
Puget Sound Conservation (Part 1)

by J. Patrick Kelley

Based on the book *Saving Puget Sound*, by John Lombard

Note

This purpose of this document is to provide a sample of my writing. John Lombard, author of *Saving Puget Sound*, has graciously given permission to use his book as source material for the essay which follows.

I have attempted to summarize Mr. Lombard's research, factual conclusions, and policy recommendations as accurately as possible. However, this document should not be considered as representing his work in any but the most general way.

If you find the ideas outlined here compelling, please take a look at *Saving Puget Sound* for all the details. Mr. Lombard's approach is both practical and visionary, and the programs he proposes are not only highly ambitious—but have an actual chance of success.

Introduction

I've been interested in the natural world for as long as I can remember, and would like to make sure it's still here for my children to use and enjoy, and for their children and future generations.

But I also want to honor the social and economic needs of my neighborhood, city, and state. I don't want to do anything that would conflict with my responsibilities as a citizen of the vibrant and growing Puget Sound region.

At first it may seem like these two goals contradict each other. The population of the Puget Sound area will continue to increase, doubling by some estimates over the next 50 to 100 years. At the same time, current demands for land and water have already brought some regions very close to a crisis point.

An impossible situation? I don't think so. I believe that we can not only accommodate growth, but actually *improve* the current state of our rural and undeveloped areas. All we need to do is expand on ideas and policies already in place at the state and local levels.

It will be hard work. But to honor our dual responsibilities—to future generations, and to the continued economic and social health of our region—it will be worth it.

Land Use and Water Use: Our Two Greatest Challenges

To truly understand the difficulties involved in supporting both conservation and growth, it's necessary to look at a wide variety of legal, technical, and public policy issues. In doing so, two key issues come up again and again at the heart of things: how we use our land, and how we use our water.

These are big topics, and in order to sort through all the details, we need a framework for making decisions. We need a set of common goals that everyone can agree to, and work towards.

Part 1 of this essay begins by identifying a vision for Puget Sound: a hundred-year plan that will allow for a vital economy, a growing population, and a net improvement in the health of our undeveloped lands and wildlife.

With this vision—these common goals—in mind, we’ll look at how land is used today, and how existing laws and precedents can provide a framework for conserving the land we need for the continued health of the region.

Part 2 (forthcoming) discusses how to provide for all of our future water needs: drinking water; water for farms, industries, and hydroelectric power; and water essential to the wildlife and natural beauty of our streams and rivers.

Finally, Part 2 of this essay concludes by detailing practical ways to implement the proposed solutions.

Conserving nature and accommodating growth is possible.

All we have to do is act.

A Conservation Vision for our Region

Does Puget Sound really need to be “saved”? The Puget Sound region has some unique natural features that most people would agree are worth hanging on to:

- We’re part of the world’s largest remaining temperate rainforest
- We live at the heart of the Pacific Northwest coastal region, which contains some of the world’s largest runs of salmon—biologically unique because they are one of the species that live in the ocean and spawn in fresh water
- We have the second largest estuary system in the country, after Chesapeake Bay—important because temperate estuaries are among the richest marine environments in the world

However, current trends are working against the continued health of these precious resources. For example:

- The Center for Biological Diversity has listed more than 1200 Puget Sound species as either imperiled or critically imperiled—about a fifth of the estimated total.
- The Puget Sound region is expected to add another 1.4 million people by 2025.
- Climate change is already altering entire ecosystems, with unpredictable long-term results.
- Everything’s connected. If you’re interested in protecting orcas, you must also look at their food chain: salmon, herring, plankton, and all the varied habitats each of these species depends on to survive.

It’s not that we don’t care, or are ignoring the warning signs. In the last 20 years, an impressive number of new agencies, laws, and public policy decisions have been crafted to deal with issues like these. So far, however, we have not found the right combination of knowledge and action necessary to address everyone’s concerns.

Conservation Priorities

What do we mean by the Puget Sound region? Technically our area consists of three distinct ecological zones: the Puget Sound lowlands, the Olympic Mountains to the west, and the Cascade Mountains to the east. For the purposes of this book, what we are calling the Puget Sound eco-region includes most of all three zones: the lowlands, from Thurston County to the Canadian border; the Olympics, except for the rainy western slopes; and the Cascades, except for the drier eastern slopes.

Given our stated goal of accommodating growth, and protecting—even improving—wild places, we need take into account a wide range of views. We must listen to farmers and fishermen, legislators and conservationists, non-profit organizations and local watershed boards. In addition, a wide variety of research papers, reports, and conservation plans must be considered.

In putting it all together, a fairly clear picture emerges of what our priorities should be for the next 50 to 100 years. In addition to controlling unchecked development in rural areas, we want to protect and restore key environments:

- Mature forests
- Floodplains and estuaries
- The Puget Sound shoreline
- Native vegetation bordering streams and rivers

Several specific areas in the state are frequently mentioned as needing particular attention:

- The forests of Hood Canal
- The Snoqualmie Pass wildlife corridor
- The South Sound prairies
- Small-scale habitats like key wetlands or Garry oak groves
- Select stream basins that need extra protection because of their vulnerability or special status

Clearly, there will have to be some changes in the way we do conservation if we want to get a start on these ambitious goals. How do we get from here to there? Let's look first at the question of land use.

Using Land Wisely

We can accommodate growth, and actually improve the health and diversity our wild places, by changing how relate to the land. Here are the steps we need to take in order to make that happen:

1. Focus on ecosystems rather than single projects or isolated areas
2. Minimize new ecological losses by directing new development where it will do the least amount of harm
3. Strengthen protections for places with the greatest ecological importance
4. Compensate for ecosystem damage by restoring floodplains, riverbanks, and key areas of the Puget Sound shoreline

Let's examine each one of these points in more detail.

Take the Ecosystem View

Many conservation efforts address only a small portion of any given issue, without considering the larger picture. This approach is certainly pragmatic and satisfying. However, focusing on a single species, an isolated parcel of land, or a specific development project can very easily become an exercise in futility when you step back and look at the health of the ecosystem as a whole.

Washington's Growth Management Act and the Endangered Species Act are both examples of narrow-focus conservation efforts that, despite many positive results, have not managed to control the continuing loss of open space and key species we

see today. Small scale, isolated conservation ignores one simple fact: everything depends on everything else (see Figure 1).

[Insert Figure 1 here]

Figure 1: The Web of Life

So how do we keep our practical solutions from becoming merely symbolic? Unfortunately, there are no easy answers.

In a way, it's kind of like physical fitness. Almost everyone agrees that staying fit is both a great idea and hard work. Contemplating the "hard work" part, we might be tempted to take a few shortcuts—and for a week or so believe that we're actually making progress. Eventually though it becomes clear that reaching our goal really does mean honoring the basic diet-and-exercise recipe for staying fit.

Effective conservation is very similar to healthy living, and not just in the obvious symbolic way. If we want to stay fit, we need to look at all aspects of our lifestyle. If we want to do conservation, we need to consider the ecosystem as a whole. It's the only way to get results.

Taking the ecosystem view can be daunting because it seems to require that everyone, from individual citizens all the way up to the highest levels of government, change attitudes and actions in a major way. Consider this though: if accomplishing our stated goal of accommodating growth and preserving the wild is going to take us beyond our current comfort level—then we probably have a good chance of success!

In fact, taking the ecosystem view actually reduces the complexity of land-use decisions. By looking at the big picture, we get clear answers to our basic questions: Where to grow? What to save? What to restore?

Determine How and Where to Grow

Landowners, particularly in agriculture and forestry, are under a great deal of economic pressure to abandon marginal or money-losing operations and sell the land. This creates a kind of "path of least resistance" for development companies and other business. Eager to answer the demands of a growing population and a growing economy, businesses will pay top dollar for room to expand.

One approach to answering the question "where to grow?" is to use the existing framework of laws and regulations. But that's the system that got us where we are today, and the scale of change required is not something that can be accomplished by legislation alone. To control rural sprawl and restore key areas, we must counter the pressure for development with economic incentives of our own.

This doesn't necessarily mean we have to buy the land outright, although certainly some of that will be necessary. Other less costly ways are possible. For example, we can purchase conservation easements, which both protect the land from development, and allow the landowner to continue using the property in non-destructive ways. We can also provide tax breaks to farmers or forestry companies who agree (for example) to cluster buildings away from sensitive areas, forgo the right to clear land for pasture, follow sustainable timber harvesting practices, or participate in habitat restoration.

Local governments also have an important role in managing growth. Clearer guidelines from the state are needed so that cities and counties can make the many small on-the-ground decisions needed to encourage high-density housing and protect open spaces. In addition, if a particular city or county finds their tax base limited by ecological restrictions, then any lost income must be offset by tax breaks, state funding, or other means.

How are we going to pay for all this?

In this era of tax cuts, threatened essential services, shrinking education budgets, and ever-higher living expenses, our resolve may waver when considering how much all of this is going to cost. Large-scale conservation will be expensive, but it can be done by requiring **payment for ecologically destructive activities**. In fact, asking businesses to help pay for any environmental damage they cause could not only fund the programs described here, but generate enough money to actually reduce current sales and property taxes. See Chapter 4 for details.

Finally, we need to recognize that two key aspects of the Growth Management Act relating to habitat preservation—“best available science” and “no net loss”—are completely contradictory. It’s a noble goal, but we can’t have it both ways. If we put in a shopping center or subdivision, both the ecosystem view and the “best available science” view tell us that the ecological value of the land is going to be diminished in ways that can’t be compensated for by artificial means.

The implications of this are clear: to balance the inevitable ecological damage in developed areas, conservation of undeveloped areas becomes even more of an urgent priority.

Strengthen Protections for Ecosystem Essentials

One of the major shortcomings of the Growth Management act is that it defines rural areas as anything that’s *not* a city or natural resource area (farm, working forest, or mine). The GMA does mention critical areas such as wetlands, watersheds, fish and wildlife areas, and flood zones, and even uses the word “ecosystem” once.

Local governments actually implement the provisions of the GMA, and must decide on their own what constitutes a protected area based on these very general guidelines. In addition, the cities and counties must determine how and to what extent these area are to be preserved and protected.

A better approach would be to start out by saying what a protected area *is*, rather than what it’s not, and then provide specific guidelines on zoning and land-use limits for these areas.

Another way in which current laws fail to protect sensitive lands relates to land-use permits for construction and development. Developers must abide by land-use guidelines in effect at the time they first apply for a permit. This sounds fine until you consider that the permit process might take several months, and the project for one reason or another could be delayed for a number of additional months or even years.

The process of determining what land use laws apply to a given project is called *vesting*, and in most other states, vesting occurs only when the permit is actually issued, or when construction begins. This and several other loopholes in Washington’s permit process result in development and land use that is no longer in sync with current laws or research.

Finally, no matter how good our laws and guidelines are, we cannot expect to truly protect essential aspects of the regional ecosystem unless the cost and impact of additional infrastructure (roads, traffic congestion, increased water demands, and stormwater pollution) is taken into account. In other words, we won’t succeed unless we take the ecosystem view.

Restore Lost Ecosystem Essentials

A major part of our stated goal is to have a net *increase* in the environmental health of the region, while still accommodating growth. This means we can't rely on protection alone. We'll also need an aggressive program of restoration that focuses on ecologically important areas. And one of the most challenging areas for restoration also offers the biggest potential payoff: the river systems, estuaries, and shorelines of Puget Sound.

What do we mean by "restoration?" It's obviously not possible to put everything back the way it was 100 years ago. What we can do though is restore rivers and shorelines enough to restart the natural cycles that support salmon and the whole web of life surrounding them.

The focus on salmon is not arbitrary. In addition to being a powerful cultural symbol; salmon are a "keystone" species--an important indicator of the overall environmental health of the region.

A number of restoration priorities have a direct effect on salmon. Among the most important goals:

- Reestablish and reconnect wetlands and estuaries, which play a central role in returning the ecosystem to a natural and self-sustaining balance
- Restore natural vegetation along riverbanks to prevent erosion and preserve salmon spawning grounds
- In strategic areas along the shores of Puget Sound, remove bulkheads and barriers to help reestablish natural features like eel-grass beds and gravel beaches (important to salmon and the fish they feed on)

This will be a large-scale effort, but more than worth it.

Some goals can be achieved without having to buy land or plan huge public works projects. For example, the Nature Conservancy recently worked with a number of private landowners in the Skagit River Delta to flood selected fields during the fall bird migration.

This kind of effort is a perfect example of one of our recurring themes, and shows the way towards the future: take the ecosystem view, and work together towards common goals.

Puget Sound Conservation (Part 2)

In Part 2 of this essay (forthcoming), we'll examine all the complexities involved in ensuring there's enough water for everyone in the years to come.

Part 2 concludes by proposing specific solutions to many of the daunting land and water use issues—solutions that we can use, starting right here, right now, today.