bridge foundations, columns, pier caps, and girders would require the installation of a temporary, pile-supported work access trestle. The details would be developed as design progresses and would likely consist of driven steel pipe piles with steel framing that support timber decking. This trestle would allow for heavy equipment to access the foundation locations and for the delivery of construction materials. The bridge deck, barriers, and pedestrian walkway would likely be constructed without the need of the trestle. The existing pedestrian/bicycle trail would remain open during construction of the new bridge.

A large portion of Confluence Parkway, including the new bridge structure, would be constructed without requiring road closures or detours as it will be along a new roadway alignment. It is anticipated that Miller Street would be closed during constructing of the railroad underpass, with local access provided via Maple Street to the south and McKittrick Street to the north. Short-term local detours will be required as needed for improvements along existing roadways. The Apple Capital Recreation Loop Trail would be kept open to the extent possible during construction of the roadway and trail realignment.

### *1.3.2 Project Timing*

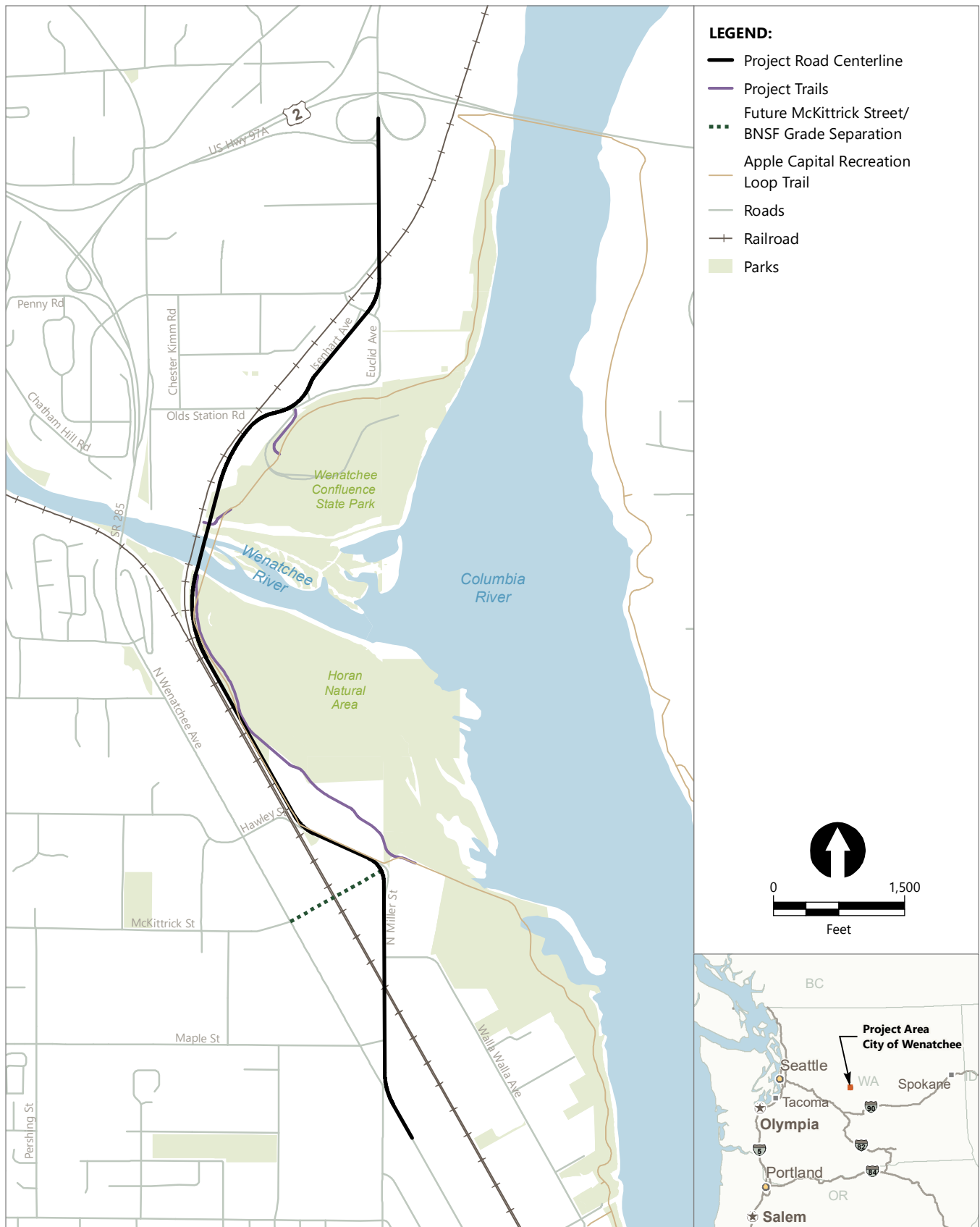
Construction is anticipated to begin in 2025, depending on availability of funding, and will span multiple years. In-water work will be performed within the allowable in-water work windows established by regulatory agencies to minimize potential disturbance of sensitive fish and wildlife species. It is anticipated that the in-water work window will be from July 15 to September 30 of each year. The temporary work access trestle would remain in the water for a period of up to three in-water work windows.

## 2 References

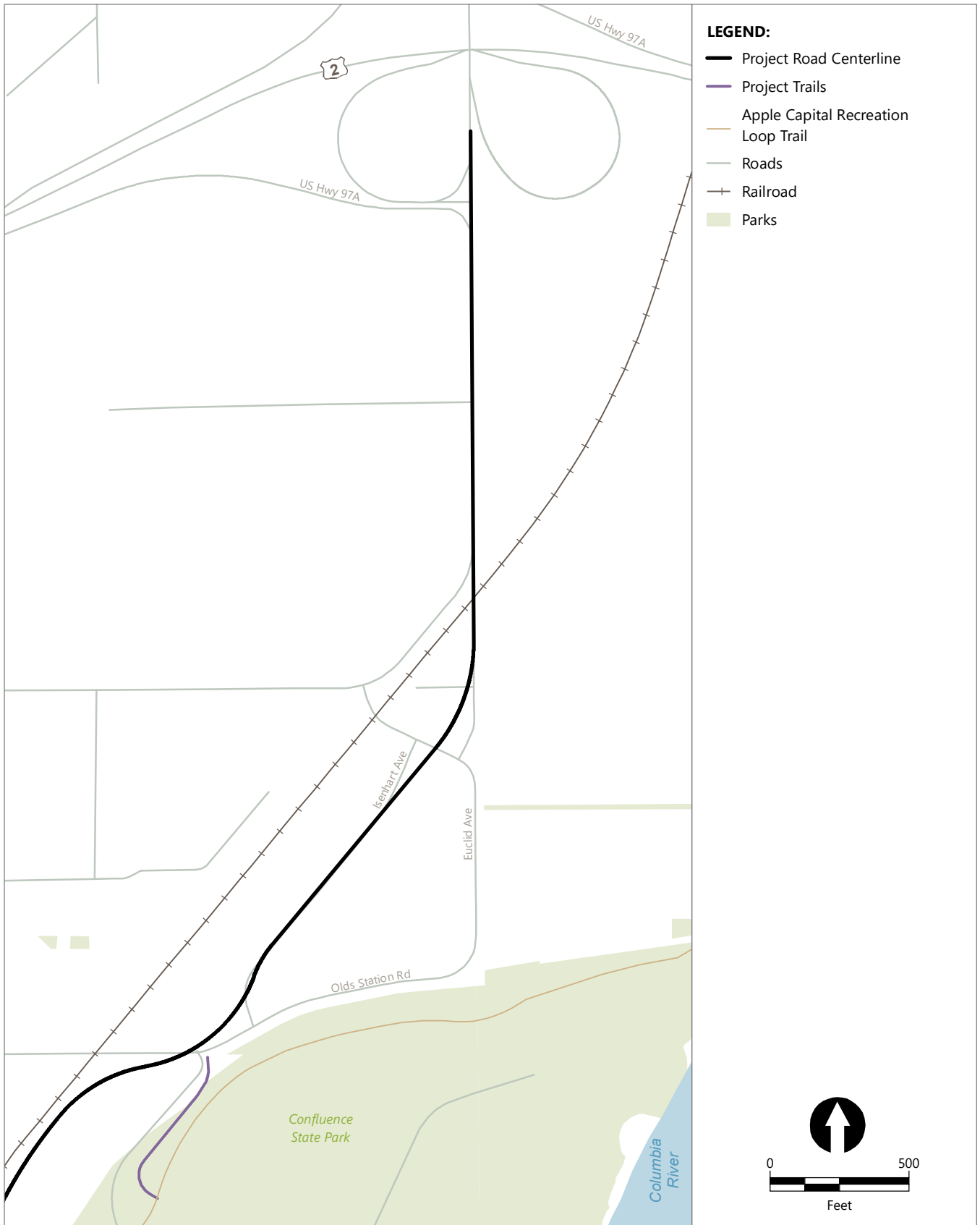
KPG, 2021. *Confluence Parkway Project Preliminary Stormwater Report*. Draft Prepared for City of Wenatchee. February 2021.

## Figures

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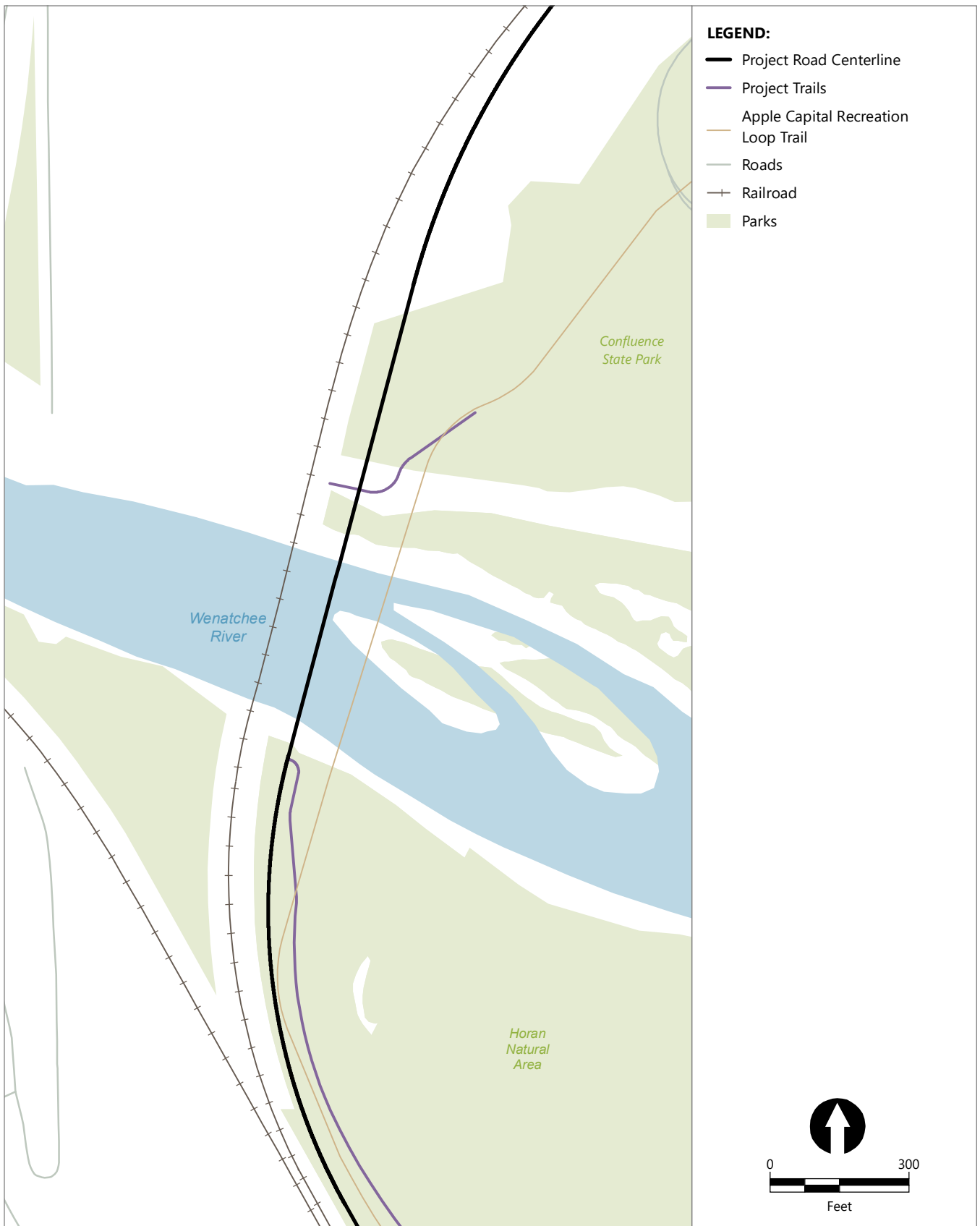
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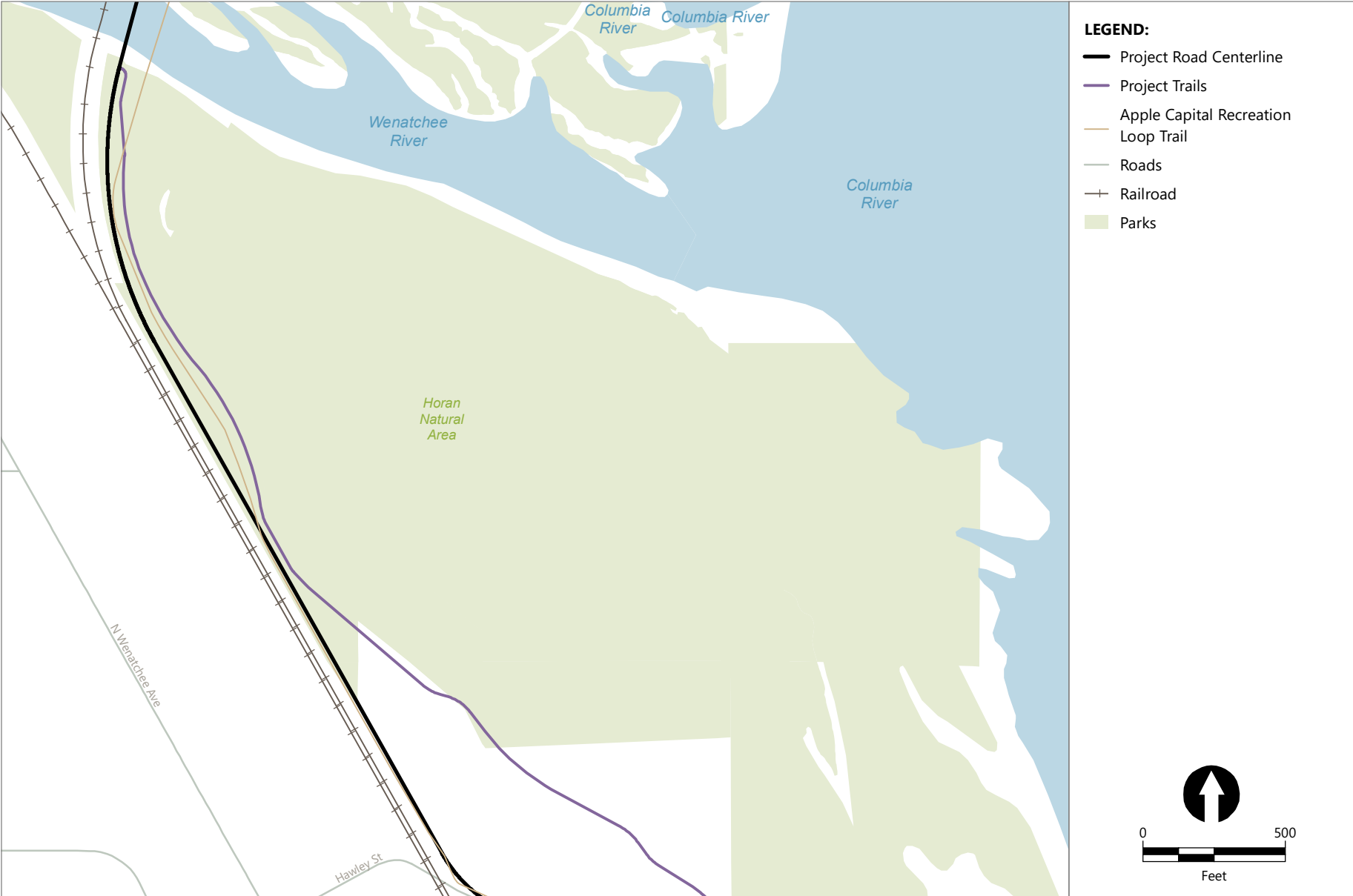
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**Figure 2b**  
**Wenatchee Confluence State Park Vicinity**  
Confluence Parkway  
City of Wenatchee



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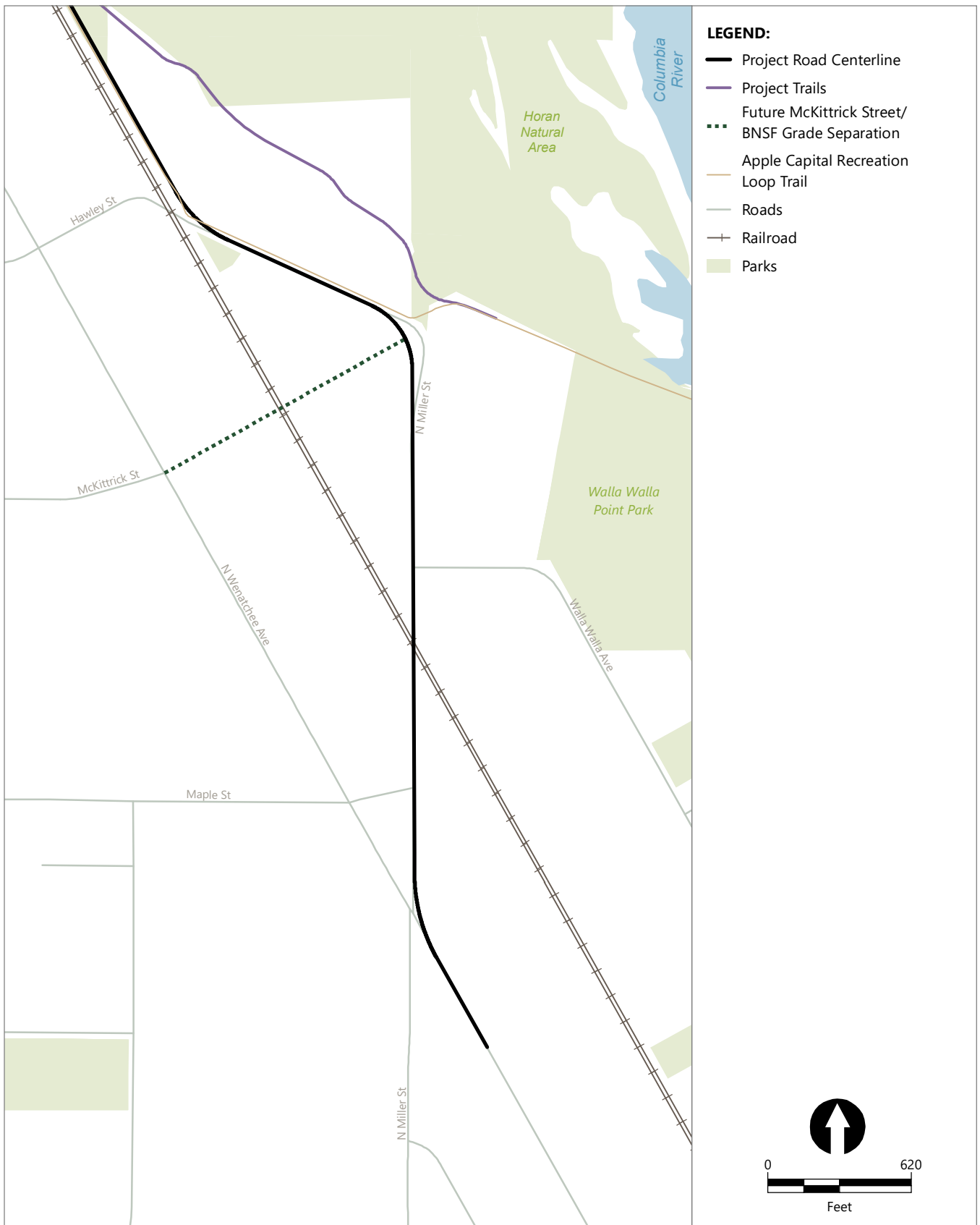


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**Figure 2d**  
**Horan Natural Area Vicinity**  
Confluence Parkway  
City of Wenatchee





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**Figure 2e**  
**McKittrick Street to North Mission Street**

Confluence Parkway  
City of Wenatchee