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# Port Angeles Area Employer Survey: Demand for Training in Environmental and Resource Management

Carl Simpson  
*Western Washington University*

Linda D. (Linda Darlene) Clark  
*Western Washington University*

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Port Angeles Area Employer Survey:  
Demand for Training in Environmental  
and Resource Management

Report 1994-06

Carl Simpson  
Linda Clark

September, 1994

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## EXECUTIVE SUMMARY

Telephone interviews were completed with 42 Olympic Peninsula employers doing at least some work in the "environmental and resource management" area, along with much briefer contact with 42 other employers, establishing that they did not have employees in that area. Extrapolating results from our sample to all Olympic Peninsula employers involves a substantial margin of possible error. Even so, the report includes our best estimates of demand for personnel and training in Environmental Studies.

We estimate the number of full-time Olympic Peninsula employees in environmental and resource management at 1,256. Another 882 work partially in the area. The majority of these employers are in the public sector, although growth is somewhat greater for tribal organizations and in the private sector.

Over the next five years, there should be approximately 63 new hires per year working full-time in environmental and resource management, along with about 18 new hires working partially in the area. About 90% of these positions will require the Bachelors degree or higher, and about three-fourths of those will require that the degree be in Environmental Studies or will be open to that degree as one option. The annual demand for new hires with Bachelors degrees in Environmental Studies will therefore be in the 60-65 range, according to our estimates.

Demand is quite high for coursework in environmental studies to upgrade current employee skills. Two-thirds of employers say they would send at least one employee for courses each year if a full program in Environmental Studies is developed at Peninsula College. We estimate conservatively that a total of about 100 employees per year would be sent to take courses.

Employers in the environmental and resource management area indicate that their employees need a wide range of specific skills listed in the full report. They also emphasize management and planning ability, general educational skills, and communication skills.

Most employers (71%) in our sample say they expect their employees to reflect a particular philosophy concerning environmental issues. The great majority of these emphasize protecting the environment. Smaller groups emphasize legal compliance and balancing environmental protection with economic needs.

Most (71%) also say they see the Olympic Peninsula changing in ways that demand new skills of their employees. The primary skills they emphasize are ability to respond to and plan for rapid change, grasp of legal-bureaucratic issues, and grounding in basic principles of environmental science.

## **INTRODUCTION**

As part of its planning process, Western's University Extended Programs commissioned a survey of Olympic Peninsula employers, to estimate the demand for employees and training in Environmental and Resource Management on the Peninsula. The Western Washington University Office of Survey Research wrote and conducted the survey, and provides this report. The primary goal of the report is to estimate employer demand relevant to a possible expanded presence on the Peninsula by Huxley College of Environmental Studies. A secondary goal is to offer guidance as to the issues of concern and the policy directions being set by these employers.

## **METHOD AND SAMPLE**

Telephone interviews were conducted with appropriate informants in 42 places of employment on the Olympic Peninsula. (See Appendix **B** for a copy of the survey.) This number leaves considerable room for error, but represents a substantial proportion of appropriate employers in the target area. The data provide guidance at a modest cost.

A sample frame of employers was compiled with an eye toward balancing two needs: to represent all employers on the Peninsula and to contain costs by targeting employers most likely to have some level of involvement in environmental issues. The sample was developed in three stages. First, all relevant government offices and tribal headquarters were included. Second, Western Washington University's Port Angeles Center compiled a list of Peninsula employers identified as likely to have some involvement with environmental issues. Third, the Olympic Peninsula telephone directory yellow pages were perused in the attempt to identify a sample of employers, excluding those that clearly would have no connection with environmental or resource management. The third stage sample played the particular role of broadening the sample, to assure that we can extend our estimates of demand to all employers on the Peninsula. This third stage sample included approximately 50% of employers in the yellow pages who were judged to have possible involvement in environmental issues and who were not included in stages one or two.

After duplications across lists were removed, the total sample frame included 152 employer names. Eight had disconnected telephone numbers, reducing the actual sample to 143. Of these, the survey reached 125 numbers, although interviews were not completed in all cases. Appendix A details the disposition of each member of the sample. Twenty-nine reported that they do no hiring or training on the Peninsula. These were largely organizations in phase two of the sample that did some environmentally related

work on the Peninsula but were headquartered outside the area. Another 13 reported that they did no work relevant to environmental or resource management and therefore disqualified themselves from the survey. Removing these two types of inappropriate employers from the sample reduced the number to 102.

Our sample target was to complete interviews with 40 employers who have some level of involvement with environmental or resource management issues on the Olympic Peninsula. Of the 102 employers confirmed as appropriate, we completed interviews with 42. The fact that one interview with a main office covered data for itself plus three branch offices reduced the total organizations for sample to 99 with 42 completed interviews (or to 102 with 45 covered by completed interview). One employer refused to complete the interview. Of the remainder, 19 were never reached and 40 were reached to confirm that an interview would in fact be appropriate, but the interview was not completed because the individual we needed to talk with was not available or because we ended data collection when we reached our quota.

In short, we talked to or received data concerning 133 employers, of whom 83 were confirmed as having employees in the area and having enough relevance to the environmental field to be appropriate for interview. Another 19 were never contacted but appeared relevant for interview. Of the 83, one refused and 42 completed interviews covering 45 organizations.

For purposes of reporting our results, we have weighted the sample so that in each category shown in Appendix B, our results are extrapolated from the survey respondents to the total number of employers who are available on the Peninsula. Responses from all categories were then combined, so that our final results are expressed in terms of the best estimate of the *total responses* that would have been generated from interviewing every available employer on the Peninsula who has some level of involvement in the environmental area.

For every category in Appendix A except "other, phone book," we *assume* that the sample frame included all appropriate employers on the Olympic Peninsula. In the case of the "other, phone book" sample, our best estimate is that half the relevant numbers were included in the sample. Thus, our findings are extrapolated to the 152 employers on the original list plus another 27 that a full phone book list would have generated. Of those, the number our findings tell us would have been interviewed had we contacted all appropriate employers on the Olympic Peninsula is 122 (the 102 in our sample plus 20 others from the phone book). It is to this number of employers that we extrapolate the findings reported here.

Error margins are set by the number of surveys actually conducted, not by the numbers to which we extrapolate the findings. In a sample of 42, the 95% confidence interval error surrounding any percentage report would be approximately 15 percentage points. In this case, the sample represents a large enough proportion of the universe that the error is reduced to about 10 percentage points.

## FINDINGS

### Number of Employees in Environmental and Resource Management

Extrapolating from our final sample of employers who do at least some work in the environmental area, we estimate that such employers currently employ 9,212 people, most on the Olympic Peninsula. This particular set of employers are heavily in the public sphere, with an estimated 2,200 state and federal employees, 3,021 in city and county governments and ports, and 786 in Native American organizations. The final 3,205 are in other, private organizations. (See Appendix C.)

The more important question for this research is how many positions these employers have that would draw extensively on training in Environmental Studies. We asked "...how many, if any, of your employees deal with environmental or resource management issues at each of three levels of intensity... as their full time focus... as one substantial part of their duties...on an intermittent basis." (See Appendix B, question 3.) Table 1 displays summary findings, extrapolated to all relevant employers.

**Table 1. Estimated Number of Employees on the Olympic Peninsula in the Environmental and Resource Management Area, 1994**

	<i>Estimated Number*</i>
Full-Time in Env. & Res. Manag.	1,256
Substantial Part in Env. & Res. Manag.	606
Intermittent in Env. & Res. Manag.	276

\* Based on a sample of 42, the 95% confidence interval error margins for these estimates are quite high: 380 for full-time, 399 for substantial part, and 161 for intermittent.

The number of positions working full-time in the area of environmental and resource management is substantial. With a small sample, these figures are subject to substantial error. We can be 95% confident that the number of full-time workers is at least 885 and no more than 1,636, with the most likely figure close to 1,256. In addition, if we assume .4 full-time equivalents (FTE) for the "substantial part" positions and .1 FTE for "intermittent," we calculate a total FIE working in the field of 1,526.

## Number of Positions Opening in Environmental and Resource Management

New hires arise from expansion or turnover. We asked each employer in our sample two questions: a) "Within the next five years, how many, if any, noz positions do you envision hiring that deal with environmental or resource management issues at each of [the three levels shown in Table 2]?", and b) "Thinking of the employees you counted as currently working full-time or in substantial part on environmental issues, how many of those positions are likely to be opening to hire within the next five years, due to retirement or other turnover?" Estimated totals for each type of new hires are reported in Table 2.

**Table 2. Estimated Number of New Hires in the Environmental and Resource Management Area during the 1995-2000 Period on the Olympic Peninsula\***

	<i>From Expansion</i>	<i>From Turnover</i>	<i>Total</i>	<i>Total per Year</i>
Full-Time	164	151	315	63
Substantial Part	15	25	40	8
Intermittent	50		50	10

\* Based on a sample of 42, the 95% confidence interval error margins for these estimates are quite high From expansion, error terms are 58 for full-time, 11 for substantial part, and 59 for intermittent. From turnover, figures are 56 for full-time, and 14 for substantial part.

Despite reports of budget cutbacks by many of the largest public employers, some expansion and turnover is expected during the next five years. Our best estimate puts the figure of full-time openings at about 63 per year. These estimates are subject to more than statistical error (reported in Table 2). Managers are making estimates based on an uncertain economic and tax revenue environment. Several specified that they were being conservative, hesitant to report highly contingent future plans. Others simply gave us their best estimate. It is likely that the openings estimated from turnover represent firmer figures, since they are based on known current personnel.

Although the greatest proportion of current environment-related positions are with public employers, estimated openings from expansion are higher in number in the private sector. With 44.4% of full-time employees, city, county, state and federal governments account for 31.3% of projected new full-time openings and 37.7% of openings from turnover. Both Tribal employers and other private employers report expansion rates per present employee greater than for governments. (See Appendix C.)

### Training Needs Relevant to Environmental and Resource Management

One element of establishing demand for Bachelors level training in Environmental Sciences is to measure the educational needs of current and future employees in the area. We asked employers "What level of education do you normally require for your job(s) that deal with environmental and resource management issues?" The majority of employers require the Bachelors degree, especially for their full-time workers. Only one-fifth of these employers normally hire any category of their environmental and resource management workers with less than a Bachelors, while 31.9% hire a substantial number at the Masters or Ph.D. level. Figures for less than full-time environmental workers are similar, although less extreme.

**Table 3. Percent of Olympic Peninsula Employers who Normally Required each Educational Level for Positions in the Environmental and Resource Management Area\***

	<i>H.S. or A.A.</i>	<i>Bachelors</i>	<i>Masters +</i>	<i>Total</i>
Full-Time	20.1	81.3	31.9	133.3%
Substantial Part	28.3	63.5	17.0	108.8%
Intermittent	28.7	57.8	13.5	100.0%

\* Includes multiple responses by some larger employers who hire at different levels for distinct groups of workers in the environmental area. Percents, therefore, add to more than 100. Figures represent the percent of employers who hire at least a substantial proportion of their environmental workers at each level.

We also asked employers who require at least a Bachelors degree for employees working full-time or in substantial part in the environmental or resource management area whether they would prefer the degree to be in Environmental Studies, in another area, or mixed. Table 4 displays the percent who gave each response.

Not all employers who listed employees working in the environmental area prefer Environmental Studies degrees. One-fourth (24.7%) prefer other degrees and about half specify the environmental degree as preferable for some, but not all, of their employees or see the degree as one acceptable option rather than as a requirement. On the other hand, nearly one-fourth (22.6%) require the degree of all their relevant employees, and a total of 75.3% either require the degree of some of their employees or see it as an appropriate option.

**Table 4. Among Olympic Peninsula Employers who Require Bachelors Degrees for Positions in the Environmental and Resource Management Area, Percent who Prefer each Type of Degree(s) Indicated**

<i>Type of Degree Preferred</i>	<i>Percent</i>
Environmental Studies Only	22.6
Environmental Studies or Other (either OK)	18.4
Mixed (Environmental Studies for some; Other degree for others)	34.3
Other (non-Environmental Science)	24.7

If we apply these figures to our earlier estimates of job openings in the next five years (Table 2), we can generate one estimate of the local area demand for Environmental Studies degrees in each of the next five years. Including full-time and "substantial part" jobs, we have a total of 71 positions opening per year. About 90% of those will require at least a Bachelors degree. Somewhat less than three-fourths of those will require a degree in Environmental Studies or will be open to that option. Thus, the annual demand for Bachelors degrees in Environmental Studies will be about 60-65. We cannot estimate how many of those will be filled by people moving into the region from outside.

Another aspect of the training issue is how many current employees might be sent by their employers to take one or more courses. We asked: "If Western develops a full program in Environmental Studies at Peninsula College, how many of your current employees would you send to take courses in an average year? Answer categories are as shown below in Table 5.

About two-thirds (63.0%) of respondents with full-time or "substantial part" workers in the environmental area say they would send at least one employee for one or more courses per year. Some of these employers indicated that the number would depend on employee initiative, but all gave the impression of enthusiasm about the prospect. Indeed, 34 of the 42 employers who were interviewed indicated they would like to be contacted with further information about the present program at Peninsula, as well as about future plans.

If we take the midpoint of each interval in Table 5 times the number of employers who placed themselves in each category, we would estimate a total of 208 employees who might be sent each year for one or more courses. Marketing research confirms that respondents to hypothetical questions often overestimate, responding partly in terms of desires and partly in terms of realities. While there is no firm rule for adjusting such estimates, it might be prudent to cut this one in half, to estimate that about 100 employees per year might be sent to take one or more courses.

**Table 5. Percent of Olympic Peninsula Employers with Employees in the Environmental and Resource Management Area who Would Send Employees for Courses in Environmental Studies Each Year**

<i>Number of Employees</i>	<i>Percent</i>
None	37.0
One or two	33.1
Three to five	27.4
Five to ten	0
More than ten	2.5
Total (N)	100%(105)

**The Nature of Training Needs Relevant to Environmental and Resource Management**

The final questions of our survey were open-ended, asking employers of full-time or "substantial part" employers what skills their employees need to have, what philosophy, if any, they expect their employees to exemplify, and what new skills, if any, are required by changes in the social and economic environment of the Olympic Peninsula. (See Appendix B for specific questions.) The goal here is to provide information to the Port Angeles Center and others collating the viewpoints of employers of employees in the environmental and resource area. Results are displayed in a series of tables that conclude the report.

When we asked employers what skills their employees in the environmental and resource management area needed, we encouraged more than one response and probed for specific environment-related skills if they had not already mentioned them. We coded and tabulated up to four separate skills per employer. Employers listed an average of 2.91 separate skills. Table 6, displaying the categories into which their answers fell, therefore totals 291%. Figures indicate the percent of employers who mentioned each type of skill.

By far the most common type of response indicated some specific technical information, although the nature of that information or skill varied widely by employer. Management skills and planning ability was also listed by over half (58.6%) of employers. General educational skills such as analytical or writing skills were listed by 41.1%, with another 35.0% listing communication skills. (See Table 6.)

**Table 6: Major Skills Managers Say Employees Need to Work with Environmental Or Resource Management Issues**

<b>Specific Skills In Environmental Studies Area</b>	<b>126.6</b>
Technical Knowledge (general reference)	28.9
General Awareness of Current Environmental Issues	25.9
Biology, Marine Biology	15.2
Watershed	11.0
Hydrology	9.7
Wildlife	8.7
Knowledge of Business Impact On Environment	7.5
Wetlands	4.9
Relevant Experience	4.7
Knowledge of Resources	4.0
Water Quality	3.8
Chemistry	1.3
Computers	1.0
<b>Management Skills</b>	<b>58.6</b>
Knowledge of Laws/Regulations	27.8
General - People Skills, Organizational Skills	15.5
Planning/Managing Change	15.3
<b>General [Educational] Skills</b>	<b>41.1</b>
Analytical Skills	16.7
Flexibility	4.9
Know Where To Get Help/Information	4.9
Goal-oriented, Hard Working, etc.	4.9
Writing	4.9
Science	4.8
<b>Communication Skills</b>	<b>35.0</b>
PR, Marketing, Lobbying	25.8
General	6.1
Negotiation	3.1
<b>Skills Specific To Job But Not Applicable To Environmental Studies (e.g., "logging")</b>	<b>23.1</b>
<b>Ability To Apply Knowledge</b>	<b>7.0</b>
<b>TOTAL (N)</b>	<b>291.2% (103)</b>

Most (70.9%) employers indicated that they do "...have a particular philosophical approach to environmental issues that employees are expected to reflect." Table 7 reports how many employers indicated each of five different approaches identified from the data. By far the most common was to protect the environment (60.8%), with another 11.5% specifically referring to pollution prevention. (These two categories are differentiated only because one is much more specific and focused than the other.) Another substantial group stipulate a balance between protecting the environment and economic or business needs. A smaller group emphasizes legal compliance.

**Table 7: Philosophical Approaches To Environmental Issues that Managers Expect Employees to Reflect**

Protect Quality of Environment (Guard Uses, See As Finite, Conserve)	60.8
Balance Environmental Protection And The Economy/Business/Jobs	36.2
Comply With Laws	17.9
Prevent/Control Pollution	11.5
Seek Low Cost Solutions	1.3
<b>TOTAL (N)</b>	<b>127.6% (75)</b>

Most employers (71.0%) say they "...see the social and economic environment of the Olympic Peninsula changing in ways that will demand new skills...." When we asked these employers what types of new skills were called for, they answered in the three broad categories shown in Table 8: emphasizing legal-bureaucratic issues, the problem of change, and the need to understand principles of Environmental Studies. Two major themes underlying the more specific responses categorized and displayed in Table 8 are tools to cope with rapid change and the problem of balancing growth, development, and business diversification on the one hand with environmental protection on the other.

**Table 8: New Skills Managers See Demanded of Employees by Changes in the Social and Economic Environment of the Olympia Peninsula**

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<b>Legal-Bureaucratic Issues</b>	<b>109.5</b>
Must Balance Ecology / Regulations With Growth / Economy	35.5
Must Know Regulations On Development	29.4
PR - Manage People In Relation To Wildlife	18.0
Habitat Restoration	16.7
Open to Valuing Tourism	9.9
 <b>General Response To Coping With Change</b>	 <b>66.8</b>
Planning Skills (Cope with change, growth)	35.0
Need More Knowledge	17.2
Reference to Growth (Population, Economics)	11.0
Business Diversification; New Industries With New Needs, Resources	3.6
 <b>Understanding of Environmental Studies /     Ecology / Resource Management</b>	 <b>32.1</b>
<b>TOTAL (N)</b>	<b>208.4% (73)</b>

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Appendix A. Call Dispositions by Type of Employer in Initial Sample

Type Employer	Disconnected/	No Workers	No Work	Refused	Not	Completed	Total
	on Peninsula	in E.S.		Interviewed			
State/nat'l govt.	0	0	0	1	10 (7)*	7 (10)*	18
City/County/Port	0	2	5	0	3	12	22
Tribal	3	0	3	0	3	7	16
Other, typed list	2	23	5	0	29	10	69
Other, phone book	3	4	0	0	14	6	27
<b>TOTAL</b>	<b>8</b>	<b>29</b>	<b>13</b>	<b>1</b>	<b>59 (56)*</b>	<b>42 (45)*</b>	<b>152</b>

\* One interview with a lead organization provided data for three others as well, giving us full information for ten organizations in this category with seven completed interviews.

APPENDIX B  
THE SURVEY

**CODE AND SKIP Q 1 IF ORGANIZATION IS:**

Governmental -	
National	1
State	2
County	3
City	4
Native American organization	5

1. To begin, what products or services does your organization provide? (WRITE IN. IF SEVERAL, WRITE ALL BROAD AREAS.

2. How many total employees does your organization have in the Olympic Peninsula area?

\_\_\_\_\_

4. We would like to know how many, if any, of your employees deal with environmental or resource management issues at each of three levels of intensity. First, as their full-time focus.... Second, how many deal with such issues as one substantial part of their duties? .... Finally, how many deal with such issues on an intermittent basis.

FULL-TIME \_\_\_\_\_  
SUBSTANTIAL PART \_\_\_\_\_  
INTERMITTENT \_\_\_\_\_

5. Within the next five years, how many, if any, NEW positions do you envision hiring that will deal with environmental or resource management issues at each of these same three levels?

FULL-TIME \_\_\_\_\_  
SUBSTANTIAL PART \_\_\_\_\_  
INTERMITTENT \_\_\_\_\_

**IF NONE ON Q. #3 AND Q. #4, THANK THEM AND END THE INTERVIEW  
IF YES ONLY TO "INTERMITTENT," SKIP TO QUESTION 8, BOTTOM OF P 2.**

5. Thinking of the employees you counted as currently working full-time or in substantial part on environmental issues, how many of those positions are likely to be opening to hire within the next five years, due to retirement or other turnover?

FULL-TIME \_\_\_\_\_  
 SUBSTANTIAL PART \_\_\_\_\_  
 INTERMITTENT \_\_\_\_\_

Our last few questions have to do with the types of training you need for your employees who work in the environmental and resource management area, including your current positions and any new positions that may be opening within the next five years.

6. First, what level of education do you normally require for your job(s) that deal with environmental or resource management issues? [PROBE FOR THE SAME THREE LEVELS - OK TO RECORD MULTIPLE ANSWERS]

	H.S.	A.A.	B.A./B.S.	MASTERS +	D.K.
FULL-TIME	1	2	3	4	9
SUBSTANT'L PART	1	2	3	4	9
INTERMITTENT	1	2	3	4	9

**IF NONE AT AA OR ABOVE, SKIP TO QUESTION 8**

8. For those positions working with environmental issues full-time or as a major part of the jobs [and requiring at least an AA degree], do you prefer a degree in environmental science, or some other degree?

1. ENV SCI    2. OTHER    3. EITHER OK.    4. MIXED [Explain:]

9. If Western develops a full program in Environmental Studies at Peninsula College, how many of your current employees would you send to take courses in an average year? Would you say....

1. None    2. 1-2    3. 3-5    4. 6-10    5. more than 10

9. Still thinking of your employees working with environmental or resource management issues full-time or as a substantial part of their jobs, what would you say are the major skills your organization needs these people to have? [LIST ALL]

**IF FEW, OR VAGUE, ADD THE PROBE:** Is there any relatively specific environmental background your employees need? [RECORD ABOVE:]

**ASK ONLY FOR THOSE WHO COMPLETED QUESTIONS 5-7:**

10. Does your organization have a particular philosophical approach to environmental issues that employees are expected to reflect, and if so, what is it?

1. NO            2. YES [RECORD:]

11. Does your organization see the social and economic environment of the Olympic Peninsula changing in ways that will demand new skills, and if so, what type of skills?

1. NO OR DON'T KNOW            2. YES [RECORD:]

12. Would your organization be interested in further contact from Western's Environmental Studies program at Peninsula College?

1. NO 2. YES 9 DON'T KNOW

Appendix C. Number of Positions, Average Number of Positions per Employer,  
and Number of Employers by Type of Employer.

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Question 2. Number of Emploeess on the Olympic Peninsula, all Employers.

	Total Positions #	Average # Posit.	Number Employers
All Employers	9212	77.6	119
1 state & fed gov	2200	154.9	14
2 city, county, port	3021	201.4	15
3 native amer	786	82.6	10
4 private	3205	40.1	80

(Appendix C, cont.)

Question 3a. Number of Full-Time Postions in Environmental and Resource Management

	Total Positions	Average # Posit.	Number Employers
All Employers	1254	10.6	119
1 state & fed goy	418	29.4	14
2 city, county, port	139	9.3	15
3 native amer	252	26.4	10
4 private	445	5.6	80

Question 3b. Number of Postions in Substantial Part in Environmental and Resource Management

	Total Positions	Average # Posit.	Number Employers
All Employers	606	5.1	119
1 state & fed gov	42	2.9	14
2 city, county, port	20	1.3	15
3 native amer	39	4.1	10
4 private	505	6.3	80

\*\*\*\*\*

Question 3c. Number of Postions Intermittently in Environmental and Resource Management

	Total Positions	Average # Posit.	Number Employers
All Employers	276	2.3	119
1 state & fed gov	77	5.4	14
2 city, county, port	27	1.8	15
3 native amer	87	9.1	10
4 private	85	1.1	80

(Appendix C, cont.)

Question 4a. Estimated Number of New Full-Time Positions That Will Work In Environmental and Resource Management

	Total Positions	Average # Posit.	Number Employers
All Employers	164	1.4	119
1 state & fed gov	33	2.3	14
2 city, county, port	18	1.2	15
3 native amer	44	4.6	10
4 private	70	.9	80

Question 4b. Estimated Number of New Positions That Will Work in Substantial Part In Environmental and Resource Management

	Total Positions	Average # Posit.	Number Employers
All Employers	15	.1	119
1 state & fed gov	0	.0	14
2 city, county, port	1	.1	15
3 native amer	4	.4	10
4 private	10	.1	80

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Question 4c. Estimated Number of New Positions That Will Work Intermittently In Environmental and Resource Management

	Total Positions	Average # Posit.	Number Employers
All Employers	50	.4	119
1 state & fed gov	11	.8	14
2 city, county, port	0	.0	15
3 native amer	34	3.6	10
4 private	5	.1	80

(Appendix C, cont.)

Question 5a. Number Of Current Positions Working Full-Time On Environmental Issues, Likely To Be Opening To Hire Within The Next Five Years, Due To Retirement Or Other Turnover

	Total Positions	Average # Posit.	Number Employers
All Employers	151	1.3	119
1 state & fed gov	42	2.9	14
2 city, county, port	15	1.0	15
3 native amer	29	3.0	10
4 private	65	.8	80

.....

Question 5b. Number Of Current Positions Working in Substantial Part On Environmental Issues, Likely To Be Opening To Hire Within The Next Five Years, Due To Retirement Or Other Turnover

	Total Positions	Average # Posit.	Number Employers
All Employers	25	.2	119
1 state & fed gov	0	.0	14
2 city, county, port	4	.2	15
3 native amer	1	.1	10
4 private	20	.2	80

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Question 5c. Number Of Current Positions Working Intermittently On Environmental Issues, Likely To Be Opening To Hire Within The Next Five Years, Due To Retirement Or Other Turnover

	Total Positions	Average # Posit.	Number Employers
All Employers	78	.7	119
1 state & fed gov	77	5.4	14
2 city, county, port	0	.0	15
3 native amer	1	.1	10
4 private	0	.0	80