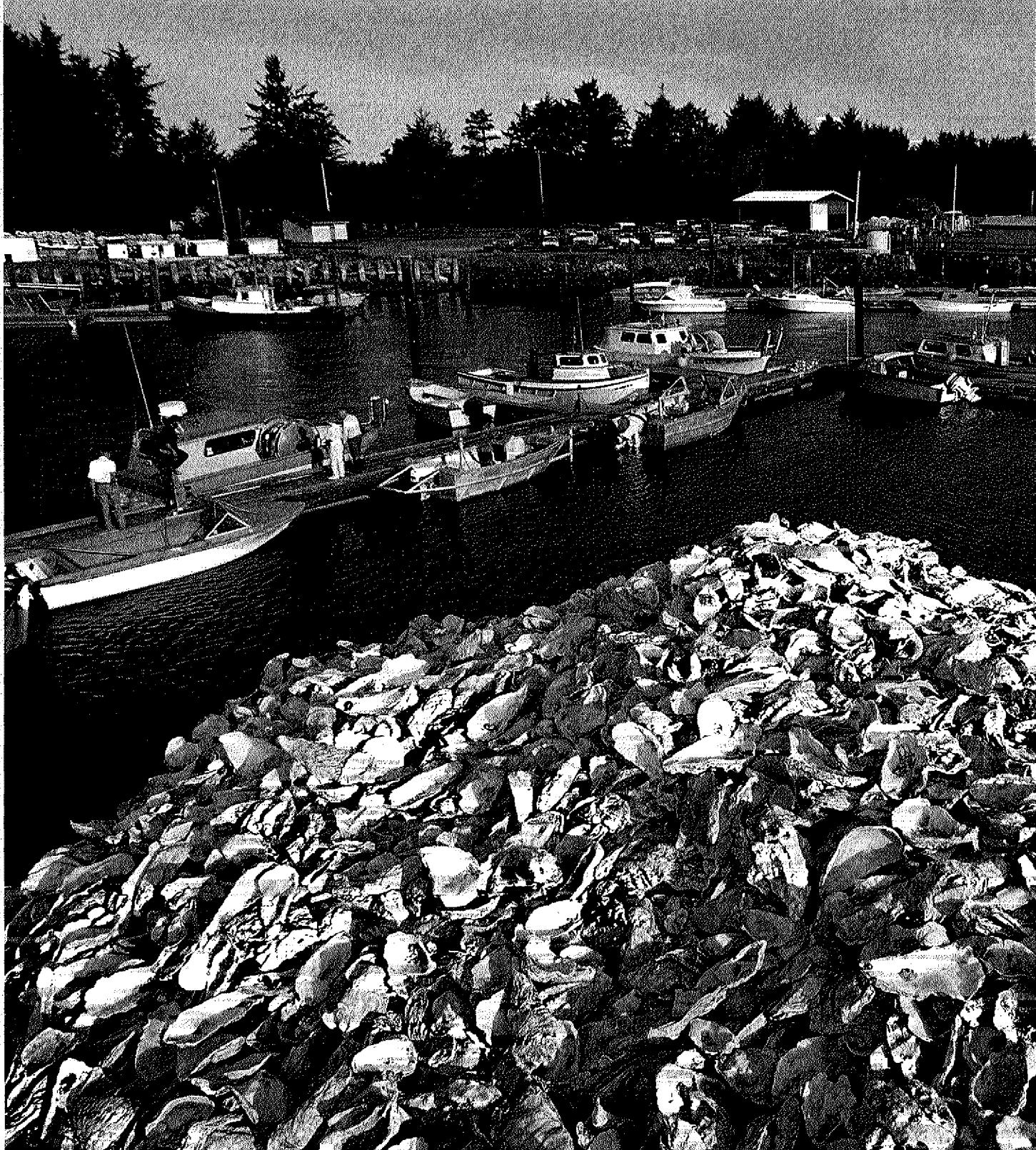


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# WILLAPA BAY LIVING: PROFILE OF A COMMUNITY IN TRANSITION

## A Report on Residents' Attitudes about Their Environment

Based on a study prepared by Dr. Rebecca Johnson and Christopher Farley, College of Forestry, Oregon State University,  
and Dr. Kathleen Bell and Dr. Daniel Huppert, School of Marine Affairs, University of Washington.





## The PNCERS Survey

*To better understand how local communities use and appreciate coastal regions, a research team recently conducted a survey of households in five study sites — Willapa Bay and Grays Harbor in Washington and Yaquina Bay, Coos Bay and Tillamook Bay in Oregon.*

*The research team wanted to know:*

- ◆ *How residents of the five bays value certain aspects of their communities and surrounding natural landscapes;*
- ◆ *What aspects of the communities and landscapes near these bays are perceived as changing — for better or worse;*
- ◆ *How residents participate in outdoor recreation activities tied to the natural environments of their local bays;*
- ◆ *What coastal residents think are threats to their bays; and*
- ◆ *What management approaches residents prefer and how they get information about management and health of their bays.*

*In February 2000, a total of 5,000 surveys were mailed to households within 30 miles of the PNCERS sites. More than half of these surveys were completed and returned. This special report summarizes the responses the research team received.*

## Who Completed the Survey?

In the Willapa Bay site, most (68%) people who responded to the survey were men. About a third of the respondents are 65 years old or older. Close to half of this group describe themselves as retired. Most households are small, with over 70 percent claiming a household size of two or fewer people.

Nearly 40 percent of survey respondents in Willapa Bay are employed full-time outside of the house, with another 13 percent employed either working part-time or at home. The main industries that provide employment are lumber and wood products, government, retail/wholesale sales, fishing, transportation and agriculture or shellfish farming.

Over 65 percent of Pacific County residents have household incomes between \$20,000 and \$75,000 per year, while 14 percent have incomes between \$10,000 and \$20,000 per year. Only 6.3% have annual incomes below \$10,000, and even fewer (5.3%) had incomes above \$100,000 per year. Over 90 percent of residents have earned a high school diploma, 25 percent have earned at least a college diploma and nearly 10 percent have completed some post-graduate education.

## What Residents Say about Willapa Bay

Asked to assess 15 different characteristics of their community, residents rated fewer people, the absence of traffic congestion and the lower incidence of crime as the most important reasons for living in Willapa Bay. Residents also value the views, scenery, clean water and recreation opportunities in the area. More than half rated these characteristics as "very important." Other survey data suggest that residents may have moved to Willapa Bay for other reasons—mainly job opportunities and to be near family and friends.

Over half of the residents believe that housing costs, the overall cost of living and job opportunities are "getting worse" in Willapa Bay (Figure 1). Many also feel that crime rate, population levels and traffic congestion are getting worse. About 40 percent of residents believe there are no changes in the environmental characteristics of the area, although about a quarter of residents are "unsure" about changes in water quality.

"Twenty-three percent of residents believe the characteristics of Willapa Bay are changing so much that they are now considering moving away," says Dan Huppert, an associate professor at the University of Washington's School of Marine Affairs and one of four researchers who prepared the study. "These people cited job opportunities, cost of living, climate, housing costs, population level and recreation opportunities as reasons for a potential move," he says.

These results show that Willapa Bay residents consider the small town characteristics and natural landscape of the area as very important to their quality of life. However, the economic factors that drew these residents to the area in the first place are changing enough for many residents to consider moving.

Most (86%) of the people responding to the Willapa survey said they have participated in at least one of 12 outdoor recreation activities in their county in the past year (Figure 2). Overall, hiking, clamming, beach combing and fishing are the most popular outdoor recreation activities. Kayaking/canoeing and surfing are the least popular.

More people participated in clamming and salmon or steelhead fishing than in birdwatching or crabbing. For salmon or steelhead fishing and birdwatching, people tend to stick close to Willapa Bay, but for crabbing and clamming, they go to the outer coast.

## Threats to Salmon and the Bay Environment

As perceived by residents, the top five threats to Willapa Bay are the spread of non-native *Spartina* cordgrass and European green crab, declines in fish habitat, shoreline development and erosion and logging in upland areas (Figure 3, back page). Residents are unsure about

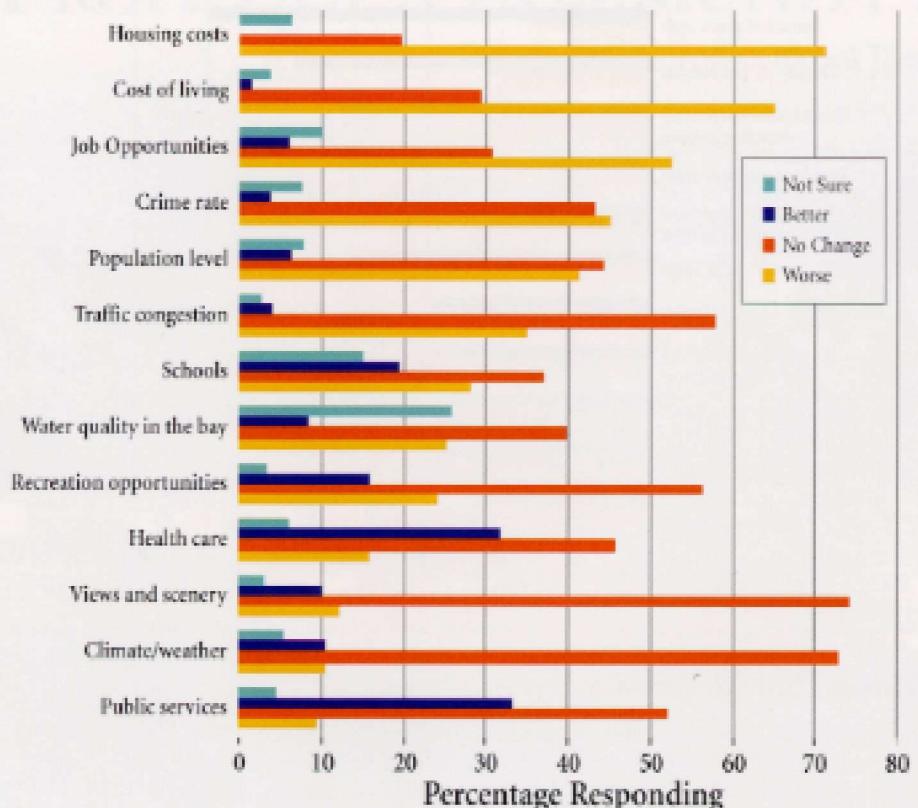
## About PNCERS

The Pacific Northwest Coastal Ecosystems Regional Study (PNCERS) is a multi-disciplinary program to study and evaluate the interrelated effects of human activities and natural changes in oceanic and atmospheric conditions. Experts in a range of disciplines are now gathering data on natural systems and social and economic influences in the PNCERS study area—the nearshore and estuarine ecosystems of the Pacific coasts of Washington and Oregon. By interpreting this information, PNCERS scientists hope to work with resource managers to develop better tools, models and databases to protect the environment and safeguard its resources.

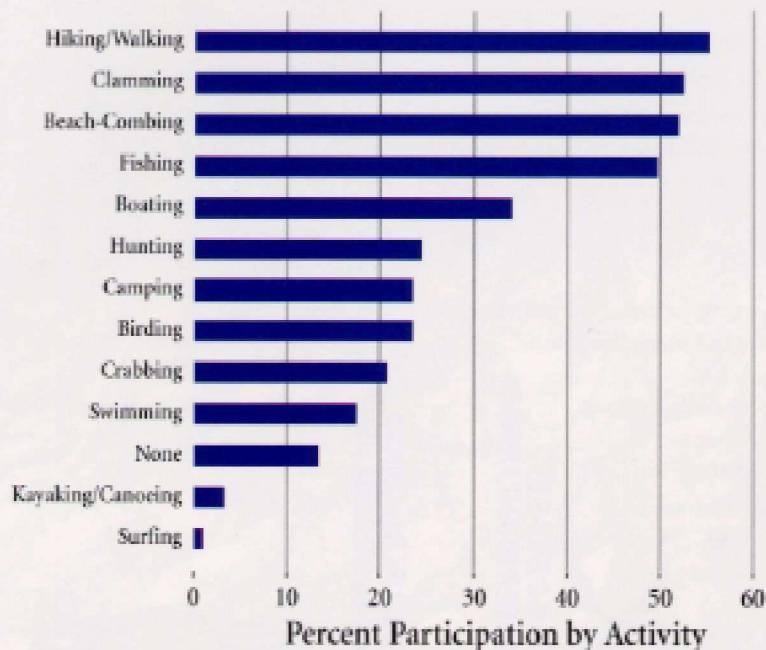
The coastal resident survey is one of several social science projects completed as part of PNCERS. Other projects include a regional economic analysis, an analysis of demographic trends, a survey of scientists and managers of coastal ecosystems, an analysis of ecosystem and environmental management and a survey of visitors to coastal recreation sites.

PNCERS is a joint effort of the Oregon Coastal Management Program, Washington Sea Grant Program, Oregon Sea Grant Program and the National Marine Fisheries Service's Northwest Fisheries Science Center. It is supported by the Coastal Ocean Program of the National Oceanic and Atmospheric Administration. Research is coordinated with the Oregon Coastal Salmon Recovery Initiative and the U.S. Global Ocean Ecosystems Dynamics (GLOBEC) and Coastal Ocean Processes (COOP) programs.

**Figure 1. Changes in community characteristics near Willapa Bay**



**Figure 2. Participation in outdoor recreation activities**



recent declines in commercial oyster-rearing habitat and the dredging of channels.

"The resident's perceptions of threats are similar to those in a recent survey of estuarine scientists and managers" notes Huppert. "Residents, however, rate the threat of oil spills more highly than do the scientists and managers."

Residents perceived degraded river habitats in forestlands, water pollution in rivers and the bay, and too much commercial fishing for salmon as the top three reasons for salmon decline. In contrast, they felt that excessive sport fishing was not a very important cause of local salmon decline.

Residents were also asked if they would vote in favor of an annual increase in taxes over a five-year period to help restore local coho salmon runs. The survey explained that tax money would be spent on improved fishery management and habitat restoration, which would cause a doubling or quadrupling of local runs. The estimated median amount that survey respondents agreed to pay for such restoration is between \$30 and \$50 per year.

## Who Decides?

Willapa Bay residents overwhelmingly support existing partnerships between government and citizens. They also feel that state and county governments should be involved in resource management decisions. However, they do not think that city governments or industry groups should be most influential. Residents showed some support for the involvement of environmental groups in making these decisions.

"We would expect most residents to place greatest faith in government on the most local level, keeping decision-making close to home," says Huppert. "Surprisingly, Willapa residents seem to trust county and state governments more than city government." When asked about tradeoffs between environmental and economic considerations, about half of the residents favor a balance between the two. About a quarter feel that economic considerations should be given priority, while the remaining quarter feel that the environment should be given the most consideration.

Where do residents get information about the Willapa Bay environment? The local newspaper is the most popular source, followed by word of mouth, television and regional newspapers.

Residents rely less on the federal government, the Internet and university extension agents for this type of information. About a third of residents said they trust the information in the local paper. Another 18 percent said they distrust word of mouth, and about a quarter reported that they distrust information from the federal government. Another quarter said they distrusted information from environmental groups.

## Comparing Willapa Bay with Other Coastal Communities

In general, there were more similarities than differences among responses between the five coastal communities. However, Willapa Bay differs in several ways:

- Willapa Bay residents rated low traffic, low population densities, and lower crime rates as the most important features of their community.
- Willapa Bay residents are more likely to be employed in the commercial fishing industry (8% compared to 5% in other bays).
- Of the communities surveyed, only Willapa Bay residents were worried about the spread of *Spartina* and European green crab.
- Residents of Washington communities, including Willapa Bay, were less likely to participate in natural resource-based recreation activities than were their counterparts on the Oregon coast. A key distinction: Washington residents are more likely to go clamming than are Oregon residents. Oregonians gather crabs more often than their Washington neighbors.

## What We Learned

"As expected, Willapa Bay residents, like residents of other coastal communities, are drawn to the attributes of rural life and the natural coastal environment," says Huppert. "In particular, they value the low crime rate, low traffic congestion, and uncrowded towns and countryside around Willapa Bay."

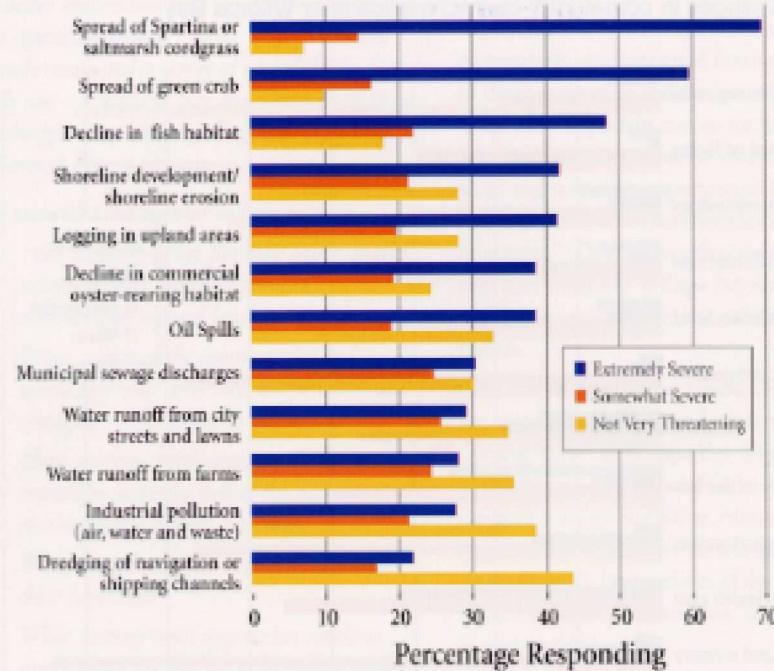
Many residents are concerned about changes to their community, including loss of job opportunities, growing populations and the rising cost of living. Among possible environmental threats to the Bay, survey respondents were most concerned about the spread of non-native animals and plants, declines in fish habitat and shoreline development and erosion.

Further, residents perceived the greatest causes of local salmon decline to be degraded river habitats in forestlands, water pollution in rivers and the bay, and too much commercial fishing. While they were divided about paying additional taxes for salmon restoration, most said they were willing to pay from \$30 to \$50 per year for a restoration program that would at least double the local coho salmon runs.

Also noteworthy, residents rely on the local newspaper for information about regional issues. They have more faith in county and state governments than in city government.

"Overall, residents seem to support strategies that build partnerships among citizen groups and government agencies," Huppert adds. "In summary, they believe that environmental concerns should strike a balance with economic concerns."

Figure 3. Potential threats to the Willapa Bay environment



## Know Your Neighbors

Who lives in the Willapa Bay region? About a third of survey respondents are relative newcomers, having lived in the area for ten or fewer years. These newcomers are more likely to have college degrees, and more are retired than longer-term residents. For recreation, newer residents go fishing less often and crabbing, clamming, and birding more often than longer-term residents. The newcomers tend to view environmental threats as more important than do long-term residents. However, long-term residents are more concerned than newcomers about poor ocean conditions.

Why do people choose to live in Willapa Bay? For many newcomers, being near the ocean is a factor that has drawn them to the community and kept them there. For the long-term residents, job opportunities, being near family and friends, and good schools are more important. Newer residents are generally more optimistic about the state of many of these attributes, but nonetheless, more of the newcomers are considering moving away.

Younger respondents ranked characteristics such as job opportunities, being near family and friends, good schools, and recreation opportunities as more important than did older residents. In turn, climate, good public services, and health care facilities were less important to them. They were generally more pessimistic about the state of various community attributes, and more of them are considering a move away from Willapa Bay.

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