EPA 910/9-92-015

United States Environmental Protection Region 10 1200 Sixth Avenue Seattle WA 98101 Alaska Idaho Oregon Washington

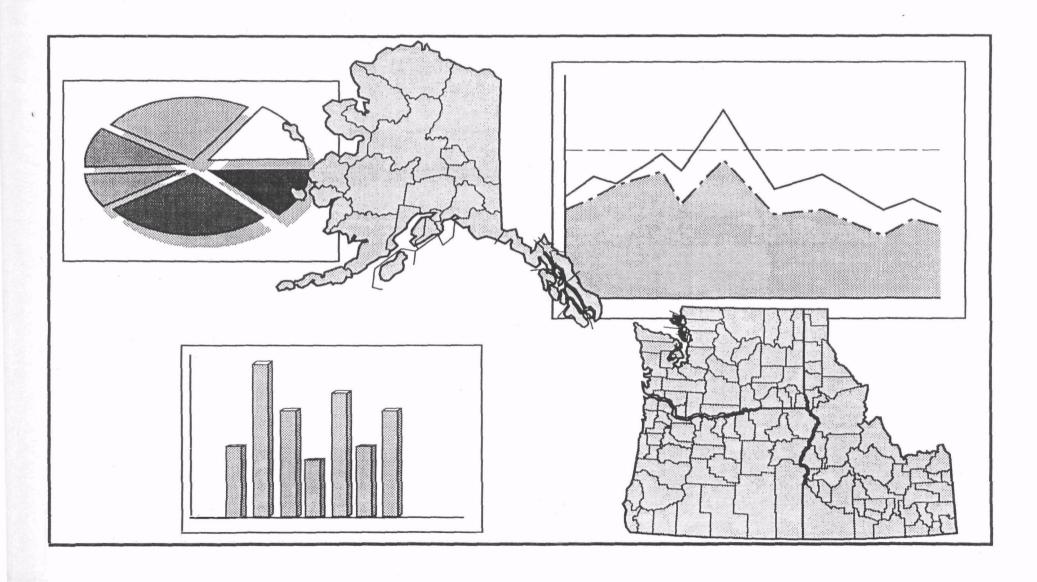
Management Division

Policy Planning & Evaluation Branch

June 1992



Region 10's Strategic Profile



This Strategic Profile, a compilation of data from several sources, provides some background information for use in Region 10's long-term planning process. The Profile is the first edition of an evolving document. Because of resource and time constraints, we were only able to review a portion of the most widely available data. We tried to rely upon sources generally perceived as "neutral" and which presented broad-based views.

The Profile will be updated and expanded as new data become available. It will be expanded to reflect what is being reported on the state of the environment and economy in the Pacific Northwest. We welcome other data or sources for use in revisions of this document.

Inclusion of the data is not an endorsement of any of the references; EPA makes no representation as to the underlying validity or reliability of the data reported.

The Profile was prepared by members of the Region 10 Policy, Planning and Evaluation Branch. We thank those who contributed to this document and Julie Hagensen, Assistant Regional Administrator for Washington Operations, Barbara McAllister, Acting Assistant Regional Administrator for Policy and Management, and Gary O'Neal, Director of Environmental Sustainability, for their participation on the Strategic Planning Team. We especially thank Gary O'Neal for his particular contribution.

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Executive Summary

This Strategic Profile covers the Region 10 states: Alaska, Idaho, Oregon and Washington. The Profile examines regional issues from six major perspectives: economic outlook, workforce, public viewpoint, environment, geographic initiatives, and emerging issues. These perspectives cannot be examined in isolation; each overlaps the others and all must be considered together to best understand environmental issues affecting the Pacific Northwest.

Economic Outlook

The economic forecast for Region 10 is not as promising as one would hope. Much of the region's anticipated loss of economic strength has an environmental connection. The major regulatory impacts on the Northwest economy do not trace to legislation administered by EPA. Rather, it is the Endangered Species Act, the Native American Lands Act and the Forest Management Act that may affect environmental issues for the foreseeable future. Arctic National Wildlife Refuge (ANWR), Columbia and Snake River salmon runs, the spotted owl, closures of marginally situated factories that do not justify investments for toxic emissions -- all may lead to a climate of opinion over the next decade that is less favorably disposed to many aspects of official environmentalism.

The Public Viewpoint

The focus of environmental programs is increasingly shifting from large point sources to the effects of individual sources and behavior. Private property rights, what some consider regulatory burdens, and decreasing economic power have the potential to increase anti-environment sentiments.

Region 10 Workforce

Region 10's workforce is not only experienced but highly trained. About an eighth of regional employees are eligible for retirement, a proportion that will grow in the next four years. This suggests impending attrition in aggregate experience and a need for prudence in recruiting and promoting replacements.

The Environmental Outlook

According to the 1991-1992 Green Index, two Region 10 states, Oregon and Washington, rank in the top 10 as far as positive overall environmental actions and policies. This success is not universal. Washington has one of the most significant regional problems in the areas of water violating Safe Drinking Water Act requirements and total toxics released to surface water.

A common thread in all media programs is the focus on pollution prevention. Geographic targeting, public-private partnerships, and the development of state and local capacities are additional recurring themes. Enforcement programs, regionally and nationally, are getting stronger and more sophisticated in order to use resources most efficiently and wisely for maximum effect.

Emerging Issues

A number of emerging issues are not directly under EPA's jurisdiction: property rights, endangered species protection, global climate change, natural resource conservation and management, and urbanization and growth management. These issues directly influence how well environmental protection works in the Northwest. Region 10's role on these emerging issues is still evolving.

Agency-Wide Directions and Issues

Agency-wide Direction and Issues

EPA's Mission:

The people who work at the Environmental Protection Agency are dedicated to improving and preserving the quality of the environment, both national and global. We work to protect human health and the productivity of natural resources on which all human activity depends. Highly skilled and culturally diverse, we are committed to using quality management processes that encourage teamwork and promote innovative and effective solutions to environmental problems. In particular, we are committed to ensuring that:

- Federal environmental laws are implemented and enforced effectively.
- US policy, both foreign and domestic, fosters the integration of economic development and environmental protection so that economic growth can be sustained over the long term.
- Public and private decisions affecting energy, transportation, agriculture, industry, international trade, and natural resources fully integrate considerations of environmental quality.
- National efforts to reduce environmental risk are based on the best available scientific information communicated clearly to the public.
- Everyone in our society recognizes the value of preventing pollution before it is created.
- People have the information and incentives they need to make environmentally responsible choices in their daily lives.
- Schools and community institutions promote environmental stewardship as a national ethic.

To accomplish the Agency mission, EPA has developed national goals and strategies. Primary goals are to:

 Provide leadership to the Nation's environmental science, research, and assessment efforts.

- 2. Make sound regulatory and program decisions.
- 3. Effectively carry out our programs and policies.
- 4. Improve the global environment

The Ten Themes - Strategies for the Future

EPA has developed 10 themes which define the Agency's main areas of focus. These themes include building better partnerships with our customers, improving our knowledge base, effective outreach, and better management. The themes or strategies for the future are:

- 1. Strategic implementation of statutory mandates
- 2. Improving the science and knowledge base
- Pollution Prevention
- 4. Geographic targeting on an ecosystem basis
- Greater reliance on market and economic incentives
- Improving cross-media program integration and multi-media enforcement
- 7. Building state and local capacity
- 8. International cooperation
- 9. Education and outreach
- 10. Better management and infrastructure

In a variety of ways, Region 10 is addressing the 10 themes in current and planned activities and strategic plans.

The Recommendations from The Science Advisory Board

The Science Advisory Board's report, <u>Reducing Risk:</u>
<u>Setting Priorities for Environmental Protection</u>, cites
steps that the Environmental Protection Agency should
take to improve its efforts, and to involve Congress
and the rest of the country in a collective effort, to

reduce environmental risks. Those steps are identified below.

- 1. EPA should target its environmental protection efforts on the basis of opportunity for the greatest risk reduction.
- 2. EPA should attach as much importance to reducing ecological risk as it does to reducing human health risk.
- 3. EPA should improve the data and analytical methodologies that support the assessment, comparison, and reduction of different environmental risks.
- 4. EPA should reflect risk-based priorities in its strategic planning process.
- 5. EPA should reflect risk-based priorities in its budget process.
- EPA and the nation as a whole should make greater use of all the tools available to reduce risk.
- 7 EPA should emphasize pollution prevention as the preferred option for reducing risk.
- 8. EPA should increase its efforts to integrate environmental considerations into broader aspects of public policy in as fundamental a manner as are economic concerns.
- 9. EPA should work to improve public understanding of environmental risks and train a professional workforce to help reduce them.
- 10. EPA should develop improved analytical methods to value natural resources and to account for long-term environmental effects in its economic analyses.

Environmental Equity

Environmental equity issues are frequently in the news. Although these issues may be new to some of us, the

March/April 1992 <u>EPA Journal</u> reports that information about environmental inequities has been available for some time. Information about inequities in the distribution of environmental hazards was first published in 1971.

The "Toxic Waste and Race" study by the United Church of Christ states that communities with hazardous waste facilities have twice the proportion of minorities as other communities.

The same study found that about half the nation's population live in cities with uncontrolled hazardous waste sites. People of color may face a higher risk of health problems related to the environment. Waste facilities are more often located in their neighborhoods, yet they often lack the economic power to move or the political clout to force a site cleanup.

EPA has found that a significantly higher percentage of African American children (compared to Caucasian children) have unacceptable blood lead levels. The EPA Journal reports "that in nearly every case, the distribution of pollution has been found to be inequitable by income. And, with only one exception, it has been found to be inequitable by race."

The environmental equity issues are a major concern across the nation. The EPA's Environmental Equity Workgroup made eight recommendations to the Agency:

- EPA should increase the priority that it gives to issues of environmental equity.
- 2. EPA should establish and maintain information which provides an objective basis for assessing risks by income and race, commencing with developing a research and data collection plan.
- 3. EPA should incorporate considerations of environmental equity into the risk assessment process. The Agency should revise its risk assessment procedures to ensure, where practical and relevant, better characterization of risk across populations, communities, or geographic areas.
- 4. EPA should identify and target opportunities to reduce high concentrations to risk to different

- population groups, employing approaches developed for geographic targeting.
- Where appropriate, EPA should selectively assess and consider the distribution of projected risk reduction in major rule makings and Agency initiatives.
- 6. EPA should selectively review and revise its permit, grant, monitoring, and enforcement procedures to address high concentrations of risk in racial minority and low income communities. Since states and local governments have primary authority for many environmental programs, EPA should emphasize its concerns about environmental equity to them.
- 7. The Agency should expand and improve its communications with racial minority and low income communities and should increase efforts to involve them in environmental policy making.
- 8. EPA should establish mechanisms to ensure that environmental equity concerns are incorporated in its long-term planning and operations.

Economic Outlook

Economic Outlook

Conditions that govern economic performance of the Pacific Northwest and Alaska have become, with few exceptions, less favorable over the last decade.

The strongest element of the region's economy in the last decade has been aircraft production. Reduction in military procurement, overacquisition and indebtedness by airlines and aircraft leasing firms, development of international competition in airframe production, decentralization of Boeing purchasing practices and decline of international air travel all indicate that the industry will contribute substantially less to the region in the next ten years.

The basic underpin of the regional economy is the forest products industry. Alteration of federal forest management practices, overcutting of private forests, withdrawal of major firms may be expected to reduce output of lumber products by a third, paper products by as much as a half, and result in an oversupply of skilled labor.

Depletion of Alaska's proven petroleum reserves and inhibition of exploration are expected to extend the Alaska's downward slope of personal income and state government revenues that began with falling crude oil prices in the mid 'eighties.

Saturation of electricity generating capacity may be expected to reduce revenues from power export and drive up rates. Competition for water between hydrogeneration and salmon species protection is expected.

Agriculture (which currently produces 2.5% of regional personal income) and food processing are the only segments of the Pacific Northwest economy that appear to present a superior situation. That strength, combined with the attractive lower average wages east of the Cascades, may produce a more vigorous and resilient set of economic changes in Idaho and eastern Washington than in western Oregon and Washington.

Much of the region's anticipated loss of economic vigor has an environmental association. Programs and regulations administered by the EPA, such as Superfund, the Clean Air Act, and wetland issues, have negative economic impacts. Legislation not administered by EPA is also related to the anticipated loss of economic vigor. The Endangered Species Act, the Native American Lands Act, the Forest Management Act, and matters falling within the purview of the Departments of Energy, Defense and Interior involve, major resource utilization issues. ANWR, Columbia and Snake River salmon runs, the spotted owl, closures of marginally situated factories that do not justify investments for toxic emissions — all could cause a climate of opinion in Region 10 over the next decade that is less favorably disposed to many aspects of official environmentalism.

Population Density and Concentration

Region 10, largest in land area of the Agency's regions, is also the most thinly populated. Washington, smallest and most populous of the four states, has a population density virtually identical to the U.S.: 73 persons per square mile versus 71. But Oregon shelters only 29 persons per square mile, Idaho 12; and Alaska's has just under 1, giving the region an overall population density of less than 11 per square mile. See Figure 1.

The region's population is concentrated in the Willamette Puget Trough, an area little more than fifty miles wide at its broadest, that lies between the Coast and Cascade Mountain Ranges. Almost 60% of the 9.3

million inhabitants of the four state region live in 16 western Oregon and western Washington counties that lie partially or entirely within the trough.

Urbanization

Population is highly urbanized. Forty-three percent of the region's inhabitants live in the Seattle-Tacoma and Portland metropolitan areas. Another 10 percent are found in the Spokane, Salem and Eugene Standard Metropolitan Statistical Areas (SMSA). Counties that composed the Medford, Boise, Anchorage, Olympia, Yakima, Bellingham, Tri-Cities and a portion of the Seattle metropolitan areas (prior to the 1985 redefinition of "standard metropolitan statistical area") include another 17%.

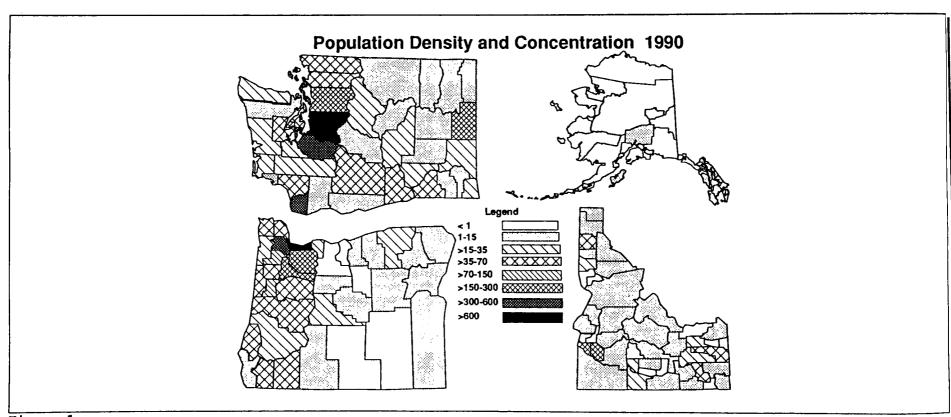


Figure 1
Source: U.S. Dept. of Commerce, Bureau of Census, "Population Estimate, 1990"

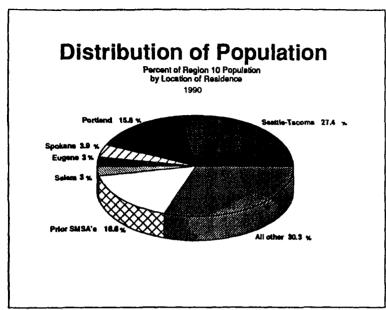


Figure 2
Source: U.S. Dept. of Commerce, Bureau of
Census, "Population Estimate, 1990"

Increase in population in the region's five SMSA's during the 'eighties exceeded by over 150,000 people the total amount of increase of the region's population, advancing processes of urbanization and population concentration that have been in force since World War II. See Figure 2.

Comparative Population Growth

Population increase during the 'eighties, sustaining a trend unbroken since the depression, occurred in Region 10 at rates well in excess of the national rate. Census Bureau projections show a distinct drop in rate of population increase in the current decade, with particularly marked reductions for Alaska and Washington. Nonetheless, rate of increase in both Oregon and Washington is expected to continue to be sufficiently greater than average to sustain the

region's long-term pattern of above normal population growth. See Figure 3.

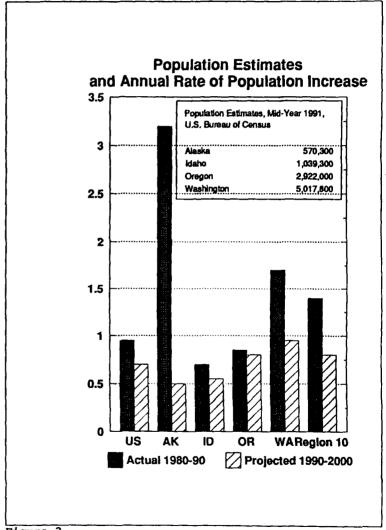


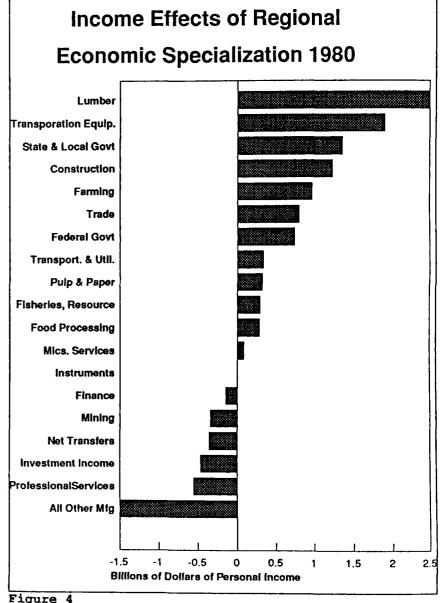
Figure 3
Source:

U.S. Dept. of Commerce, Bureau of Census, Census of Population 1990; Series A Projection

Economic Specialization

Economic specialization is measured by the degree in which a subset of an economy varies from the whole in terms of fundamental measures such as employment distribution, income source, output, consumption pattern or capital deployment. Examination of the broadest of such measures, distribution of income sources, in Region 10 and the nation in 1980, indicates that the Region produces a disproportionate share of U.S. income from forest products, manufacture of transportation equipment other than autos, farm output and food processing, and output of forestry, fisheries and agricultural services. Further, both construction--because of the sustained process of superior growth in the region--and federal government--because it owns more than half of the land area of the region--have produced gross incomes above national standards. An intermediate group of income sources--miscellaneous services, trade, transportation and utilities--also generates above average income for the region, but it is doubtful that these can be considered examples of regional specialization; rather, they are indications of scale diseconomies produced by low population density.

Substandard development is to be found in all forms of manufacturing other than transportation equipment. Mining, financial services, professional services and portfolio income are also below national norms for income production. Substandard level of income from transfers in 1980 may be viewed as an indication of relative economic vigor: the Region's population included a less than average proportion of pensioners, persons subsisting on social insurance and farm income leveraged by agricultural subsidies. See Figure 4.



Source:

urce: U.S. Dept. of Commerce, Bureau of
Economic Analysis, "Personal Income for
Regions and States"

Economic Trends

Region 10 economic specialization was not configured to benefit from evolution of the national economy during the 'eighties. None of its basic industries except instrument manufacture produced income growth at an above average rate; and in that instance, the region's share of the industry declined.

Farming, food processing and manufacture of transportation equipment all were stronger performers in Region 10 than in the rest of the nation; and military installations in Alaska and Puget Sound produced slightly greater than average increase in income from federal government. But critical forest products and construction industries were weak contributors to regional income in both relative and absolute terms.

One consequence of the region's uneven economic sojourn through the 'eighties was an above average rise in transfer income as early retirements, unemployment compensation and welfare stipends partially substituted for loss of wage income. Another was a relative rise in income from manufacturing other than basic industries. The latter was, to a degree, a statistical freak; its absence of automotive manufacture spared the region from participation in that huge industry's decline. But positive factors were also at play, as growth in chemicals production and some electronic specialties made up a portion of losses suffered by basic industries. A large relative increase in income from mining traced entirely to initiation of oil production on the North Slope. See Figure 5.

Migration

Region 10 contained 3.58% of the nation's population in 1980. During the next decade, population increased at a steady rate of 110,000 persons per year, accounting for 4.85% of the nation's population increase and bringing the region's share of the national population to 3.74% at the collection of the 1990 census. The Census Bureau expects the region to account for 4.5% of total population growth through the year 2000, adding 700,00 persons to the four states and raising total population above 10 million by the end of the decade.

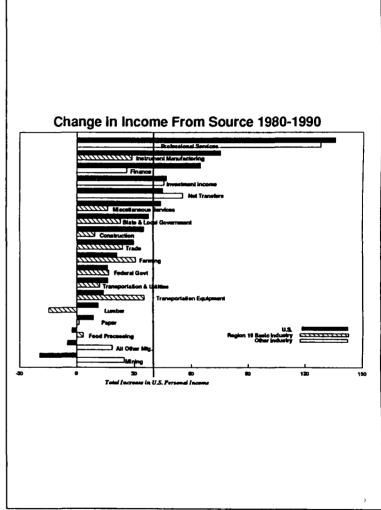


Figure 5

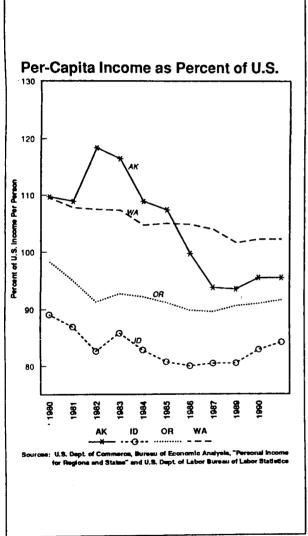
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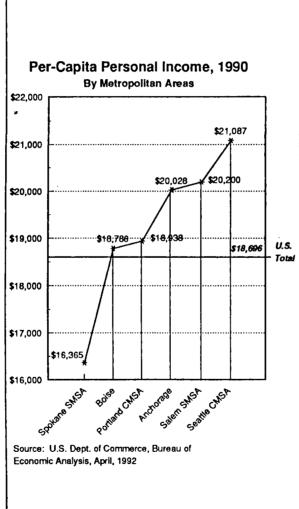
U.S. Dept. of Commerce, Bureau of Economic Analysis

Relative Well-Being

Region 10's population increased more rapidly than that of the nation in the 1980's. Its gross personal income increased more slowly than the nation's. Per-capita income -- and thus the relative well being -- of its

inhabitants was below the national average. By 1990, three of the four states and the region as a whole produced below average for inhabitants. (The judgment depends on an adjustment for Alaska price levels. Nominal per-capita income in Alaska remains highest among the fifty states.) See Figures 6, 7, and 8.





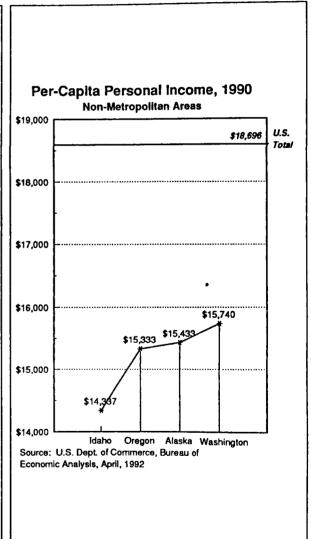


Figure 6

Figure 7

Figure 8

Region 10's Strategic Profile - Work Force and Resources

Region 10 Work Force and Resources

Region 10's Strategic Profile - Work Force and Resources

Region 10 Workforce

Region 10's work force is highly trained and balanced in terms of skills, experience, and gender. Ethnic composition corresponds with regional distributions. The work force is divided equally between male (50.6%) and female employees (49.4%). Modal grade is 12, median grade 11, below over all agency grades of 13 and 12, respectively, but well above all federal service. Females make up more than half of the work force in grades 1 through 4 and over 70% of the work force in grades 5 through 10. The average grade of female employees is less than 9.5, as compared to 10.2 for male employees. See Figure 9.

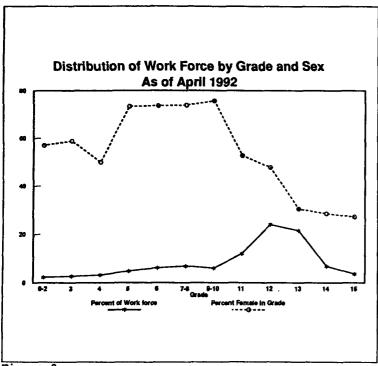


Figure 9
Source: U.S. EPA Personnel Database Records

Composition of Work Force by Function

More than a third of Region 10 employees are engaged in administrative duties. A somewhat smaller segment of the work force is composed of scientists and engineers. Legal staff, at 5% of the total, match the agency-wide allocation for this function. Technical and clerical support composes less than 30% of the regional work force. See Figure 10.

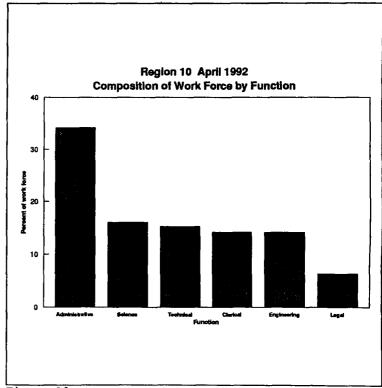


Figure 10

Source: U.S. EPA Personnel Database Records

Distribution of Work Force Experience

Half of the Region's employees have accumulated more than eight years of federal service. Average length of service is 11 years. Roughly an eighth of all regional employees have sufficient time in service to qualify for retirement, and a somewhat larger portion of the work force will reach that mark over the next four vears. See Figure 11.

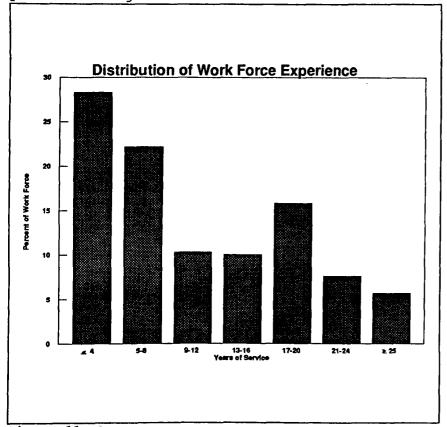


Figure 11 Source: U.S. EPA Personnel Database Records

Educational Composition of Work force

The regional work force is experienced and highly trained. Three-quarters are college graduates, a third have advanced degrees. Another forty percent, cutting across levels of formal educational attainment, have specialized training. See Figure 12.

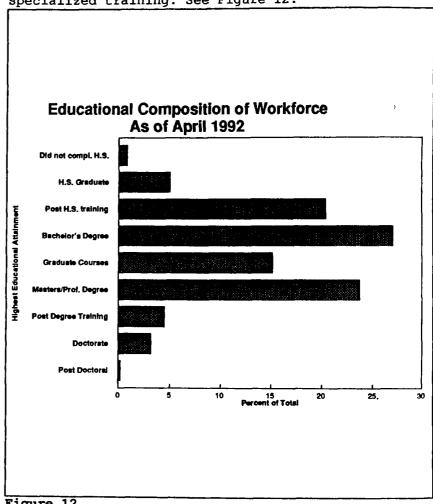


Figure 12

Source: U.S. EPA Personnel Database Records

Region 10's Strategic Profile - Work Force and Resources

Resources

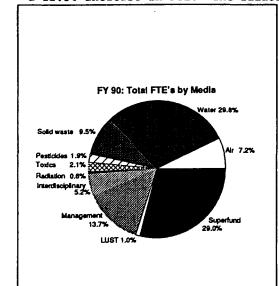
Between fiscal years 90 and 92, EPA Region 10 full-time equivalents (FTEs) rose from 513.3 to 577.4, a 12.5% increase. Total number of employees is approximately 680. Total resource dollars gained 8.5% during the same period. The increases lag behind trends in government spending. Total federal spending rose 17.9% from FY 90 to FY 92, while transfer payments increased even more steeply, by 23.6%. Nationally, state and local government spending went up 16.6% (for the years 1989-91).

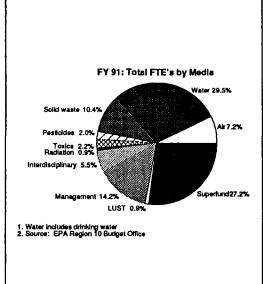
The Air programs experienced a 23.4% gain in FTEs and 53.8% in total resources. This buildup reflected the impact of the 1990 Clean Air Act Amendments on resources and workload.

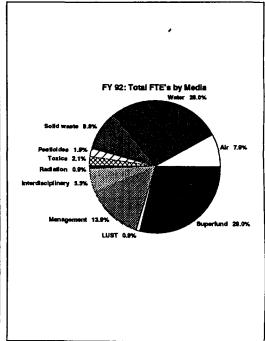
Superfund, fell in total resources, from \$39,160,900 to \$34,398,000, a 13.6% reduction. This was balanced by a 12.5% increase in FTE. The falloff in total

resources is mainly explained by a 26% decline in extramural resources, which in the Superfund program means contract dollars. In this regard, Superfund has been a victim of its own success. With "enforcement first" as a prevailing attitude, Superfund has achieved more cleanups and removals by Potentially Responsible Parties. This has meant that funds appropriated by Congress in specific budget categories for enforcement are not being spent. Congress has interpreted these unspent funds as evidence of inactivity in the Superfund program, and has taken them away from the Agency.

A major increase in resources was evident in the Interdisciplinary budget category, which includes Environmental Impact Statement review, federal facilities enforcement, and Office of Regional Counsel policy and operations. The latter is the major contributor to the increase, as the number of attorneys has risen from 23 in FY 90 to 34 in FY 92, a 48% increase.







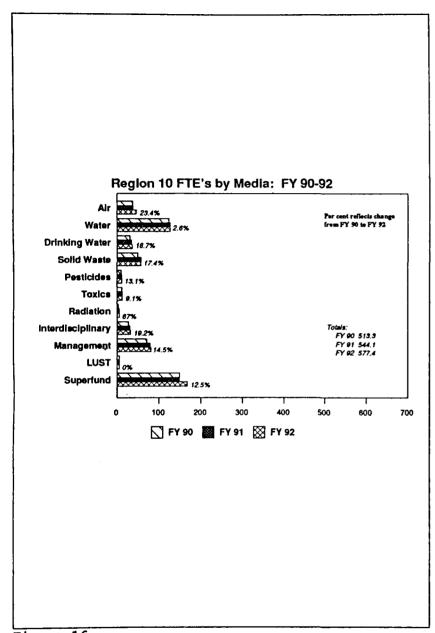


Figure 17
Source: EPA Region 10 Budget Office

Toxice

Region 10 Total Resources by Media: FY 90-92 (dollars in thousands)

AAAAAA 53.82%

10,000

20,000

Per cent reflects change

FY 90 \$ 85,390

FY 91 \$ 92,902 FY 92 \$ 92,815

40,000

30,000

from FY 90 to FY 92

Figure 16
Source: EPA Region 10 Budget Office

Region 10's Strategic Profile - The National Public Opinion

National Public Opinion

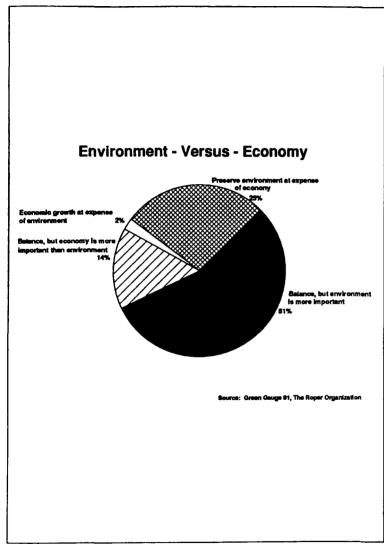


Figure 18

The Adult of Today

Concern about pollution is increasing. Environmental equity matters show an increased level of attention in certain populations. The national Green Gauge polling data show that in 1982 7% of those polled had environmental concerns. The 1992 data show that 21% now have environmental concerns. When asked whether certain lifestyle changes were worth the inconvenience or cost, 58% of those polled said "no."

Results from polls in Region 10 are different. In 1992 polling data approximately 8% of those polled placed the environment as a concern. The economy was number one at 35%. The 8% reflected a one percent drop in six months.

The <u>Green Gauge</u> data lists the leading environmental problems as vehicle exhaust, litter, industrial and solid waste disposal and household garbage disposal costs.

Future Generations

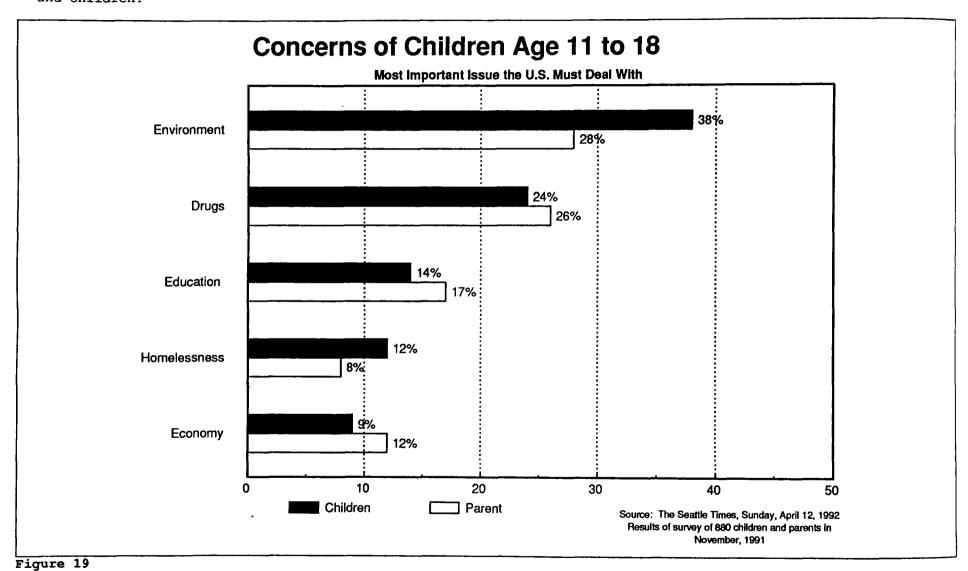
From Saturday morning cartoons to classrooms, kids are bombarded with warnings about acid rain, rain forests destroyed, global warming, spotted owls pushed to the brink of extinction, and dolphins killed by fishermen netting tuna. The kids are responding. There are at least 15 student environmental groups claiming a minimum of 1 million members.

A recent article in <u>The Seattle Times</u> states that parents listen to their children when it comes to the environment. A survey of 1,000 adults found a third of all parents made a purchase decision based on something their children had said about the environment. In addition, 70 percent of adults surveyed said their environmental concern had increased in the past two years. Sixty-seven percent said their environmental activities had risen.

Several published sources predict that the needs of the environment will remain a concern for future generations. The support for environmental protection is greater today than 15 years ago. Given the impact of the mass media and global focus, it is very likely that the level of interest in environmental protection -

Region 10's Strategic Profile - The National Public Opinion

perhaps most likely in times of a prosperous economy - will increase. See Figure 19 for attitudes of adults and children.



Environment

Water

Information from the National Wildlife Federation, U.S. Departments of Interior and Commerce, the Green Index, the Washington Department of Ecology and/or the U.S. EPA states that:

- 79% of the water systems in Alaska violate Safe Drinking Water Act requirements. Washington follows Alaska with 67% of water systems in violation. See Figure 20.
- Oregon has the lowest percentage of population (10%) exposed to water systems in significant noncompliance. Alaska and Washington have the highest percentages (40% and 45% respectively) of population exposed. See Figure 20.
- Since 1987, Region 10 has had a steady increase of Safe Drinking Water Act and wetlands enforcement actions.
- Approximately 42% of the Region's miles of rivers and streams partially or completely fail to meet their designated use for drinking, recreation, or fishing.
- Alaska, Oregon and Washington face expensive costs to provide adequate sewage treatment to the year 2008.
- Idaho has the highest groundwater use of Region 10 states.
- One-third of the nation's shellfish beds are closed due to pollution or lack of monitoring, resulting in millions of dollars of lost revenues. Sixth-five percent of Oregon's shellfish productive waters are restricted from fishing due to levels of pollution.
- Wetlands, estuaries, forest and other ecological habitats are disappearing in Washington State at a rate of 30,000 acres a year.
- Coastal fisheries, wildlife, and waterfowl populations have declined. As many as two million seabirds and 100,000 marine mammals die

every year after eating or becoming entangled in plastics or marine debris.

The traditional approach for addressing water pollution has relied heavily on regulatory solutions at point sources. To effectively address the wide spectrum of sources that pose serious threats to surface water, ground water, and wetlands approaches which combine the traditional means with new solutions are being considered.

For the past two decades, EPA and the states have focused their efforts on controlling major industrial and municipal dischargers. These controls have typically been "technology based," rather than "water quality based."

The Region's loss of aquatic resources is escalating. For example, several Columbia River salmon runs were recently designated as "endangered species"; well over half of Washington's shellfish beds have been permanently decertified due to bacterial contamination; and portions of the Snake River have become extremely clogged with aquatic weeds. Many of these problems are attributable to a combination of habitat destruction and the cumulative effect of pollutant loading from many sources.

To more effectively protect such resources, federal, state and local agencies and tribal governments are adopting a more holistic "watershed approach" that emphasizes ecosystem protection and improved program coordination. Key challenges are 1) to integrate state and federal efforts into a compatible, mutually supportive partnership; and 2) to bring into that partnership the multitude of other agencies and interest groups that have a stake in each watershed. Please see the following pages for Figures 19, 20, and 21.

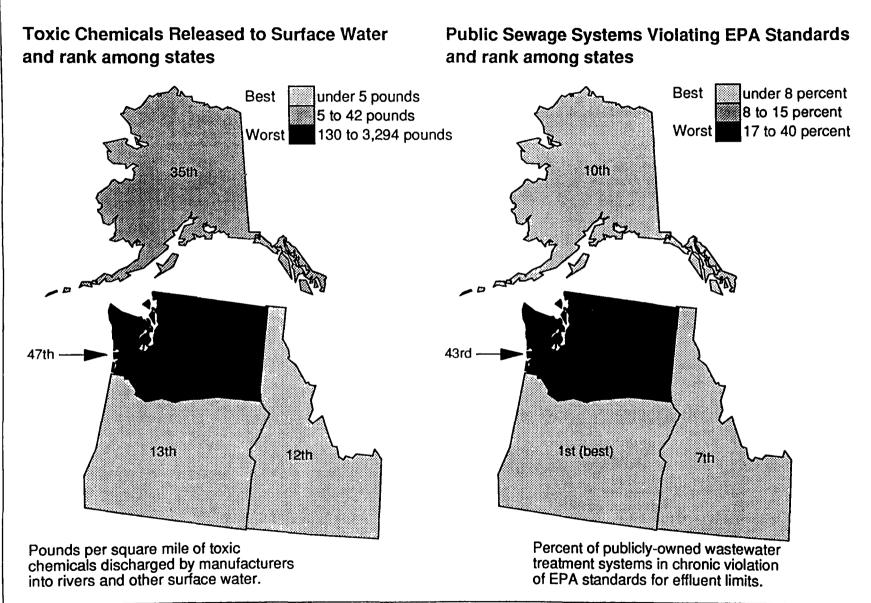
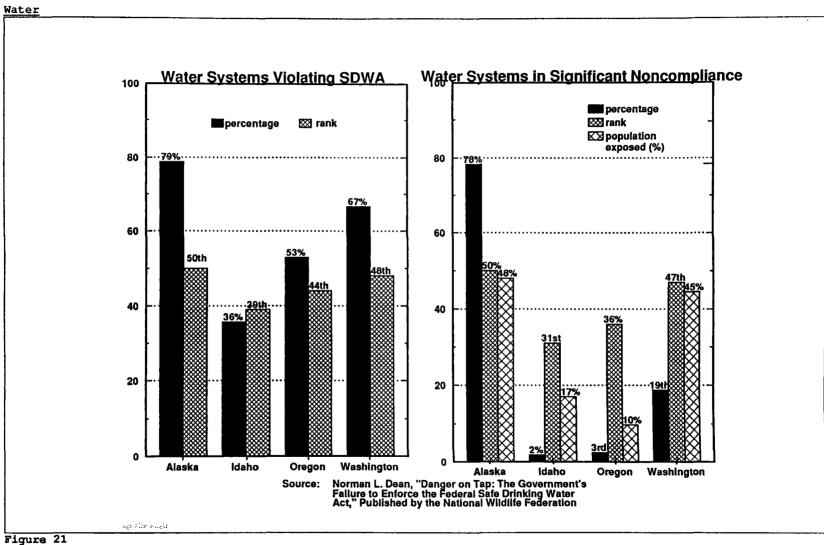


Figure 20 Source:

Green Index, "Toxics in the Community: The 1988 Toxic Release Inventory National Report," Sept. 1990. Published by the Office of Toxic Substances, USEPA, Wa. and Office of Water Enforcement and Permits, USEPA, Wa.



Water

Major Program Objectives

Efforts of the Agency's water programs center around geographic targeting and rely on grass-roots and consensus building approaches that empower state, local, and tribal governments. A main goal is to mobilize support for stewardship and conservation of water resources with the EPA and state government offering technical, scientific, and educational assistance to support and reinforce grass-roots efforts.

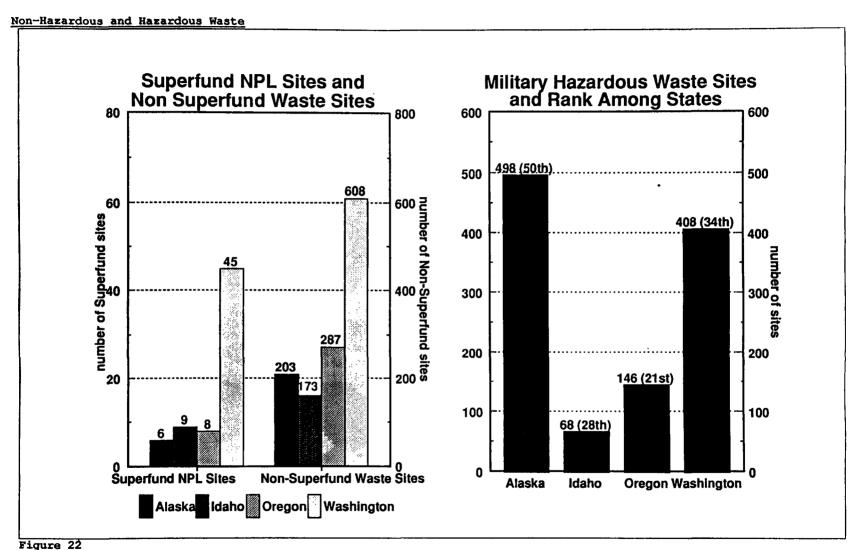
The Agency-wide Water Program Strategic Plan calls for a shared responsibility in managing water resources and discusses the changes necessary to our institutional framework in order to achieve environmental goals and objectives. The changes are:

- Implement geographic targeting
- Develop a more holistic approach to ecological resource management
- Institutionalize pollution prevention and multimedia approaches
- · Promote integrated water quality management
- Improve state and local capability to fund and operate water programs
- · Educate and empower the public
- Exercise federal leadership and enlarge partnerships with other federal agencies
- · Enlarge our international partnership

Non-Hazardous and Hazardous Waste

Information from the U.S. EPA, the United Nations' United States of America National Report, and/or the Green Index states that:

- Region 10, as of February 1992, has 68 Superfund sites on the National Priority List (NPL).
 Washington has the most Superfund sites with 45;
 Oregon has 8; Idaho 9; and Alaska 6. See Figure 22.
- Alaska has 4 Superfund federal facility sites; Idaho has 2; Oregon 1; and Washington has 15.
 Many military bases have multiple hazardous waste sites. See Figure 22.
- Region 10, under the Resource Conservation and Recovery Act (RCRA) Program, has approximately 4% of the nation's large quantity waste generators, transporters and treatment, storage and disposal facilities.
- Penalty amounts for RCRA enforcement complaints in Region 10 have increased from an average of \$14,818 in 1989 to an average of over \$53,000.
- Idaho, Oregon and Washington are authorized to implement the RCRA base program. Alaska is expected to receive final RCRA authorization around June 1994.
- The RCRA corrective action (cleanup) program has been delegated to the state of Idaho.
- Washington is doing one of the best jobs nationally of recycling municipal solid waste
- Alaska, Oregon and Washington are ranked in the high top 10 for per-capita state spending to monitor, manage and regulate solid and hazardous waste.
- The United States produces approximately three billion tons of hazardous and nonhazardous waste per year.



Source: Superfund Sites in the Pacific Northwest, EPA Region 10, 2/7/92 and Green Index, "Department of Defense Environmental Restoration Report to Congress for Fiscal Year 1989," U.S. Depart. of Defense, Washington

Non-Hazardous and Hazardous Waste

During 1989 and 1990, the EPA Headquarters Office of Solid Waste and Emergency Response (OSWER) completed two intensive self examinations. Congress, environmental groups, and the public at large frequently examine and question the success of the Superfund program.

One of the main conclusions from the self examinations is that neither EPA nor the states have the resources to address all of the nation's waste disposal problems. Partnerships between EPA, state and local agencies, tribal governments, and the private sector must be cultivated and strengthened if the nation is to successfully address disposal problems.

In Region 10, representatives from state, tribal governments, local, and Canadian environmental agencies along with EPA and private sector representatives signed a Memorandum of Agreement to help address the Northwest's waste disposal issues and to increase intergovernmental cooperation among the Region 10 states and British Columbia. Figure 22 on the following page presents data on the status of waste in Region 10.

Major Challenges

The Office of Solid Waste and Emergency Response identified six major cross-program goals in their Strategic Plan for FY 1993 - 1996. These goals represent change in focus and direction for the future. The goals are to:

- Integrate pollution prevention into all sectors of society.
- Create a national consensus on waste management goals.
- 3. Develop an integrated waste cleanup program.
- Create a national understanding that "it's my problem too."
- 5. Define the state role in waste management.

6. Use environmental risks as the criteria for making choices and setting priorities.

Major Program Objectives

OSWER also identified four main program objectives:

- 1. WASTE MINIMIZATION: Minimize the quantity and toxicity of waste created by commercial, industrial, and governmental activities.
- 2. ENVIRONMENTALLY SOUND MANAGEMENT: Ensure the environmentally sound management of solid and hazardous wastes.
- 3. PREVENT HARMFUL RELEASES: Prevent the harmful releases of oil and hazardous substances into the environment.
- 4. PREPARE FOR AND RESPOND TO HAZARDOUS RELEASES:
 Prepare for and respond in a timely and effective
 manner to releases of hazardous substances into
 the environment.

Toxics

Information from the U.S. EPA, the United Nations' United States of America National Report, and/or the Green Index states that:

- Of the four states in Region 10, Idaho releases the fewest pounds of toxic chemicals to the environment. Washington produces the most with nearly three times as much as Idaho. See Figure 23.
- Oregon has the highest rank among Region 10's four states for releasing to the environment the most toxins that cause serious health problems such as birth defects and nerve damage. See Figure 23.
- Oregon and Washington have implemented programs to encourage farmers to move toward sustainable farming systems. Actions include implementing alternative farming practices and techniques to control pests instead of a reliance on traditional pesticides.
- In the 1960s and 1970s, pesticide use reached an all-time high. Recent total use appears to be remaining steady at slightly lower levels than those of the mid-1980's.
- In the conventional pesticide market, agriculture accounts for over two-thirds of the pesticide user expenditures and about three-quarters of the total amount used annually.
- Herbicides are the leading type of conventional pesticide, accounting for over 50 percent of domestic sales and of the total amount of pesticide used.

EPA's Toxic Substances Program is responsible for protecting the public and the environment from risks associated with the manufacture, use, and disposal of toxic chemicals. A major aspect of the program is strong enforcement of the laws under its purview.

As in other EPA programs, pollution prevention and education are critical aspects of a successful toxics program. Other federal agencies, states, tribal and

local governments, and the private sector are EPA's more traditional partners. See figure 23.

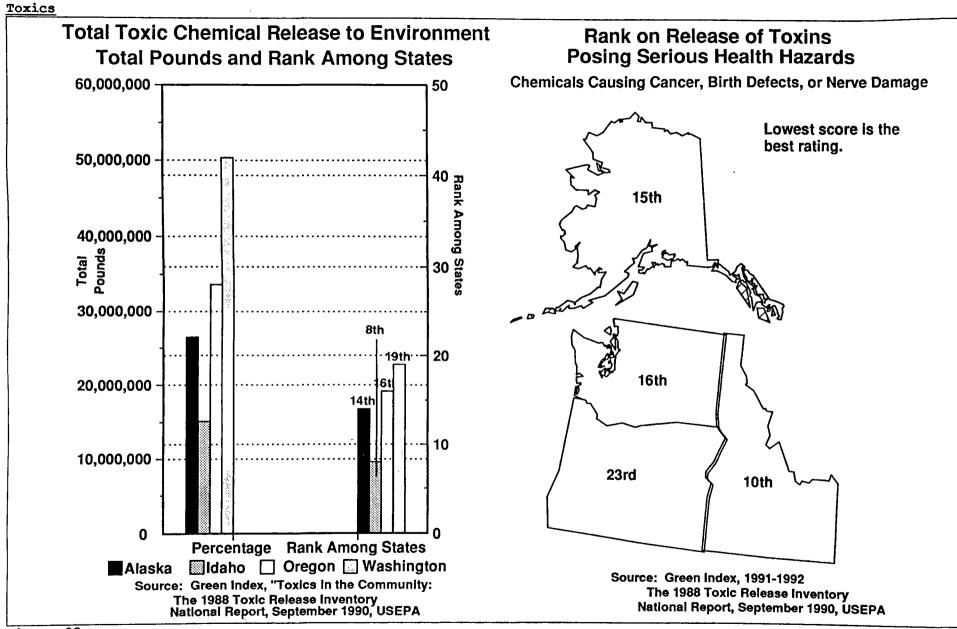


Figure 23

Toxics

Major Challenges

Nationwide, and in Region 10, new approaches focusing on pollution prevention and education are being undertaken in order to achieve effective change. Focus areas include:

- Improving public access to toxic chemical information, such as TRI data,
- Encouraging voluntary industry response, such as those in of the National Pollution Prevention Strategy,
- 3) Revitalizing government toxic substance programs, at all levels of government, that emphasize substitution of toxic products with less toxic substances or non-toxic alternatives, and
- 4) Focusing additional consumer information on potential hazards from exposure to toxic substances.

National Toxic Substances Program Goals

The National Toxic Substances strategic plan is a result of a major reassessment of the goals and direction to be taken under TSCA and related mandates. The program strategy establishes four major goals:

- 1) Prevent or eliminate unreasonable risk
- 2) Reduce unnecessary exposure
- 3) Encourage safer substitutes
- 4) Maximize program productivity

Air

Information from the U.S. EPA, the United Nations' United States of America National Report, and/or the Green Index states that:

- Washington ranks among the 10 worst states for carbon monoxide violations because of air pollution in metropolitan areas. See Figure 24.
- As of 1988, 66% of Washington's and 53% of Oregon's populations were in air violating standards for carbon monoxide. See Figure 24.
- Alaska is among five states with the worst rates for end-of-pipe air pollution control devices (based on TRI data).
- In 1990, amendments to the Clean Air Act strengthened criminal sanctions by increasing fines and jail terms for knowing violations.
- States have established control programs addressing 708 different compounds in the ambient air.
- Scientific evidence indicates that air within homes and other buildings can have higher levels of air pollution and greater health impacts than outdoor air.

Air pollution ranks high in the relative magnitude of public health problems. In a majority of polls and studies, air pollution is among the highest environmental concern of the public.

The environmental equity issue is an aspect of air pollution problems. Studies show that the risks associated with exposure to air toxics are not spread evenly over the whole population. People who live near major emission sources are invariably exposed to higher levels of the emitted pollutant than those more distant. See Figure 25 for data on regional air quality.

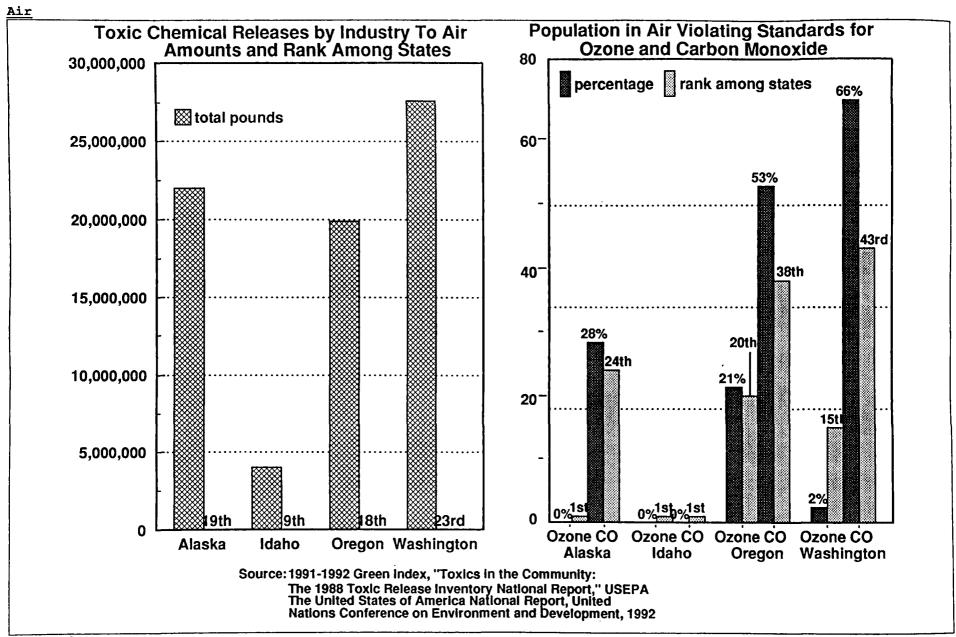


Figure 24

Air

Strategic Objectives

Particulate matter (PM-10), one of six criteria pollutants addressed under national air quality standards, is a pollutant of major concern in the Pacific Northwest. The basic goals of the PM-10 program are attainment and maintenance of compliance with the PM-10 National Ambient Air Quality Standards (NAAQS) nationwide. To achieve this goal, strategic objectives of the PM-10 Program include:

- 1) getting State Implementation Plans in place,
- defining long-term nonattainment policies,
- preventing episodes where PM-10 concentrations exceed significant harm levels, and
- 4. reducing the number of days of violations of the NAAQS and the magnitude of the violations.

Planned activities of the national PM-10 program focus on the sources of PM-10 emissions that are the most serious obstacles to achieving attainment. These sources are:

- residential wood combustion,
- 2) urban fugitive dust,
- 3) industrial sources, and
- other combustion sources, such as agricultural burning.

Compliance

A 1989 review of trends in the air toxics program raised concerns in the enforcement and compliance areas of the air program. Concerns related to reduced efficiency in state enforcement activities as characterized by variant interpretation of regulations, uneven enforcement, inconsistent training programs for state inspectors, and diminished capacity to perform quality inspections.

In recognition of these problems, a shift of emphasis is taking place at both the state and federal level to strengthen air toxics enforcement programs. In 1990, amendments to the Clean Air Act strengthened criminal sanctions by increasing fines and jail terms for knowing violations.

Enforcement

Data in the Region 10 Enforcement Report shows that:

- In the last four years, Washington State, followed by Oregon, issued the most administrative orders of Region 10 states.
- Since 1987, Region 10 has had a steady increase in the number of administrative orders. An administrative order is issued to collect penalties or prescribe an action for violating environmental laws.

Region 10 is examining the efficiency of its enforcement programs. EPA enforcement will look increasingly toward:

- targeting or focusing compliance monitoring and enforcement resources to achieve environmental results in a manner both consistent with national priorities and sensitive to Regional and State needs
- <u>screening</u> for enforcement response and realizing the full potential of enforcement authorities in addressing environmental problems, and
- <u>qaining the maximum leverage</u> from each individual enforcement action, both in terms of general and specific deterrence and incentives for the regulated community to prevent pollution and minimize waste.

According to the February 1992 issue of <u>Business and</u> the <u>Environment</u>, <u>EPA</u> plans to increase the number of criminal investigators from 38 to 200 in the next three years.

Region 10's Strategic Profile - Geographic Initiatives Overview

Region 10's Geographic Initiatives

Region 10's Strategic Profile - Geographic Initiatives Overview

Geographic Initiatives Overview

EPA Region 10 has refined its method of doing business through the use of geographic initiatives - discrete areas of focus for a coordinated, comprehensive campaign for a better environment. Geographic initiatives allow areas of heavy industrial activity and, often, population concentration, to be identified and resources channeled.

Region 10 has identified four geographic areas, one in each state in the Region, for this integrated approach. The selected geographic areas are:

- · Southeast Alaska
- Coeur d'Alene Area (Idaho Panhandle)
- Portland/Willamette Basin (Oregon)
- Puget Sound/I-5 Corridor (Washington)

The environmental status and outlook for each of these geographic initiatives is discussed below.

Southeast Alaska

Southeast Alaska is a heavily forested and mountainous land, with an extensive coastline cut by fjords. It is the size of New York State, and, while sparsely populated, it is experiencing rapid population growth. Its principal industries include timber, mining, commercial fishing, and tourism.

The major environmental issues of Southeast Alaska, naturally enough, revolve around these industries. Old mine sites must be cleaned up while new mines must avoid the problems of hazardous and solid waste, air emissions, and water quality degradation.

Logging may have serious effects on fisheries, as well as reducing habitat for the area's wildlife population. Pollution from cruise ships must be controlled, and the area's pristine natural beauty and wildlife must be preserved to maintain Southeast Alaska as a vacation destination. The extensive coastline and rainy climate mean that wetlands are ubiquitous — and they are threatened by all of the commercial activities detailed above.

EPA's initiatives will emphasize pollution prevention and education/outreach. These approaches will be directed at individual industries and communities.

Coeur d'Alene Area (Idaho Panhandle)

The Idaho Panhandle is one of the fastest growing parts of the state. Newcomers and long-time residents alike are discovering that water quality is the foremost environmental concern of the Coeur d'Alene Basin. Degraded rivers and contaminated lake sediments are the legacy of mining operations and agriculture.

The geographic initiative for Coeur d'Alene addresses:

- Metals source reduction through the establishment of a Total Maximum Daily Load (TMDL) for the South Fork Coeur d'Alene River.
- Superfund remediation through removal and monitoring at the Bunker Hill site, and by analyzing other sites for possible inclusion on the National Priority List (NPL).

Among the challenges posed by this initiative are the need for coordination among a variety of federal, state, and local agencies and jurisdictions along with numerous private interests. The initiative provides for these concerns through the formation of an Interagency Group that will oversee development of a management plan. Extensive citizen involvement and public communication will be essential to the success of the initiative.

Puget Sound/I-5 Corridor

Unlike some of the other geographic initiatives, Puget Sound and the I-5 Corridor present a truly "metropolitan" mix of environmental issues. Pollution is not solely attributable to a few isolated industries or sources; the entire spectrum of environmental "players" is involved.

The area has a high population density, enhanced by recent explosive growth. By the year 2010, the population is expected to double from the 2 million residents in 1960. Among the issues that need to be addressed are ozone non-attainment, numerous Superfund sites and federal facilities, decreasing solid waste

Region 10's Strategic Profile - Geographic Initiatives Overview

landfill acreage, the nonpoint source water pollution inherent in a large developed area that ultimately drains into a single water body -- Puget Sound, and the need to upgrade sewage treatment.

Area governments are wrestling with state-imposed growth management restrictions and there is a growing awareness of the need for regional governance that transcends traditional political boundaries.

The regulatory network needed to deal with these issues is perhaps further advanced for Puget Sound than for the other geographic initiatives. The present network is the product of the alliances and working arrangements that heightened interest in Puget Sound in the 1980's and led to its designation as an estuary of national significance.

Portland/Willamette Basin

This Basin has been described as the most productive and threatened resource in Oregon. The primary environmental concerns relate to agriculture, forest products and practices, and urban/commercial/industrial development. Total maximum daily load (TMDL) standards in the Tualatin River have been a major issue. EPA is also developing pilot projects for Pesticide Ecological Monitoring and a watershed demonstration program for wetlands planning.

The key to the success of this initiative lies in the maturing partnership between EPA and the Department of Environmental Quality. EPA has identified the development of state and local capacity as the essential strategic factor in the Portland/Willamette Basin.

Region 10's Strategic Profile - State and Local Government Trends in Region 10

State and Local Government Trends In Region 10

Region 10's Strategic Profile - State and Local Government Trends in Region 10

State and Local Government Trends Within Region 10

Alaska

The single overwhelming influence on Alaska's political (and economic, and social) future is oil. The price of oil is now low and production is declining by 7% per year. Insufficient revenues to meet state needs will be supplemented by the reserve fund this year. However, this will eliminate the reserve fund as a future revenue source. It is predicted that state government will be trimmed, including the Department of Environmental Conservation.

Idaho

The most immediate influence on Idaho's fortunes is the drought. This year has had the lowest precipitation on record, following five years of low rain. The mountain snowpack is low, which means less water for irrigation.

Reduced water flows and high concentrations of nutrients in the water can produce lower dissolved oxygen levels, leading to fish kills. Recreational uses of waterbodies, such as boating on reservoirs, may be curtailed due to lower water levels. The fate of anadromous fisheries may become a major issue.

Over the long term, the principal issue in Idaho is a shifting population. Over the last decade, about one-half of Idaho's 44 counties lost population or grew more slowly than the state as a whole. One-third of Idaho's population now lives in a narrow band from Boise to Ontario, Oregon.

Idaho Department of Environmental Quality (IDEQ) had what can be considered a productive legislative session in 1992. IDEQ received 35 new positions and a groundwater quality plan was approved. In return for the staffing increase, IDEQ has committed to developing a plan for an environmental trust fund. This would be a revolving fund for capital improvements. Its adoption would eliminate the competition among different environmental interests for general fund money.

Oregon

In the fall of 1990, Oregon voters passed Ballot Measure 5 to impose limits on property taxes. The new law has led to budget reductions of 4-5% in the current biennium. Cuts of 15-20% are forecast for the FY 93-95 biennium in light of an expected deficit of \$1 billion.

A recent poll places the budget deficit in context. On April 12, 1992 The Sunday Oregonian reported that the biggest issues facing Oregon residents were the economy (36%) and unemployment (29%). Environment placed seventh on the list, chosen by only 4% of those polled.

Other issues include the spotted owl and the salmon. The salmon may become a bigger issue than declining timber harvests because of its greater effects on the economy.

Washington

At the time the Legislature convened in January, Washington faced a budget deficit of \$900 million in a \$15.7 billion budget. Executive agencies faced even worse financial prospects because budget cuts could not be taken from basic education or entitlement programs. An overall general fund cut of 11.7% was imposed on state agencies. Because the Washington Department of Ecology (WDOE) receives its budget from 31 different funds, the general fund cut fell disproportionately on certain programs.

Water resources, Puget Sound, the State Environmental Policy Act, and shorelines — all heavily dependent on the general fund — saw their funding slashed. The hazardous waste program, air quality, and oil spills, with alternative funding sources, fared better. WDOE has suffered a staff reduction of 29, along with cuts in non-personnel resources.

For FY 93-95 the state faces a deficit of about \$500 million (although on a bigger budget base than in 1992).

The major state-wide environmental issue may be growth management. The Legislature has already passed a major statute on the subject. The law requires localities to engage in comprehensive planning, which brings them face-to-face with responsibility for the environmental effects of growth.

Emerging Issues

Emerging Issues - Problems or Opportunities?

A commonly used phrase in EPA is "our plate is full (or over-flowing)." The burden of work required to implement the myriad laws and regulations EPA is charged with is sometimes overwhelming.

At the same time, however, there are many issues and factors outside our program lines that directly influence how well environmental protection works or does not work in the Northwest. The environmental management framework within which we operate is very dynamic. As Region 10 works through our strategic planning process, we need to think about and understand our relationship with these cross-cutting issues and opportunities.

Eight issues of change, with significant implications for EPA, are highlighted below. Each issue is addressed by a short paragraph to present the essence of the issue and a few questions to think about. The topics were selected using the following criteria:

- The topic or issue has a major known or potential impact in the Northwest over the next 5-10 years.
- The issue is cross-cutting and any response by EPA involves more than one program.
- There is a potential for significant involvement of or impact on EPA programs.

The eight issues are:

- Endangered Species Protection;
- Global Climate Change;
- 3. Natural Resource Conservation and Management;
- 4. Urbanization and Growth Management;
- 5. The Public Good vs Private Rights Debate;
- Regulatory Burden;
- 7. Geographic Priorities; and
- 8. Sustainable Development.

1. Endangered Species Protection

This is both a current and an emerging issue. Two aspects are discussed below:

<u>Salmon</u> - How to prevent further losses and restore depleted runs is clearly a front-page issue today. Currently, the focus is on Snake River sockeye and some of the Columbia River runs. Salmon runs on the Oregon coast and in Puget Sound may well be listed in the near future. Programs to address this issue will impact a wide variety of economic sectors and federal and state agency programs throughout the region. This will likely be a "front-burner" issue in the region for at least the next decade.

- Where does this fit (or should it fit) in EPA's strategic priorities?
- Will our approach to/participation in this issue be reactive, or targeted and anticipatory?
- What role(s) for EPA will add the most value to the overall salmon protection effort?

Other Species -There are a number of other plant and animal species in the Northwest which are either already listed as endangered species or are nearing that point. While the public may not relate to them as they do salmon, potential protection programs will likely also have significant impacts in the region.

2. Global Climate Change

There is a strong likelihood that the emphasis on global climate change and its implications will increase significantly over the next 5-10 years. While there is still no consensus on the potential directions change in the Northwest (warmer/cooler. dryer/wetter, large vs small sea level rise), the potential implications of some of these changes are becoming more apparent. For example, trends toward a warmer and dryer climate would have profound impacts on instream water quality and quantity, habitat, agricultural practices, needs for more domestic water supplies, etc. Any significant sea level rise will have major impacts on coastal facilities and estuarine It is not unreasonable to anticipate systems.

legislation during this period requiring carbon dioxide emission reductions. Within the region, some states and cities are already developing programs to address some or all of these potential impacts.

- Are there things that Region 10 should be doing to understand better the basic issues and implications for our programs?
- Where can EPA add the most value in preparing to address this issue?

3. Natural Resource Conservation and Management

There is a growing ferment and debate within the region about how best to conserve and manage key natural resources (water, soil, timber, etc.). Some of this debate is driven by issues like preserving old growth timber and threatened salmon species. Another issue is how to maintain the availability of these resources over the long-term to minimize the economic disruption associated with their over use. The conservation and management choices for these resources will have profound implications for ecosystem integrity and environmental quality.

- What are the priority issues EPA would like to see addressed as these natural resource management practices change?
 - How best can Region 10 develop an understanding of and participate in the processes that affect the resource management decisions?
 - Where can EPA add the most value to solving these problems?

4. Urbanization/Growth Management

Significant increases in the population of the Northwest have occurred in recent years and the trend is likely to continue. Much of this growth is focused in the urban and urbanizing areas (the I-5 corridor in Oregon and Washington, the Boise area, Spokane/Coeur d'Alene, etc.). The list of current and potential environmental issues associated with this trend is long and varied. It includes loss of wetlands, increased

difficulty in maintaining air quality, degradation of habitat and urban watersheds, waste management issues, etc. State and local officials, operating within a complex mix of laws and planning requirements, are striving to find ways to accommodate anticipated population growth while providing necessary services and preserving ecological values and the overall quality of life for residents. As growth continues, working through these complex issues will be a top priority for years to come. The results will have significant impacts on environmental quality in the Northwest well into the next century.

- What are the priority problems that we feel need to be addressed as part of the growth management process?
- What is the appropriate role for EPA Region 10 in this area?
- What kinds of program priorities, staff development activities, organizational arrangements, etc., do we need to plan for and develop to maximize our effectiveness in working with these growth management processes?

5. The Public Good vs Private Rights Debate

The focus of national environmental programs is increasingly shifting from a large point-source emphasis to addressing the effects of individual actions and choices. Many of these involve how individuals use their private property and other similar vested rights (water rights, for example). This has highlighted the long-simmering debate of private rights vs the common good. A major backlash has developed among those who feel that environmental constraints on private property are a violation of constitutional rights and the result of environmental extremism.

- What are the primary program areas affected by this debate and how will it likely affect the strategic choices we make?
- How do we want to respond to this debate (ignore it as much as possible, identify ways to work

with it to find common ground, take a hard-line, aggressive stance, etc.)?

 What do we need to plan for and do to improve our ability to understand and work with those involved in this debate?

6. Regulatory Burden

Similar to the property rights debate outlined above, there is a growing outcry regarding the cumulative regulatory burden on businesses and communities. From a community perspective, the cumulative impact of environmental and other regulatory requirements is overwhelming the ability of many communities to effectively address them. Businesses, from large to small, are increasingly citing the burden of meeting regulatory requirements as a major reason for job loss, scaling back business development plans, etc. Antiregulatory groups are gaining a wide following and are claiming the vast number of regulations as one of the key reasons for the decline of U.S. economic power. These cries of outrage and pleas for relief are getting increased attention at both state and national levels. The comprehensive command and control regulatory approach is seen by many as having reached (or exceeded) the limits of its effectiveness.

- How can EPA Region 10 improve its ability to understand and respond to these issues?
- Are there key program areas we want to focus on in terms of finding creative ways to provide flexibility while still achieving environmental goals?
- If we cannot provide flexibility, how can we enhance the capability of local governments and business to understand and respond to our requirements?

7. Geographic Priorities

As previously stated, EPA is focusing more on initiatives and programs in specific geographic priority areas. These range in size from the very large (the Great Lakes, the Gulf of Mexico) through mid-size areas (Puget Sound, the Coeur d'Alene Basin,

a large ecosystem, etc.) to the local scale (a single community, a small watershed). The geographic focus is in many ways a very effective way to integrate programs to address priority needs. Most of these geographic efforts are long-term efforts involving several years of work. If the trend towards identifying additional priority areas continues, the region may end up losing the primary benefit achieved by collective effort in a few areas.

- Strategically, how many major geographic areas do we want to focus on?
- Are there guidelines we should develop to direct selection of any new priority areas?
- How do we best work with the states to identify and plan for long-term efforts in geographic priority areas?

8. Sustainable Development

The concept of sustainable development is emerging as a new paradigm for how to meet long-term environmental and economic needs. The form that any programs and actions in this area will take, whether within EPA or other federal agencies, state or local government, or business, is not yet clear. What is clear is that the Northwest will be a national focal point in this area. There will be a growing debate about the topic and related issues and many opportunities for action and leadership. Major elements of many of the topics highlighted previously are directly related to issues of sustainability.

- From a strategic perspective, how can Region 10 position itself to be most effective in the evolution of this new paradigm within the region?
- How do we incorporate an increased focus on the concept and what it implies for how we do business (stronger communications with business and economic sector, use of market incentives, a longer range focus on impacts of our decisions, etc.) into our strategic priorities and plans?

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