

Natural Resources and Population Growth in Washington State

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For some time now I've traveled the beautiful state of Washington in a small airplane, overseeing our public lands and natural resources. It's a unique vantage point—you're flying low enough that you can actually see what's happening on the ground in some detail, yet you're high enough to get a big picture view. And what I've seen are the impacts that five and a half million people make on the land, simply by being there. The web of highways criss-crossing our farmlands and mountains, the new housing developments sprouting like mushrooms after a good rain, the lakes and rivers whose banks have been altered to accommodate our activities there, the vast farms that have disappeared, the network of clear-cuts where entire forest ecosystems have been forever altered—all are changes that have happened so gradually we've hardly noticed.

A hundred years ago when Washington was first seen by Europeans, it was a vastly different place. Western Washington was covered with timber—lots of it very, very old, and very, very big. The rivers, like the Columbia, were so mighty that they were honored in a series of ballads that spoke to our desire to harness their strength to bring power to the people who would live here. Fish were so plentiful that the old folks say you could walk across the rivers on their backs.

All that has changed now, and will change even more so if we continue to grow as we are now. Washington is a popular place to live—we're in the top ten fastest growing states in the country. And it probably has a lot to do with the beauty of our natural



environment. At the moment, we're loving it nearly to death. And by the year 2045 there will be twice as many people here—population equal to 29 new cities of 180,000 people each. How will our natural environment survive that many people? How do we act now to assure that our grandchildren inherit at least some of the richness that we did?

The problem isn't just about how much we're growing. It's also about the way we're growing—spreading out from urban centers all across our farms and forests—“sprawling” across the landscape (see Figure 1). Hard to believe, but we now have folks who commute from Ellensburg in eastern Washington across the mountain pass to Seattle every day to work. And as we move farther into the “countryside” seeking the peace and serenity, and wild things and places that our hearts and souls crave, we carve into the farmland and forests the indelible pattern of urbanization—strip malls, office complexes, fast food chains.

Washington, like many western states, is losing forest and farm land to development at an astonishing rate. The impact to our natural resource industries has been felt in lost jobs, communities whose whole econ-

omy must somehow change, family traditions that end with our generation. And now we're seeing a steady and growing list of “critters” that are being listed as threatened with extinction, from the northern spotted owl, to the lynx and the salmon. We've eaten away at their natural habitats to the point where they simply can't survive, and as a result, we now have 30 species listed, and more in the listing queue. Our state's urban areas have lost between 90 and 98% of their coastal wetlands—no wonder, then that fish are in trouble.

Recently my department published a report on the status of our natural resources. It's called “Our Changing Nature: Natural Resource Trends in Washington State.”¹ We gathered data from many sources, covering many topics, to indicate the trends and impacts of our population growth. The report documents several important trends: 1) our resources are declining in both quantity and quality; 2) population impacts are the single biggest factor; 3) our growth patterns are having an increasing impact on resources as we sprawl. Here are just a few of the things we found:

- During the past 50 years, Washington has lost two-thirds of our old growth forests
- We now have 1,022 dams on our state's rivers
- We've contaminated 5,100 acres of sediments in Puget Sound so badly they're on the Federal Superfund clean up list
- Less than 1% of the original Palouse Prairie habitat remains
- Washington is the third worst state in the nation in terms of water systems that fail to meet the Safe Drinking Water Act standards

¹To view an online version of “Our Changing Nature,” go to www.wa.gov/dnr. A paper copy of this report can be obtained by calling the Washington State Department of Natural Resources at (360) 902-1724.



Figure 1. Population growth in the region has resulted in significant changes to the Kent Valley south of Seattle. (Left) An aerial photograph from 1965 shows the Green River meandering through farmland, and the construction of Interstate 5. (Right) The 1996 photograph shows the channelized river amidst industrial development in the former farmland. Used by permission of the Washington State Department of Natural Resources.

I could go on, but hopefully you get the picture.

There is reason to be hopeful, though, even in light of all these changes. People all across our state, and, indeed, across the nation, are paying more attention to past actions and their consequences. More of us are realizing that standard of living and quality of life are not the same, and we're beginning to think about how we can have both, without destroying our natural environment. We've learned that acting together, with a plan for change, we can reverse some of these trends.

For example, the peregrine falcon was nearly extinct in 1970, with fewer than 50 pairs in the lower 48 states. We figured out that the pesticide DDT was causing their eggshells to be so thin that the eggs broke when the adult birds tried to hatch them. We made what was at that time a tough choice—to ban DDT—and gave the falcon protection under the Endangered Species Act. As a result of our efforts, more than 1400 pairs inhabit the lower 48 today. Even with our special efforts, it took 28 years to bring the peregrine back from the brink of extinction.

Scientific research provided the key to the puzzle of what was happening to the pere-

grine falcon. During the time since that discovery, the job of pinpointing cause and effect has become more complicated. And our society has become more driven by the dollar values we attach to everything. For a more in depth understanding of the state of our natural resources, a comprehensive bank of reliable scientific data needs to be gathered, analyzed and communicated.

We don't need more data to tell us we have a problem, but we may need more data to help us find good solutions. In the meantime, we need to pay attention to the science we have available, and make choices that put the health of our natural resources at least on a par with all other considerations. We need to ground our thinking in the best science we can find, and recognize that what we know is very limited. But when we don't know all there is to know, we should err on the side of protecting the resources, and leave some of the tough decisions for future generations to resolve. Science can't answer the tough policy questions for us, but it can indicate some of the wrong answers.

Now is the time for us to remember the legacy of natural resources that we inherited, take stock of what we have left, and commit to passing on to our children and grand-

children a legacy that is as rich as the one we inherited. It's not too late, but time is growing short.

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