EARTHQUAKE READY BURNSIDE BRIDGE

Multnomah County is creating an earthquake-ready downtown river crossing

Multnomah County

BETTER – SAFER – CONNECTED February 2021

Technical Report Summary: Wetlands and Waters

This summarizes the key findings of the *Draft Environmental Impact Statement* detailed in the *EQRB Wetlands and Waters Technical Report*.

Affected Environment

Wetlands and waters within the study area were characterized using a variety of published sources and databases, as well as a field survey conducted on June 19, 2019, on the east bank of the Willamette River. No field survey was conducted on the west bank of the river because the Portland Harbor Wall occupies this area. The survey identified the ordinary high water mark (OHWM) of the river, which establishes the limits of jurisdiction for wetlands and waters under federal and state regulations.

No wetlands or hydric soils, which are soil types that develop under wetland conditions, were identified within the study area. The study area does include a section of the Willamette River that is approximately 1,500 feet long on the west bank and approximately 2,250 feet long on the east bank.

Mitigation

Avoiding impacts to waters is not feasible for the build alternatives due to the need for in-water work. Minimization would be achieved by constraining the in-water footprint as much as practicable (while still meeting the seismic resilience purpose of the Project) and by implementing construction best management practices. Compensatory mitigation for impacts of the Project would compensate impacts to aquatic functions as required by the federal Final Mitigation Rule and Oregon's Aquatic Resource Mitigation Framework policy. Potential compensatory mitigation sites have been identified. In addition to the option of performing mitigation, another opportunity would be to purchase mitigation credits from an existing mitigation bank.

More information on this topic is available in the *Draft Environmental Impact Statement* and in the *EQRB Wetlands and Waters Technical Report*.

Impacts from the Bridge Alternatives

No-Build Alternative

The No-Build Alternative would cause no new permanent or temporary impacts to waters prior to a Cascadia Subduction Zone (CSZ) earthquake. A CSZ earthquake would have considerable direct impacts to water resources in the study area due to the bridge collapsing into the Willamette River and the adjacent shoreline.

Impacts Common to all Build Alternatives

While the areas and volumes would differ, all build alternatives would add permanent structure below the OHWM including retrofitted bridge piers (Retrofit Alternative) or replacement piers and shafts (replacement alternatives). Any potential indirect effects of the build alternatives to waters prior to a CSZ earthquake would be minimal.

Construction activities would include temporary fill placement and removal within the river that would vary by alternative and option, including installation of temporary pilings, cofferdams, and work bridges, as well as excavation of portions of the riverbed. All build alternatives would avoid the No Build Alternative impacts which include bridge collapse into the river and shoreline.

Enhanced Seismic Retrofit Alternative

In addition to the common impacts, the Retrofit Alternative would require partial demolition of the bridge substructure, as well as removal and reconstruction of a portion of the Harbor Wall to retrofit the bridge pier immediately adjacent to it. The Retrofit Alternative would require the highest number of permanent shafts and the greatest areal extent of new footings within the river.

Replacement Alternative with Short-Span Approach

In addition to the common impacts, the Short-Span Alternative would include full demolition of the bridge substructure and erection of new permanent structures within the river for the new bridge, with both of these construction activities occurring within cofferdams.

Replacement Alternative with Long-Span Approach

The total area of permanent footings in the river would be similar to that for the Short-Span Alternative, but this alternative would require the fewest number of piers and shafts in the river, including eliminating the in-water pier/bent near the eastern shoreline.

Replacement Alternative with Couch Extension

This alternative would have similar impacts to the Short-Span Alternative. The total area of permanent structure below the OHWM would be the same as for the Short-Span Alternative, but it would require more shafts in the river than the other replacement alternatives.

Impacts from Construction Traffic Management

Without a Temporary Bridge

Without a temporary bridge, no additional impacts to wetlands and water resources beyond those described above are anticipated.

With a Temporary Bridge

Use of a temporary detour bridge during construction would cause added temporary impacts to water resources similar to but greater in magnitude than those described above. If a temporary bridge were built, the first construction activity for any of the build alternatives would be to install temporary pilings, using a combination of vibratory and driving methods, both on land and in the river.

More information

Help shape the future of the Burnside Bridge and visit **BurnsideBridge.org** for more information.

For more information, contact:

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For information about this project in other languages, please call 503-209-4111 or email burnsidebridge@multco.us.

Para obtener información sobre este proyecto en español, ruso u otros idomas, llame al 503-209-4111 o envíe un correo electronico a burnsidebridge@multco.us

Для получения информации об этом проекте на испанском, русском или других языках, свяжитесь с нами по телефону 503-209-4111 или по электронной почте: burnsidebridge@multco.us.

BurnsideBridge.org

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