



residents and businesses. Washington and Oregon Departments of Transportation, (WADOT and ODOT) have a Columbia River Crossing (CRC) project team office in Vancouver, WA. According to the CRC, in May, the CRC spent about \$ 2.4 Million, and thru May 2012, approximately \$150 million taxpayer dollars have been spent. The oversight subcommittee met in Vancouver on Aug. 20, 2012 and focused on the bridge too low, among other issues.

These are the same concerns that a [Coast Guard Letter](#) from Dec. 7, 2011 to the CRC outlined over the adequacy of the Final Environmental Impact Statement (FEIS) on the proposed project. Although the CRC, Coast Guard, and some elected officials were aware of the height issue, the letter wasn't brought to the general publics' attention until [March 2012](#). The US Coast Guard has statutory authority to approve the location and clearances for all bridges over navigable waterways.

Incomplete river users' data included in FEIS



The fact is, the proposed 95 foot high I-5 double-decker bridge with light rail is too low for current river transport and could hamper future growth. The existing I-5 bridge stands at 69 feet in the tallest section, and has a lift span that lifts to 179 feet. In comparison, the I-205 bridge is 144 feet tall over the wide center area of the bridge.

To gauge environmental impacts of the proposed CRC light rail bridge on river users, the CRC used a woefully [incomplete 2004 survey by Parsons Brinkerhoff](#). The survey missed numerous vessels that require high clearance, including a US Army Corps of Engineers dredging vessel. Given that ODOT logs every vessel that requests a lift, this failure is glaring. Furthermore, this old survey was not even updated prior to completing the 2011 FEIS. Since 2004, other companies that require high bridge clearance have also located in Vancouver whose needs are not reflected in the FEIS.

A 2006 public hearing on the proposed project included testimony from companies who utilize the current bridge lift, including [Thompson Metal Fab](#) that needs a 125 foot clearance, which was discounted by the CRC. A CRC "[fact sheet](#)" for the hearing included the 2004 survey data and a graph showing average river levels instead of actual levels. That was problematic since actual river levels, including occasional flooding, greatly affect the navigational clearance as the water peaks since 1995 show below.

#### [High water peaks since 1995](#)

**18.50 ft** on 12/01/1995

**17.50 ft** on 04/27/1996

**27.20 ft** on 02/09/1996

**22.55 ft** on 01/03/1997

**19.03 ft** on 06/05/1997

**17.43 ft** on 06/02/2011

The oversight subcommittee asked the CRC staff for an update on river users having clearance issues with the 95 foot height. Surprisingly, there are now about 36 barges that could be adversely impacted. Just last March the CRC claimed that only a "[handful of marine shippers](#)" would not clear the 95-foot span.

Collectively, it's estimated that about 700 jobs could be negatively affected if a replacement bridge impedes river traffic. Committee member Sen. Ann Rivers (R-LaCenter) questions: "If this project is truly about freight mobility, why would we limit the freight mobility on the river, amounting to as much as \$4 billion per year? Any project we undertake must include river users in our calculus."

The oversight subcommittee also asked CRC staff how many feet of clearance could be gained by removing the light rail from the lower deck of the proposed CRC bridge. Staff did not have that information. C-tran staff explained that a previous light rail vote county-wide had failed. In contrast, this November a light rail sales tax vote is scheduled for only certain parts of Clark County, not county-wide.

U.S. congress members have also weighed in via letter, "We believe that any forthcoming solution should not only address impacts to current users, but should also provide opportunity for future economic growth." They also cited [federal law](#). "the Rivers and Harbors Act clearly states that no bridge shall at any time unreasonably obstruct the free navigation of any navigable waters of the United States."

As to future growth, acres of industrial zoned land upriver toward Camas/ Washougal and Troutdale/PDX could be cut off from larger vessels and cargo headed to and from the Pacific Ocean if the bridge is too low.

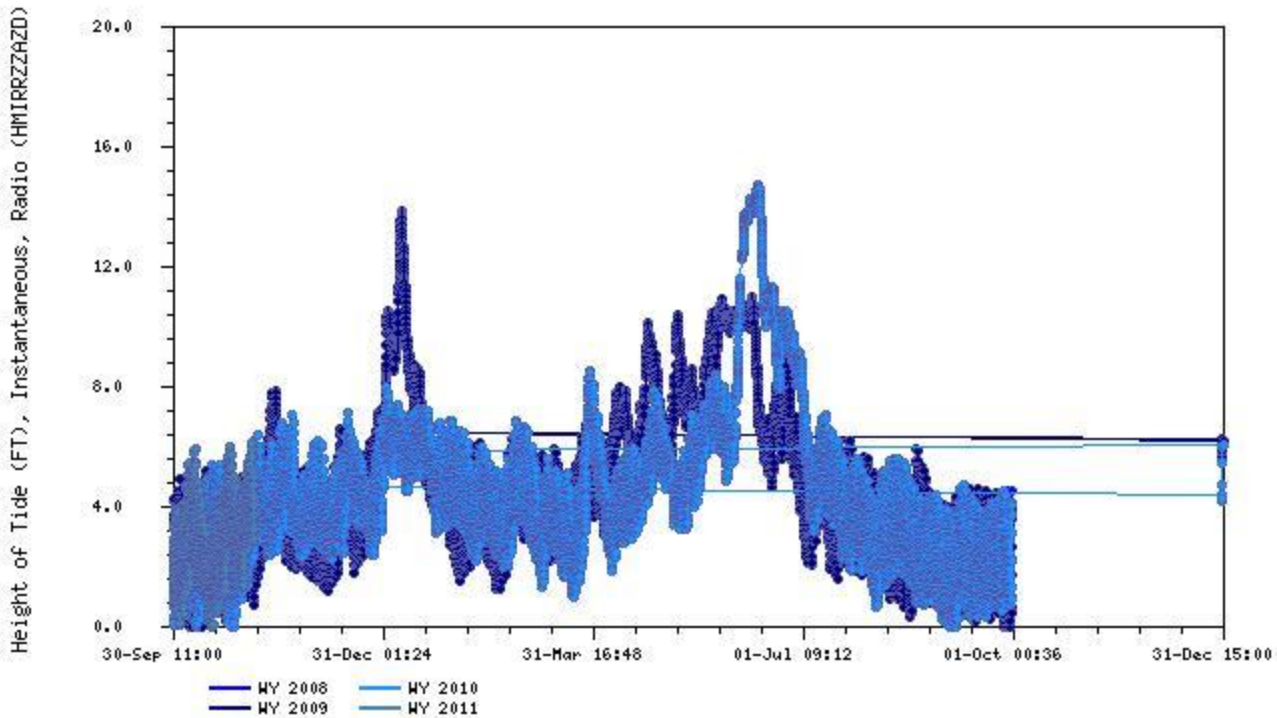
[Navigational clearance depends on seasonal river water levels](#)

Citizen oversight committee member from Clark County, Rhonda Boni-Burden, pointed out that river levels vary throughout the year, so navigation clearance under the bridge is really lower than the official bridge height. CRC staff responded that a 95 foot navigational clearance was applicable at the end of summer. According to an FEIS statement, "The new bridges will provide a minimum proposed navigation clearance envelope of 300 feet wide by 95 feet high." A March 7 CRC e-mail update corrects the statement, "Current plans call for about 95 feet above the Columbia River datum, which provides *between 75 and 95 feet of navigational clearance* depending on water level."

In other words, the "minimum navigation clearance envelope of ...95 feet high" is really a maximum clearance of 95 feet, at the end of the summer. For the remainder of the year the river runs higher, therefore clearance is reduced.

The graphs below from NOAA and the NW River Forecast Center illustrate the variable river levels. At the datum point of "0", navigational clearance is roughly 95 feet. Every foot above the zero line reduces the clearance.

## VAPW:Columbia River At Port Of Vancouver NOAA Tide



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Possible solutions to correcting the bridge height—costs up, up and away

The CRC is now evaluating a range of bridge heights from 95 feet up to 125 feet. A 110 foot bridge could be constructed for about \$25 Million more, plus other unspecified costs. A bridge up to 125 feet could add \$200 Million plus. Adding a bridge lift was also discussed. However, the CRC group explained that the double-decker bridge type with light rail was not conducive to a lift due to the weight of the structure. Additionally, it could cost another \$250 Million plus for a lift.

The FAA would also have to approve additional height to account for PDX airport and Pearson Field Airport clearance requirements. A glide slope is how much lateral distance is needed for every vertical foot of space an airplane needs to land or take-off. These ratios determine how tall structures can be without disrupting air traffic. FAA regulation part 77 specifies a standard guide slope of 20: 1 foot. FAA approval for Vancouver waterfront development west of the bridge was based on a glide slope of 23:1 foot. If similar ratios are applied to the bridge, there appears to be room to increase the bridge height.

Mitigation measures were also suggested, such as paying to relocate for companies who would no longer be able to navigate under the proposed CRC light-rail bridge. As for the US Army Corps of Engineers dredging vessel, it could potentially be modified to fit under a lower bridge, and perhaps other vessels could also be modified.

It is not too late to halt the CRC Light Rail Project

A bridge too low is the second fatally flawed CRC bridge design, heaping more costs on the estimated \$10 Billion CRC light rail project\*. This debacle is yet another reason for serious review of the region's current and true transportation needs, as well as the future. Updated economic, traffic, and tolling projections that factor in a potentially slow or no growth economy are essential.

The CRC Oversight Subcommittee is now asking the tough questions that should have been asked by local officials prior to approval of the FEIS, and should insist on answers. The public expects public projects to invest their dollars wisely. As a comparison, The Hoover Dam Bypass project , The Hoover Dam Bypass project produced eight bridges for less money than the proposed CRC light rail bridge project.

**\*The well-documented cost to taxpayers, if the CRC stays on budget, is \$10 billion. This was established by the [Cortright Report \(PDF\)](#) which used data from an independent review panel hired by the governors of Washington and Oregon. (View the panel's [final report](#) on which Cortright based his findings.)**