

PUBLIC PERCEPTIONS OF THE ROLE AND COMPETENCY OF GOVERNMENT TO DEAL WITH WATER-RELATED ISSUES OVER A 34-YEAR PERIOD IN THE PACIFIC NORTHWEST, USA

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ABSTRACT

The purpose of this paper is to examine how the public perceives several levels of government addressing environmental issues in the Pacific Northwest. In 1987, a set of survey questions was designed to address the following: (1) how different levels of government address the environment, (2) public satisfaction with the government at fulfilling their environmental responsibilities, (3) the level of government that should be most responsible for protecting water quality, (4) the amount of money spent protecting the environment and (5) individual and public participation in environmental activities. These survey questions were inserted into a large mail-based survey that was sent to over 3,000 members of the public in 1987, 1992, 1998, 2002, 2007, 2012, 2017 and 2021. Public response rates exceeding 50% were obtained in each survey year. In 1987, 24.1% of the survey respondents felt that government and elected officials did not place enough emphasis on the environment. However, by 2021, this value more than doubled to 58.8%. In 2021, residents younger than 40 years old and respondents from Washington and Oregon were most likely to say that there was not enough governmental emphasis on the environment. By 2021, a majority of survey respondents felt that state, county, city and town governments were doing a good or a very good job of protecting water resources, while only 36% of residents felt that the federal government was doing a good or very good job protecting water. County and state governments were each viewed by over 35% of residents as should having the most responsibility for protecting water in their communities during the entire 34-year survey period. Conversely, never more than 12% of surveyed residents thought that the federal government should have a primary role. The percentages of the public saying that their state of residence spends less money on the environment than it should in 1987, 1998, 2007, 2017 and 2021 was 28.7%, 33.2%, 36.9%, 41.3% and 45.1%, respectively. The three important observations made about public participation in environmental activities were: (1) about half of the surveyed public never took part in an environmental activity, (2) depending on the survey year, between 20.1% and 30.3% participated more than once in an environmental activity and (3) no evidence in upward or downward participation trends were observed over this 34-year study.

Keywords: public opinion, sustainable water resource management, voluntary actions to protect water, water quality, water quantity.

1 BACKGROUND

The public in the four Pacific Northwest (PNW) states (Alaska, Idaho, Oregon and Washington) consider environmental protection and particularly water resources important environmental issues in the region [1]. Since the Clean Water Act (CWA) was passed by Congress in 1972, several laws have been enacted at the federal, state and local levels to address water protection issues. These laws are targeted at surface and groundwater quality and quantity, ensuring safe drinking water for the public and the safe disposal of wastes that could negatively impact the quality of water resources. This paper examines how the public perceives the roles and effectiveness of different levels of government – federal, state, counties, cities and towns and individual citizens in protecting water resources in the Pacific Northwest.

2 INTRODUCTION

In the early 1970s, Congress passed three major pieces of legislation that continue to be the foundation for protecting water resources in the USA. These three Acts are: The CWA of 1972, The Safe Drinking Water Act (SDWA) of 1974 and The Resource Conservation and Recovery Act of 1976. All three pieces of legislation have been highly popular with the public and have been reauthorized and amended by Congress on a regular basis since the 1970s. Initially, the federal government had responsibility for enforcing these laws. However, the authority for regulating many key parts of the legislation has been passed on to the state and community levels. This has created a lack of public understanding about where responsibilities lie for different aspects of water resources regulation.

The CWA became law in 1972 and had the overall goal of improving surface water quality and making water bodies safe for swimming. The US Environmental Protection Agency (USEPA) was given authority to oversee this legislation. Over time, restoration and maintenance of the chemical, biological and physical integrity of the USA's waters should be achieved [2]. The Act recognizes the responsibilities of the federal, state and local governments in addressing water pollution. It provides federal resources to support state and local government facilities that process, improve and/or deliver wastewaters to protect water quality [3].

In 1974, the SDWA was enacted to ensure that drinking water is safe at the community level. This Act was amended in 1986 and 1996. The USEPA sets standards and monitors states, local authorities, communities and water suppliers that in turn enforce standards. This Act protects surface and groundwater sources that are potentially used for drinking water [4]. To ensure that drinking water is safe multiple barriers are established including source water protection, treatment, distribution system integrity and public information [5].

The Resources Conservation and Recovery Act was passed in 1976 with the goal of ensuring that wastes and hazardous chemicals did not contaminate water. This Act was amended in 1992 and 1996. This piece of legislation gave the USEPA authority to track hazardous wastes from the cradle to the grave. The Act was designed to minimize the entry of unwanted hazardous chemicals into the hydrologic cycle [6]. Cradle to grave tracking includes generation, transportation, treatment, storage and disposal of hazardous wastes [7]. This Act also provided for the development of a framework to manage non-hazardous solid waste materials.

Previous studies have shown that political inclinations impact public views on the environment [8]. The public in liberal-leaning states is more likely to support strong environmental protection, while conservative-leaning states are less likely to support protection. Both Washington and Oregon are liberal-leaning states, while citizens of Alaska and Idaho are more conservative. Thus, it would be expected that Oregon and Washington residents would be more likely to support proactive programs to protect water quality than residents of Idaho and Alaska. Several survey studies in the USA have shown that government efforts to protect the environment are seen by the majority of the public as insufficient [9]. On a state-by-state basis, environmental opinions are influenced by existing environmental conditions [10]. Public opinions about water issues appear to drive environmental policy actions in many situations [11,12,13,14,15].

Surveys have been widely used to track public perceptions of water issues in the Pacific Northwest [16,17,18]. The purpose of this paper is to examine how the public perceives several levels of government addressing environmental issues in the Pacific Northwest. In 1987, a set of survey questions were designed to address the following: (1) how different levels of government address the environment, (2) public satisfaction with the government at fulfilling

their environmental responsibilities, (3) the level of government that should be most responsible for protecting water quality, (4) the amount of money spent protecting the environment, and (5) individual and public participation in environmental activities. These questions were inserted into large mail-based surveys that were sent to the public in 1987, 1992, 1998, 2002, 2007, 2012, 2017 and 2021. This paper identifies public views and trends over a 34-year sampling period between 1987 and 2021.

3 METHODOLOGY

A survey instrument was developed to assess public perceptions of the role and the competency of the government to deal with water-related issues over a 34-year period in the Pacific Northwest, USA. The four northwestern states evaluated were Alaska, Idaho, Oregon and Washington. The specific questions addressed in this survey study included:

Q-1. In your opinion, does the environment receive the right amount of emphasis from government and elected officials? Choose one of the following: *No, too much emphasis; No, not enough emphasis; Yes, the right amount of emphasis; No opinion.*

Q-2 Are the following government entities doing good or very good in fulfilling their responsibilities for protecting water resources in your community of residence? Choose one for each branch of government:

- a. Federal government: *Very good job, Good job, Fair job, Poor job, No opinion.*
- b. State government: *Very good job, Good job, Fair job, Poor job, No opinion.*
- c. County, city or town: *Very good job, Good job, Fair job, Poor job, No opinion.*
- d. Individual citizen: *Very good job, Good job, Fair job, Poor job, No opinion.*

Q-3 In your opinion, who should be most responsible for protecting water quality in your community? Choose one of the following: *Federal government, State government, County, city or town, Individual citizens, Don't know.*

Q-4 Do you agree with the following statement: In my opinion, my state of residence spends less money on environmental protection, including water quality, than it should? Choose one of the following: *Strongly agree, Agree, No opinion, Disagree, Strongly disagree.*

Q-5 How often have you or someone in your household participated in an environmental-related activity such as a class, workshop or volunteer effort? Choose one of the following: *YES, often; YES, more than once; YES, once; Not sure; NO, never participated.*

The above survey questions were included in all 11 surveys conducted between 1987 and 2021. In 2002, 2007, 2012, 2017 and 2021, these questions were embedded into 60-question surveys that were sent to over 2,500 residents of the region [16,17,18]. The same questions were embedded into smaller 30-question surveys that were sent to 1,200 residents in 1987, 1993, 1998, 2005, 2010 and 2015. Consequently, answers to each of the survey questions were obtained in 1987, 1993, 1998, 2002, 2005, 2007, 2010, 2012, 2015, 2017 and 2021.

The survey target audience was a representative sample of the 11,400,000 adult residents of Alaska, Idaho, Oregon and Washington that live within the four PNW states. In addition, demographic information, including state of residence, community size, county population, gender, age and educational level were also collected. Community size data were translated into urban, suburban and rural based on the county of residence. Residents were considered urban if they resided in a county (borough in Alaska) with more than 100,000 people. They were considered suburban if they resided in a county with between 30,000 and 100,000 residents. Residents residing in counties with less than 30,000 people were considered rural.

Based on census estimates in 2020 there were 28, 34 and 74 counties in the Pacific Northwest classified as urban, suburban and rural, respectively.

Each survey was developed using the Dillman methodology and was delivered to clientele via the US Postal Service [19,20]. A sufficient number of completed surveys was the goal to result in a sampling error of 3–5% [21]. The survey process was also designed to receive a completed survey return rate of more than 50%. Addresses were obtained from a professional social sciences survey company (SSI, Norwich, CT). Four mailings were planned to achieve the 50% return rate. The mailing strategy used was identical in all 11 surveys that had been conducted in the region since 1987 [16,17,18]. It only took three mailings to achieve the target return rate of 50% in 2002, 2005, 2007, 2012 and 2015. Conversely, it took four mailings to achieve the 50% return rate in 1987, 1993, 1998, 2010, 2017 and 2021.

Survey answers were coded and entered into Microsoft Excel. Missing data were excluded from the analysis. The data were analyzed at two levels using SAS [21]. The first level of analysis generated frequencies, while the second level evaluated the impacts of demographic factors. Significance ($P < 0.05$) to demographic factors was tested using a chi-square distribution [20,21]. Since similar response rates were observed in all survey years, data analysis procedures were identical for each sampling.

4 RESULTS AND DISCUSSION

The survey methodology was not designed to be unique but rather to be able to compare resident responses over time so that useful information could be obtained. Using the mail-based Dillman survey methodology, response rates of over 50% were achieved for all 11 surveys with three or four mailings. This high response rate resulted in a sampling error of less than 5%. Approximately, 4% of the data presented in this paper was previously published in studies about specific survey year information [16,17,18]. This paper is unique because the data evaluated 34-year trends in the Pacific Northwest, USA.

When this survey was first initiated in 1987, the population of the four Pacific Northwest states was 8,696,000. However, by 2021, the region's population had grown to 15,380,000. This 76% population increase resulted in the region becoming more urban over the 34-year study period. On a numerical basis in 2021, based on county classification, the urban, suburban and rural populations of the four Pacific Northwest states were 12,304,000, 2,485,000 and 591,000 people, respectively.

4.1 Public perception of government emphasis on environment.

In this study, government was defined in the following four layers: (1) federal government, (2) state government, (3) county, city or town government and (4) individual citizens. Thus, government and elected officials could be at the federal, state, county, city or town level. A general government question would refer to all government entities except individual citizens. When the public was asked if the environment was receiving the appropriate amount of emphasis by the government, answers varied over this 34-year study; however, trends were apparent (Table 1). Statistically significant differences in the public response to this question were observed over time. By 2021, a majority (58.8%) of the surveyed public felt that the environment did not receive enough emphasis from the government. This value was only 24.2% in 1987, but this not enough emphasis response doubled by 2021. This increase in the not enough emphasis response generally increased with every survey year.

The percentage of the public that felt that the government placed too much emphasis on the environment decreased from 20.2% in 1987 to only 8.7% in 2021 (Table 1). The percentage of survey respondents thinking that the government placed the right amount of emphasis on the environment declined from 39.1% in 1987 to about 25% from 2017 to 2021.

Demographic differences had a significant impact on responses to this question. Demographic answer differences were observed for gender, age, education level, community size, state of residence and the urban–suburban–rural split based on county size (Table 2). Females were more likely than males to say that the government did not put enough emphasis on the environment. Survey respondents less than 40 years old also were most likely to think that government did not put enough emphasis on the environment. College graduates were most likely to say that there was not enough emphasis on the environment. People residing in cities of more than 100,000 people were most likely to think that the government did not emphasize the environment enough. Residents of Washington and Oregon were more likely than residents of Alaska and Idaho to find fault with the lack of governmental emphasis on the environment. Finally, residents of urban counties were more likely than residents of rural counties to say that the government under-emphasized the environment.

Table 1. Answer to the question: ‘In your opinion, does the environment receive the right amount of emphasis from government and elected officials?’.

| Emphasis | 1987 | 1992 | 1998 | 2002 | 2007 | 2012 | 2017 | 2021 | Significance |
|-------------------------|------|------|------|------|------|------|------|------|--------------|
| | % | | | | | | | | |
| No, too much emphasis | 20.2 | 19.4 | 16.9 | 18.3 | 10.9 | 10.1 | 9.1 | 8.7 | **** |
| No, not enough emphasis | 24.1 | 28.4 | 34.1 | 33.9 | 46.2 | 50.2 | 52.3 | 58.8 | **** |
| Yes, right emphasis | 39.1 | 37.1 | 34.0 | 32.7 | 30.0 | 27.4 | 24.1 | 25.4 | **** |
| No opinion | 13.5 | 12.1 | 14.1 | 11.9 | 12.9 | 10.2 | 13.1 | 6.5 | **** |

**** = Significant at the 0.001% level of probability.

Table 2: Influence of population demographics on people most likely to say that the government did not place enough emphasis on the environment. All survey years are pooled.

| Demographic | Most likely to conclude that the government does not place enough interest on the environment | Significance |
|--------------------|---|--------------|
| Gender | Females | ** |
| Age | <40 years old | *** |
| Education level | College graduate | *** |
| Community size | >100,000 people | **** |
| State of residence | Washington, Oregon | *** |
| County status | Urban | **** |

, *, **** = significant at the 0.05, 0.01 and 0.001 levels of probability. NS = not significant.

4.2 Responsibility for protecting water resources

Public perception of different levels of government doing a good or very good job (answers are added together) is shown in Table 3. Public perceptions significantly changed with time. In general, the public was significantly more likely to say that all levels of government were doing a good or very good job after 2007 than prior to 2000 (Table 3). Public satisfaction with the government in 2021 ranked from best to worst was county, city or town government (61.4%), state government (52.9%), federal government (36.2%) and individual citizens (34.7%).

The percentage of survey respondents saying that the federal government was doing a good or very good job of protecting water resources increased from 14.9% in 1987 to 36.2% in 2021. Similar trends were observed for satisfaction with state government and counties, cities and towns – although a larger percentage of the public was satisfied with these levels of government than with the federal government.

The demographic factors of gender, age, education level, community size, state of residence and population nature of county significantly influenced answers by survey respondents (Table 4). When looking at satisfaction with the federal government, it was found that females were more satisfied than males and that residents less than 60 years old were more satisfied than older residents. Residents with some college experience were more satisfied with the efforts of the federal government than both less educated and more educated respondents. People residing in communities having between 25,000 and 50,000 residents were most satisfied with federal efforts. Residents of Idaho were more satisfied with federal efforts than people in Alaska, Oregon and Washington. This answer is interesting because, in general, residents of Alaska thought that the federal government was being too proactive, while residents of Oregon and Washington felt that the federal government was doing too little to protect water. Finally, people living in suburban counties were most likely to say that the federal government efforts were better than those residing in urban and rural counties. It should be noted, however, that at no time did more than 44% of the survey respondents give the federal government a rating of good or very good for their water protection efforts.

The demographic data for state governments and county, city or towns and individual efforts are not shown. However, the demographic trends on attitudes toward the federal government follow similar demographic patterns.

The public was divided on the question of which level of government should be most responsible for protecting water quality at the community level (Table 5). State government and counties/cities/towns were most frequently cited as they should be most responsible for protecting water resources. Public opinion often changed over the 34-year sampling period (Table 5). At no time did more than 12% of the surveyed public think that the federal government should be most responsible for environmental protection. However, there was a significant trend about federal responsibility over time. Prior to 2002, about 10% of the public thought that the federal government should be most responsible for environmental protection. However, by 2012, less than 7% of the surveyed public felt that the federal government should be most responsible. Long-term trends about state government and counties/cities/towns were not observed; however, almost 40% of the public thought that each group (state government, counties/cities/towns) should be most responsible for environmental protection. The public was at least four times as likely to say that state government or counties/cities/towns should be responsible for environmental protection than the federal government.

Table 3: Public perception of government entities doing good or very good (sum of good and very good answers) in fulfilling their responsibilities for protecting water resources in their community of residence.

| Entity | 1987 | 1998 | 2002 | 2007 | 2012 | 2017 | 2021 | Sign. |
|----------------------|------|------|------|------|------|------|------|-------|
| | % | | | | | | | |
| Federal government | 14.9 | 18.4 | 21.4 | 28.0 | 43.3 | 40.1 | 36.2 | **** |
| State government | 34.8 | 38.6 | 40.1 | 42.9 | 48.8 | 54.1 | 52.9 | **** |
| County, city or town | 47.2 | 48.0 | 50.3 | 55.6 | 63.1 | 60.1 | 61.4 | **** |
| Individual citizens | 19.6 | 22.8 | 24.6 | 27.2 | 38.2 | 36.2 | 34.7 | **** |

**** = Significant at the 0.001 level of probability.

Table 4: Influence of population demographics on people who believe that the federal government is doing a good job (sum of good and very good answers) fulfilling their responsibilities for protecting water resources in my community of residence. All survey years are pooled.

| Demographic | Most likely to conclude that the federal government is doing a good job protecting water | Significance |
|--------------------|--|--------------|
| Gender | Females | **** |
| Age | <60 years old | ** |
| Education level | Some college | ** |
| Community size | 25,000 – 50,000 | *** |
| State of residence | Idaho | *** |
| County status | Suburban | *** |

** , *** , **** = significant at the 0.05, 0.01 and 0.001 levels of probability.

Table 5: Answer to the question: 'In your opinion, who should be most responsible for protecting water quality in your community?'

| Entity | 1987 | 1992 | 1998 | 2002 | 2007 | 2012 | 2017 | 2021 | Sign. |
|----------------------|------|------|------|------|------|------|------|------|-------|
| | % | | | | | | | | |
| Federal government | 8.4 | 10.0 | 10.6 | 8.6 | 9.5 | 6.3 | 6.2 | 5.4 | *** |
| State government | 34.2 | 36.0 | 29.4 | 24.9 | 39.0 | 38.2 | 41.2 | 37.6 | NS |
| County, city or town | 36.4 | 40.1 | 36.8 | 39.0 | 37.3 | 40.2 | 39.1 | 38.3 | NS |
| Individual citizens | 12.8 | 13.8 | 12.0 | 11.8 | 10.6 | 12.2 | 10.1 | 14.6 | NS |
| Don't know or other | 6.0 | 4.3 | 10.2 | 15.7 | 3.5 | 3.1 | 2.3 | 3.1 | *** |

NS = not significant; *** = Significant at the 0.01 level of probability.

4.3 State government spending on environmental protection

Public views on state government spending to protect the environment over this 34-year study are shown in Table 6. When confronted with the statement 'In my opinion my state of residence spends less money on environmental problems including water quality than it should', residents were more likely to agree with it in 2021 than in 1987 (Table 6). When the strongly agree and agree responses were summed, the percentages of the public saying that their state government spent less money than it should in 1987, 2002, 2012 and 2021 was 28.7%, 33.9%, 36.9% and 45.1%, respectively. This upward trend was observed throughout the 34-year study period. The percentage of people with no opinion was relatively high and ranged from 28.4% to 40.8% over the study period. The percentage of people disagreeing with the survey statement declined over the study period.

State of residence significantly impacted a person's response to this survey question. When the agree and strongly agree answers are summed, a majority of residents of Washington (54.2%) and Oregon (50.3%) were more likely to agree that their states spend too few dollars on environmental protection. Conversely, only 23.4% of Alaska residents thought that too little was spent on environmental protection. Idaho residents were in the middle with 38.1% of residents saying too little was spent on environmental protection.

4.4 Participation in environmental activities.

Less than half of survey respondents participated in one or more environmental activities over the course of this survey study (Table 7). Even though the percentage of survey respondents that took part in environmental activities, including attending class, workshops or volunteer activities, changed over time, obvious trends were not apparent. Table 7 can be best summarized with the following findings: (1) about half of the surveyed public never took part in an environmental activity, (2) depending on the survey year between 20.1% and 30.3% participated more than once in an environmental activity and (3) no evidence in upward or downward trends in environmental participation were observed.

The demographic factors of gender, age, education level, community size, state of residence and the urban-suburban-rural make-up of a county impacted responses to this survey question (Table 8). Females were more likely than males to participate in environmental activities.

Table 6: Answer to the question: 'Do you agree with the following statement: In my opinion my state of residence spends less money on environmental protection including water quality than it should'.

| Answer | 1987 | 1992 | 1998 | 2002 | 2007 | 2012 | 2017 | 2021 | Sign. |
|---------------------|------|------|------|------|------|------|------|------|-------|
| | % | | | | | | | | |
| Strongly agree | 7.1 | 10.4 | 10.8 | 10.7 | 14.2 | 15.3 | 19.1 | 19.0 | **** |
| Agree | 21.6 | 20.8 | 22.4 | 23.2 | 22.7 | 21.5 | 22.2 | 26.1 | ** |
| No opinion or other | 40.8 | 38.8 | 42.3 | 36.5 | 29.5 | 28.4 | 33.1 | 30.6 | **** |
| Disagree | 19.4 | 20.2 | 18.3 | 19.9 | 22.4 | 22.5 | 17.2 | 16.9 | ** |
| Strongly disagree | 11.1 | 9.8 | 6.2 | 9.7 | 11.2 | 12.3 | 8.4 | 7.4 | ** |

** , *** , **** = Significant at the 0.5, 0.01 and 0.001 levels of probability, respectively.

Table 7: Answer to the question: ‘How often have you or someone in your household participated in an environmental-related activity such as a class, workshop or volunteer effort?’.

| Answer | 1987 | 1992 | 1998 | 2002 | 2007 | 2012 | 2017 | 2021 | Sign. |
|------------------------|------|------|------|------|------|------|------|------|-------|
| | % | | | | | | | | |
| YES, often | 5.4 | 6.1 | 4.2 | 4.9 | 3.9 | 4.3 | 2.9 | 3.6 | ** |
| YES, more than once | 23.8 | 20.1 | 26.3 | 22.9 | 22.3 | 24.3 | 27.1 | 30.3 | ** |
| YES, once | 9.4 | 10.6 | 11.8 | 8.8 | 3.1 | 5.8 | 8.6 | 10.1 | NS |
| NOT SURE | 11.3 | 17.0 | 3.9 | 9.8 | 19.2 | 13.2 | 11.3 | 7.4 | NS |
| NO, never participated | 50.1 | 46.2 | 53.8 | 53.6 | 51.5 | 52.4 | 50.1 | 48.6 | NS |

NS = not significant. ** = Significant at the 0.05 level of probability.

Table 8: Influence of population demographics on people most likely to say that they have participated in an environmental-related activity such as a class, workshop or volunteer effort. All survey years are pooled.

| Demographic | Most likely to participate in environmental-related activity (class, workshop and volunteer effort) | Significance |
|--------------------|---|--------------|
| Gender | Females | **** |
| Age | <70 years old | ** |
| Education level | College graduate | ** |
| Community size | >100,000 people | ** |
| State of residence | Washington | *** |
| County status | Urban | ** |

, *, **** = significant at the 0.05, 0.01 and 0.001 levels of probability. NS = not significant.

People older than 70 years old, as well as college graduates, were more likely to participate in environmental activities. Residents of communities with more than 100,000 people and people from urban counties were most likely to participate in environmental classes, workshops and volunteer activities. State of residence was highly significant as Washington residents were more than twice as likely to take part in environmental activities than Oregon, Idaho and Alaska residents. Alaska residents were least likely to attend workshops, classes and volunteer activities.

5 CONCLUSIONS AND RECOMMENDATIONS

The views of the surveyed public over this 34-year survey study changed over time. A summary of the study findings were:

- The percentage of survey respondents thinking that the government placed the right amount of emphasis on the environment declined from 39.1% in 1987 to 25% between 2017 and 2021.
- By 2021, a majority (58.8%) of the public felt that the environment received enough emphasis from the government.

- Residents of the region were more likely to say that the county, city or town (61.4%) and state government (52.9%) were doing a good or very good job protecting the environment compared to only 36.2% for the federal government in 2021.
- Females, residents younger than 60 years old, people with some college education, residents of communities with between 25,000 and 50,000 people, Idaho citizens and suburban county residents were most likely to conclude that the government was doing a good or very good job protecting water resources.
- Throughout the 34-year survey study, the public identified state and county, city or towns as the governments who should be most responsible for protecting water quality in their community. Conversely, less than 11% of the public thought that the federal government should be most responsible in any survey year.
- When the agree and strongly agree answers were summed, state of residence significantly impacted respondent answers. The majority of Washington (54.2%) and Oregon (50.3%) residents were more likely to agree that their states spent too few dollars on environmental protection. Conversely, only 23.4% of Alaska residents thought that too little was spent on environmental protection.
- The three important observations made about public participation in environmental activities were: (1) about half of the surveyed public never took part in an environmental activity, (2) depending on the survey year between 20.1% and 30.3% participated more than once in an environmental activity and (3) no evidence in upward or downward participation trends were observed over this 34-year study.
- The residents most likely to participate in an environmental activity were females, people older than 70 years of age, college graduates, respondents living in communities larger than 100,000 people, residents of urban counties and residents of Washington and Oregon.
- An important finding of this study was that the general public did believe that the government played a legitimate role in protecting water at the federal, state and local levels.
- Most survey respondents felt that the government was competent at protecting water, although in many cases, not enough money was provided to water administering agencies to do an outstanding job.

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