Background and Introduction

- Chelan PUD has been coordinating with the City of Wenatchee to review environmental studies associated with the City's Confluence Parkway Project.
- The Project has potential to result in significant environmental noise impacts to Wenatchee Confluence State Park and Horan Natural Area—park lands owned and operated by Chelan PUD to meet the Federal Power Act requirements and Federal Energy Regulatory Commission (FERC) policies applicable to the Rock Island federal license.
- To accommodate the Confluence Parkway alignment, the City of Wenatchee is requesting an exchange of land that
 includes portions of Confluence State Park and Horan Natural Area. Land changes would require Chelan PUD and FERC
 approvals, as well as a future Rock Island license amendment and change to certain elements of the FERC-approved
 Recreation Plan.
- Chelan PUD has chosen to conduct additional noise analysis to inform future decisions that will impact Chelan PUD's FERC license obligations and Federal Highway Administration (FHWA) section 4(f) concurrence.
- Chelan PUD's due diligence supports our core value for protecting public resources entrusted to us and making decisions that align with customer owner interests.
- On March 30, the PUD held an open house and guided trail walks and offered an online public survey. We received 970 survey responses, with noise impact to the park as a common comment and concern of the proposed parkway project. In May, the Board directed staff to move forward with an augmented noise evaluation and review and hiring a consultant with federal highway noise study expertise.



Confluence Parkway– Review of City Noise Discipline Report

5 July 2022

Key Findings and Observations

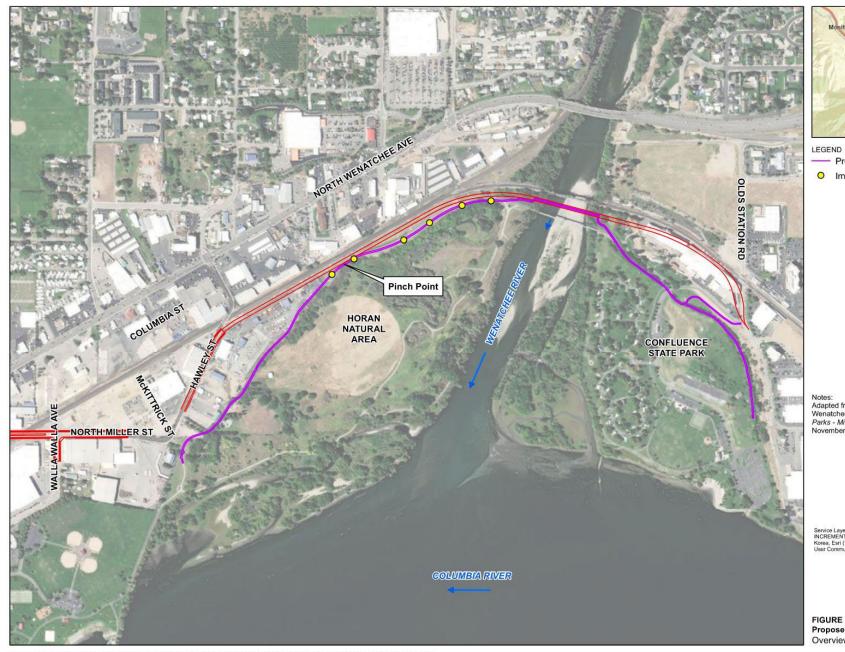
- The City's Noise Discipline Report is compliant with FHWA and WSDOT regulations.
- Appropriate noise mitigation options were considered in accordance with WSDOT policy and procedures.
- The supporting data, assumptions, results and conclusions appear reasonable with no fatal flaws identified during the review.
- Additional issues such as train and nighttime noise levels not directly applicable to the traffic noise study were considered as part of the review.

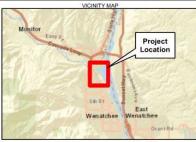
Horan Natural Area and Confluence Park

- Less than a 10 decibel increase, i.e. "substantial impact."
- Less than 66 decibel threshold to be considered an impact.

Apple Capital Loop Trail

- Six receptors had a greater than 10 decibel increase.
- Two receptors closest to the "pinch point" experience a 21-23 decibel increase (46 and 47 decibels existing increasing to 67 and 70 decibels future).
- Increase can be reduced to 1618 decibels with proposed noise abatement (62 and 65 decibels future).
- Existing short-term train noise can be on the order of 60 to 80 decibels, depending on location.





- Proposed Trail Alignment
- Impacted Receiver

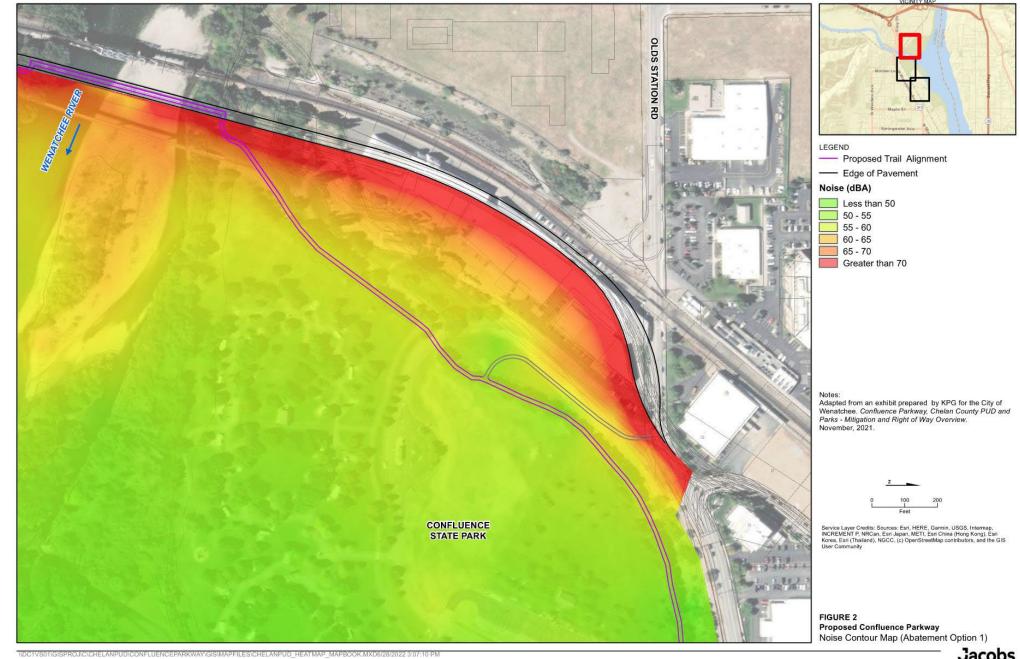
Adapted from an exhibit prepared by KPG for the City of Wenatchee. Confluence Parkway, Chelan County PUD and Parks - Mitigation and Right of Way Overview.

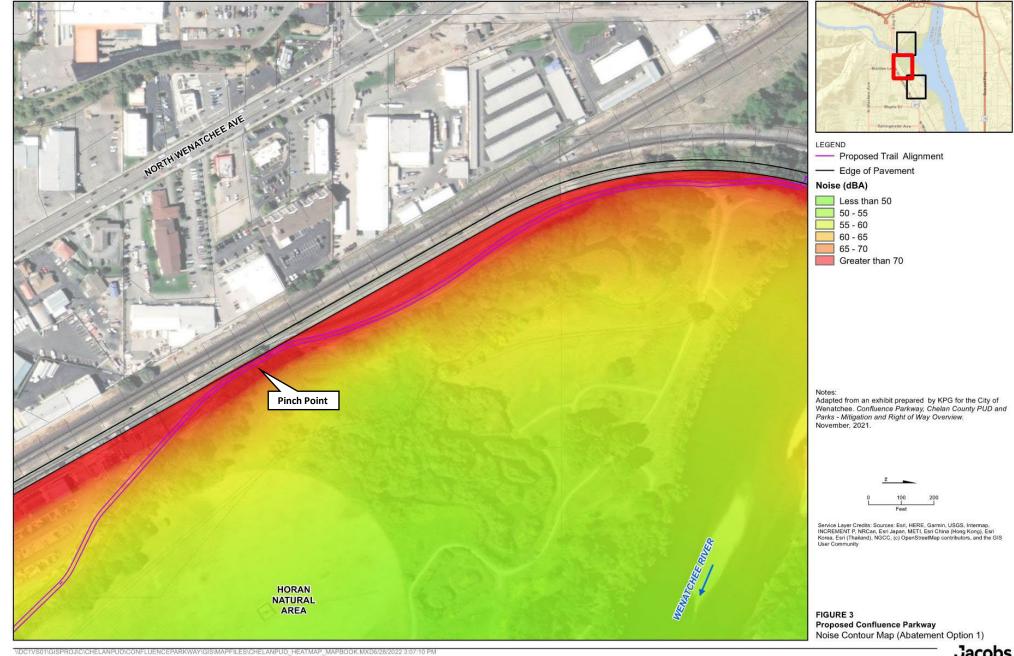
November, 2021.

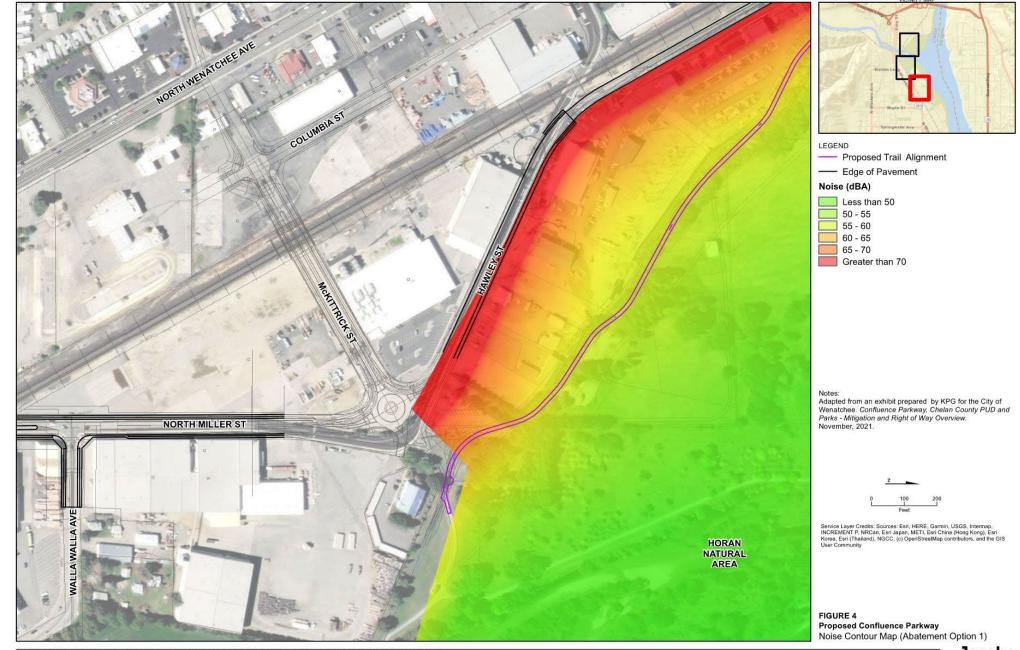


Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

FIGURE 1 Proposed Confluence Parkway Overview Map







Proposed Noise Abatement

 Three options were considered; none were considered feasible and reasonable based on a strict interpretation of FHWA/WSDOT policy.

Noise Abatement Option		Feasibility		Reasonableness		Cost	
		Constructable	Noise Reduction Criteria	Noise Reduction Design Goal	Cost- Effective	Cost of Abatement	Allowable Cost
1	4-foot berm with 4-foot wall at pinch point	Yes	Yes	No	NA	\$ 79,737	\$ 214,359
2	4-foot berm with 2-foot noise wall and 6-foot wall at pinch point	Yes	Yes	Yes	No	\$ 429,963	\$ 348,912
3	4-foot wall with 4-foot noise wall and 8-foot wall at pinch point	Yes	Yes	Yes	No	\$ 696,993	\$ 348,912

Proposed Noise Abatement

- Option 1 is proposed because it also provides aesthetic enhancement:
 - -Three sections of four-foot high earthen berm with landscaping.
 - Four-foot high wall at the "pinch point" for noise reduction.
- City proposes to lower Trail at pinch point by four feet for an eight-foot vertical separation total.

Horan Natural Area Proposed Category A Designation

- Activity Category A is defined as land where serenity and quiet are of extraordinary significance and serve an important public need.
- Category A land has a lower threshold for a noise impact (55 decibels) than Category B or C (66 decibels).
- Category A designation is important because it could set a precedence for future noise studies.
- Requires FHWA approval to be classified as such (very rare).

Summary and Next Steps

- Provide formal comments after Environmental Assessment is published (anticipated fall 2022).
- Prepare Noise Abatement Criteria (NAC) Category A proposal for review by FHWA (and WSDOT).
- Coordination with City:
 - -Prepare mitigation drawings and technical specifications early in the planning process for inclusion in the design-build procurement package.
 - Develop and implement bridge design features to minimize noise effects and to enhance aesthetics.