

The Willamette: Our Treasure, Our Charge

How healthy is the Willamette?

Just as there are different ways to monitor a person's health (e.g., body mass index, blood pressure, cholesterol), there are different ways to gauge the Willamette's health. Depending on how you look at it, the river ranges from being in great shape to having some big challenges.

Three important questions to ask in understanding the health of the Willamette are:

- How clean is the water?
- What's in the river bottom and riverbanks?
- Can our native, river-dependent fish and wildlife prosper?

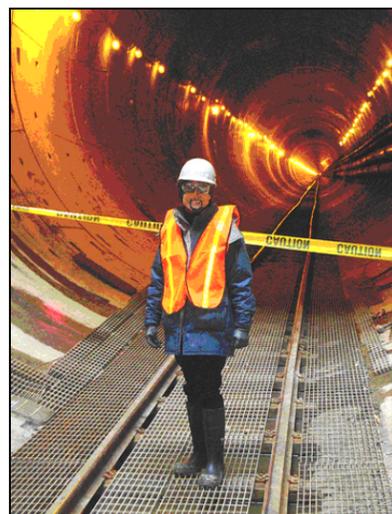
How clean is the water?— Pretty clean!

The Willamette's water quality is much better than in years past. In fact, according to the DEQ's [Oregon Water Quality Index](#), the Willamette has recently rated as high as excellent (see inset). And, [DEQ has declared the river generally safe for swimming](#). Thanks to Portlanders' 20 year commitment to controlling Combined Sewage Overflows and to Clean Water Act controls on industrial pollution, the Willamette's a far cry from the polluted waterway it was in the early 1900s—when fish suffocated and just touching the water could make you sick. Now it's a river that is safe for all types of boating, salmon fishing, and even swimming—as shown by the hundreds of Portland Triathlon participants who dive into the river each year.

The Bad Old Days: In the 1930's, this was the Willamette:



Today, the Willamette's brighter and better.



The Big Pipe is making a big difference.

Willamette Water Quality Index*

	'04-05	'08-09
Upstream	87	91
Downstream	85	90

* The Index is based on eight water quality factors, such as temperature and bacteria, as developed by the state DEQ.

Index key:

0-59	=	Very poor
60-79	=	Poor
80-84	=	Fair
85-89	=	Good
90-100	=	Excellent

Info from: [City of Portland Service Efforts and Accomplishments : 2008-09](#)

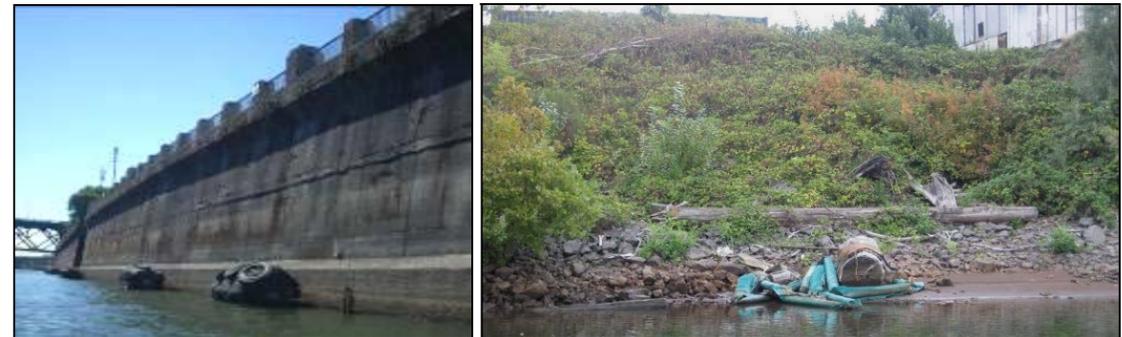
River Bottom and Banks—A Problem.

For much of the last century, Portland's growth and prosperity has taken a toll on the river's health. Hazardous chemicals from industrial activities contaminated the river bank and river bottom—so many that Portland Harbor was listed by the EPA as a [Superfund](#) clean-up site in 2000. The hazardous materials include metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), chlorinated pesticides and dioxin. Some of these, like PCBs, enter the food chain and become concentrated in certain kinds of fish—causing the Oregon Health Authority to issue [warnings](#) about eating the fish. For over a decade, the City of Portland has been working with state and federal agencies and industry to determine where the pollution is and how best to clean it up. A [study](#) was submitted to EPA in early 2012 detailing pollution sites and clean-up options.

Fish and Wildlife—Hard Times.

While the water's much cleaner, we've been really tough on nature when it comes to the river environment. The Willamette has been scooped-out, straightened, sea-walled, and shored-up to make the river that we know today. At one time, 80 percent of our stretch of the river was *less than* 20 feet deep; now, 80 percent is *deeper than* 20 feet—which means that shallow water habitat, which is important for salmon and other species, is now scarce.

There used to be riverside wetlands and creeks that ran free to river. Now most of these are filled-in—by one estimate, nearly 300 miles of streams that originally flowed through Portland are now buried or piped. And today, about half of our riverbanks are "armored" with concrete, metal, or riprap. In fact, over 70 percent of the riverbanks are non-natural and, in many places, covered with invasive species, like blackberry. The result: Chinook salmon, coho salmon, and winter steelhead are on the [Endangered Species List](#)—and other river species, like lamprey, sturgeon, and native turtles, are in trouble.



So, in Portland, the overall health of the Willamette is a mixed bag. It is clean enough to enjoy and treasure, but problems remain that demand our continued commitment. The City of Portland is currently working on many fronts to safeguard the river's health: managing wastewater and stormwater; improving recreational access, addressing habitat needs, and working with others on addressing the Superfund site. For more information, visit the [Rivers Office website](#), or call 503.823.0275.

Good for the Willamette? Good for You!

Finally, beyond wondering whether the Willamette's good for you, it's also worth asking: are you good for the Willamette? Do you...

- take your car to the car wash, rather than letting sudsy water run down the drain and into the river?
- take a light touch when it comes to fertilizers and pesticides?
- try to keep your stormwater from running off your property?
- lend a hand when it comes to river and streamside clean-ups?
- take time to get out on or along the river to enjoy all it has to offer?

If you do, the River thanks you! If you'd like to learn more, visit www.portlandonline.com/river.



The Rivers Office works to connect Portlanders to the Willamette and Columbia Rivers and the benefits they provide: ecologic, economic, recreational, and social.



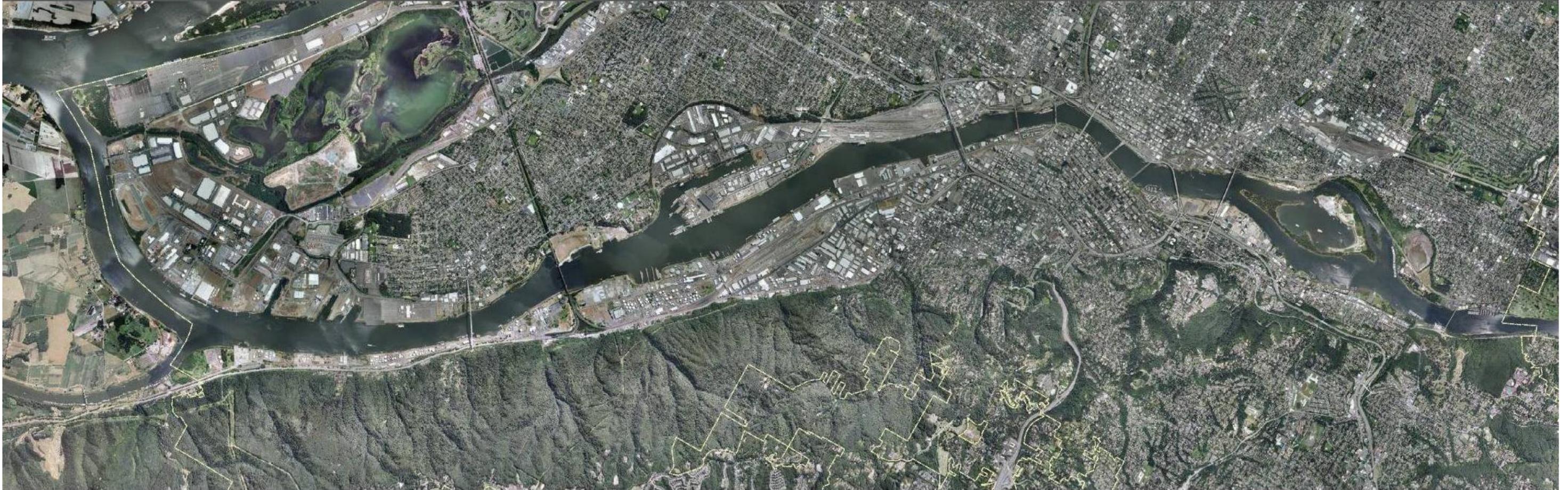
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Willamette River - 2009 Aerial Photos



Portland city boundary



0 0.25 0.5 0.75 1 Miles

