

Urban Ecotopia - City Club of Portland 10/01/99 -

The Willamette River has sustained us for thousands of years, with food, drinking water, transportation, irrigation water, and comfort from its beauty. We have mistreated it. For over a hundred years we paid the River back by using it as a disposal system for our waste, dammed it for power and flood control, dredged it, diked it and changed its character to suit our needs. Unlike many great rivers in this country, the Willamette's entire watershed is in Oregon, so we can not look elsewhere for someone to blame.

Now originally, our sewer system wasn't designed to protect the river, but to efficiently collect and deposit storm water run-off into the river.

After World War II, however, we built a sewage treatment plant, and have increased our capacity to treat wastewater since then.

We created a combined sewer system that intercepted the stormwater and added it to the wastewater flowing to the plant for treatment. Too much rain, and it overflows into the river. It was state of the art design when we built it. But Since Portland continued to grow, we have more storm water going into the sewer system rather than soaking into the ground. In 1990 we estimated the overflows to be about 6 billion gallons a year which is down from 10 billion in 1972. By the way in 1999, we are currently down to 3.2 billion gallons. That's a lot of progress!

The City developed a basic CSO strategy in 1991. The strategy had 3 components:

1. Get stormwater out of the system to make the CSO problem smaller. The more stormwater you can get out of the system, the fewer overflows you will have. The fewer overflows - the smaller the Big Fix needs to be.
2. Clean up the Columbia Slough first by controlling overflows from the 13 Columbia Slough outfalls by 2001. And we are well on our way to meeting that goal.
3. Control overflows from the 42 Willamette River outfalls by 2011... which is now, exactly 20 years from 1991.

By 1993 it was clear that this would be an enormous task. With the preliminary engineering done, the cost-estimate topped \$1 billion to accomplish this effort. With virtually no State or federal money available, it would have to come from sewer ratepayers.

The City then worked with the Oregon DEQ staff, and members of the Environmental Quality Commission to develop a revised plan that adjusted the target from 99 percent volume reduction on the Willamette to 94 percent volume reduction. That change will save ratepayers over \$300 million, and still result in only 4 overflow events a year. And that plan is working: by the end of next year, for a total investment of about \$300 million, CSO volumes will have been cut by approximately 53 percent from 1991.

So, in just eight years we have approached the halfway mark on our journey. To do this, we have more than doubled our sewer rates. This means a typical residential family was paying \$14 per month in 1991 and is now paying \$32 per month .

But as we face the rest of our task, I believe we need to pause and think for a moment about the best way to complete it. And I believe that calls for a broad vision beyond a single engineering project.

For all the success it has had so far, our current approach attacks the problem from a single dimension. Its goal is to reduce the amount of bacteria reaching the river. The solution agreed to involves digging big tunnels on either side of the River and spending another \$400 million to tackle what remains of this one problem. A great deal has changed since the 1994 CSO order was signed.

- Technology has changed, it always does
- We have learned from the success and failures of other localities dealing with similar CSO issues.
- We know more about the quality of Willamette as it enters Portland.
- We now have a fish listing pursuant to the Endangered Species Act.

So before we pour a lot more of that very expensive concrete, shouldn't we make sure that we are taking advantage of what we have learned?

Portland wants to address combined sewer overflows, water quality, urban stormwater, and fish habitat protection and restoration all at the same time. We propose tackling all of these objectives in a comprehensive and integrated manner. To act on one or two objectives on the list at the expense of the others misses tremendous opportunities. Portland's Clean River Plan consists of nine actions that will result in improved water quality in both the Willamette River and our urban streams that feed the Willamette. It will also result in improved water quality, enhanced fish and wildlife habitat, better educated citizens regarding water quality issues, and improved air quality.

This would allow us to make extensive use of innovative techniques such as: on-site use of stormwater, instead of dumping it into the sewer, one example of this is our popular downspout disconnection program.

- building wetlands
- getting smarter about the impacts of miles and miles of pavement on the amount of stormwater produced
- restoring streambanks by planting trees and native plants

We need to think about these options prior to making the financial and engineering commitments. And prior to getting involved with building large diameter tunnels to collect and store mixed storm water and sewage.

Once those tunnels are sized and built - at a cost of hundreds of millions of dollars - we are committed to that solution.

I suggest we consider other options before starting to build the big tunnels. This give us better environmental results for the dollars invested.

Now is the time to look beyond what should be done to remove CSO's from the Willamette River. We need to address all the problems facing our River and our urban streams.

Now, I know that some of these recommendations will make my friends in the environmental community nervous. I understand their apprehension of any delay.

But, I hope that those in the environmental community will understand this evolution of the CSO project as a victory. It is the result of a more rational and holistic view of protecting our water, our river and our ecosystem. We must not undermine our own success by clinging to yesterday's technology and yesterday's vision!