



## **Watershed Stewards Program** 2001 Annual Report



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**CLARK COUNTY**  
WASHINGTON

# **Watershed Stewards Program 2001 Annual Report**

*By Gary Bock, Program Coordinator*

## **EXECUTIVE SUMMARY**

In 2001, the Watershed Steward Program began to establish itself as a viable, long-term program. The program closed 2000 with 17 active stewards and a part-time Coordinator. The Program Coordinator's position was expanded to full time in 2001 and by the end of 2001, the volunteer pool increased to 42 active participants.

Fourteen new partnerships with government agencies and non-governmental organizations were formed. Stewards worked on restoration projects with Clark Public Utilities, Fish First, Vancouver/Clark Parks, Habitat Partners, the Clark Conservation District, and the Ridgefield National Wildlife Refuge. The Coordinator worked actively with Clark County to develop a volunteer water quality monitoring program to be implemented in 2002. Many of the Stewards are already monitoring local streams and are developing data in preparation for the program.

During the last half of the year, the Coordinator contacted nearly every environmental agency and organization in southwest Washington. He spoke at the meetings of many of these organizations, enhancing visibility for the program and forming partnerships that will provide new Stewards for future classes and quality volunteer opportunities for all the Stewards. Additionally, many agencies now contact the Watershed Stewards when there is a need for trained volunteer assistance.

With the advice of County staff and the Watershed Stewards Advisory Board, the Coordinator developed a PowerPoint presentation and will speak to many community groups and neighborhood associations in 2002. The Advisory Board feels that this will promote both the training and Watershed Stewards outreach programs throughout the year.

The Watershed Stewards are taking the initiative in researching and developing public education projects. Several of the Stewards participated in outreach to schools and others are developing plans for activities in Vancouver/Clark parks. Stewards are working actively with a variety of environmental agencies and organizations to promote reduction of non-point source pollution through individual action.

## **TASK 1 – ADVISORY BOARD**

The Coordinator routinely consults with the Advisory Board on matters pertaining to the Watershed Stewards. The members of the advisory board, especially Doug Stienbarger and Cindy Meats, are working on a long-term strategy to make the program more successful. The Advisory Board is also kept informed about Watershed Stewards events and encouraged to participate and offer suggestions.

## Deliverables:

The Advisory Board was formed during 2001 and will have quarterly meetings beginning in 2002. The Coordinator keeps the Advisory Board informed of Watershed Stewards activities and receives regular input from most of the members. The Coordinator added a Watershed Steward and a member of the clean Water Commission to the Advisory Board in 2001.

## Advisory Board

Douglas M. Stienbarger	WSU Cooperative Extension
Cindy Meats	Clark County Public Works
Dave Howard	Washington Department of Ecology
Tom Newman	Watershed Steward
Susan Rasmussen	Clean Water Commission
Denise Smee	Clark Conservation District

## Issues and Actions

- In order to ensure consistency of input, the Board will meet quarterly.
- The Board will focus on providing long-term vision for the program.
- In order to include the diverse populations in Clark County, efforts will be made to recruit another Board member from underserved populations.

## TASK 2 – VOLUNTEER TRAINING SESSIONS

There were two 10 week training sessions in 2001. The spring session was quite successful, attracting 22 applicants and graduating 20 Watershed Stewards. The fall session was marred by the September 11 terrorist attack, leading to a lack of coverage by local media. Five Watershed Stewards graduated from the program in the fall.

Training sessions were generally well received by participants. Comments on the guest speakers included “Well organized PowerPoint presentation”, “Interested in learning about hatchery operations”, and “Added interest to topics with illustrations” were noted and shared with guest speakers. Other comments such as “A concise list of web sites would be helpful” and “A tour of restoration projects in Clark



*Gordon Franklin, Natural Resource Conservation Service, instructs Watershed Stewards on soils.*

County would interest me” have been incorporated into the training or continuing education opportunities.

The content of the fall training represented a considerable improvement as the Coordinator developed a complete study notebook for each of the participants, which contained additional information on each topic. The Coordinator added variety to the curriculum by including more videos, reports, and multi-media presentations. All of the guest speakers were strongly encouraged to add multimedia aspects to their presentations as well.

### **Deliverables**

25 Stewards were trained in 2002

### **Issues and Actions**

- In an effort to sustain a consistent pool of training applicants, the Coordinator will significantly increase marketing and visibility of the program in 2002 through presentations to service clubs, neighborhood associations, and closer ties with other volunteer programs.
- To better assess program impact, the Coordinator will develop evaluation forms that include a numerical rating system. This will help quantify and track the effectiveness of Watershed Stewards training.

### **TASK 3 – VOLUNTEER MANAGEMENT**

Stewards were very active in 2001. The number of hours donated by Watershed Stewards doubled from first quarter to second and from second to third. The Watershed Stewards were involved in a wide variety of programs and activities sponsored by WSU Cooperative



*Watershed Stewards work with students from View Ridge Middle School to plant along Gee Creek.*

Extension, Clark County, other agencies, and numerous non-governmental organizations. The Stewards are also active in a wide variety of environmental organizations and many members of these organizations expressed interest in Stewards training due to the Coordinator’s outreach efforts.

The Coordinator and several of the Stewards were active in Clark County schools, giving River Rangers presentations, answering student questions on particular watersheds, and helping to implement the Student

Watershed Research Project, which teaches high school students to monitor water quality. Watershed Stewards reached nearly 300 students during 2001.

The Watershed Stewards participated in many community outreach efforts during 2001 (see Table 1). They partnered with Clark Public Utilities, the Clark Conservation District, the City of Camas, Vancouver Audubon, Clark County, LaCenter School District, the City of Vancouver, the U.S. Fish and Wildlife Service, and the WSU Research Extension Unit to reach out to many different populations in Clark County. The Stewards plan to participate in nearly every local environmental event in 2002.

**Table 1**

<b>Outreach Event</b>	<b>Partner(s)</b>	<b>Stewards Involved</b>	<b>Audience</b>
Envirothon	Clark Conservation District	6	325
Lacamas Festival	City of Camas, Clark County	4	400
Home and Garden Idea Fair	Clark Public Utilities	10	800*
Clark County Fair	Clark County ESA Office	24	1500*
LaCenter Community Connections	LaCenter School District	4	200*
Columbia River Watershed Festival	City of Vancouver	6	185
WSU Field Day	WSU Research Unit	2	45
Harvest Festival	WSU Research Unit	4	270*
Old Apple Tree Festival	City of Vancouver, Clark County, EIC	5	450 *
Bird Fest	U.S. Fish and Wildlife	4	400*
Birding on Salmon Creek	Vancouver Audubon	7	70
	<b>Totals</b>	<b>76</b>	<b>4645</b>

\* Contacts at large events are based on Steward estimates of actual contacts. Actual attendance at events was much greater.

The Coordinator contacted environmental organizations and community groups as well (see Table 2). He spoke to Rotary Clubs, volunteer organizations, and environmental groups at locations all over the county. The Coordinator contacted over 150 people in this manner.

**Table 2**

<b>Organization</b>	<b>Date</b>	<b>Attendees</b>
Gee Creek Enhancement Committee	September 6	12
Directors of Volunteer Programs Association	September 25	18
Camas/Washougal Rotary Club	October 25	33
Master Composters	October 26	9
Trout Unlimited	November 6	28
Habitat Partners	November 13	15
Fish First	November 25	28
Friends of the Ridgefield National Wildlife Refuge	December 11	8
	<b>Totals</b>	<b>151</b>

Finally, the Stewards regularly make short presentations at restoration events. The Stewards present planting instructions and a video produced by Thurston County Cooperative Extension and make brief presentations at habitat restoration events so participants understand the benefits of restoration. Eighty people have been contacted in this manner.

### **Deliverables**

Watershed Stewards participated in most of the environmental events that occurred in within Clark County in 2001. They created *Birding on Salmon Creek*, a new event that may become annual. The Stewards formed partnerships with many of Clark County’s environmental agencies and organizations and are regularly contacted when volunteer opportunities arise.

### **Issues and Actions**

- The Coordinator will form a sub-committee of Watershed Stewards to plan and implement public education events. This committee will help Stewards originate their own projects, in addition to working with other organizations and agencies. Projects will include improving the Watershed Stewards display, planning new events, and providing coordination allowing the Stewards to participate in multiple events on the same day.
- The Coordinator developed a list of “Community Volunteers”, people who expressed an interest in Watershed Stewards events without committing to the ten-week class. These volunteers are notified when the Stewards or a partner organization sponsor an event. This list, which currently has 53 people, grows with each new contact made by the Stewards at events or meetings.

### **Volunteer Projects**

The Coordinator keeps in touch with the Stewards in a variety of ways. All of the Stewards with email have been added to the list serve and regularly receive mail about events and activities that may be of interest. They also engage in dialogue about upcoming events and activities. The Coordinator or other Stewards contact Stewards without email through a phone tree system.

The Coordinator assists Watershed Stewards in accomplishing projects by offering advice and referrals to various agencies and organizations to facilitate partnerships. There is a library of free publications collected from a variety of organizations by the Coordinator available at the Extension. The



*Stewards take samples in the East Fork of the Lewis River.*

Coordinator also maintains a lending library at the Extension that includes technical manuals, county and state agency policy documents, and field guides. The Stewards use this library to plan educational programs, restoration projects and monitoring activities. All Stewards are also aware of the Environmental Education Cooperative and many hold WSU library cards.

Watershed Stewards volunteers were visible at nearly every environmental event during 2001. They staffed booths at the Lacamas Festival, the Home and Garden Idea Fair, the Clark County Fair, The Harvest Festival, the WSU Research Unit Field Day, the Old Apple Tree Festival, and Bird Fest at the Ridgefield Wildlife Refuge. The Stewards also created and staffed a birding event at Salmon Creek Park.

With the help of several Stewards and County staff, the Coordinator contracted for new artwork and a logo to better represent the program. This artwork is used on displays, brochures, and educational materials created for the program. One of the Stewards has designed a newsletter template and the first issue will be finished early in 2002 for distribution at public events and to a mailing list of approximately 250 people. The Extension Chair has contracted with a web designer and the Watershed Stewards web site will also be on line early in 2002.

Watershed Stewards reached out to Clark County schools in many ways. One Steward is helping implement the Student Watershed Research Project at Columbia River High School, Stewards gave four River Rangers presentations, and Stewards are working at Yacolt Middle, Pioneer Elementary, and Frontier Middle schools to begin environmental science programs in local natural areas.

The Watershed Stewards worked on restoration and maintenance projects in partnership with the Clark Conservation District, Clark Public Utilities, Habitat Partners, Vancouver/Clark Parks, Fish First, and View Ridge Middle School in Ridgefield. These projects enhanced several hundred feet of shoreline along Gee Creek, the East Fork of the Lewis River, and Salmon Creek. The Stewards participated in non-native vegetation removal at Whipple Creek Park, Salmon Creek Park, and the Ridgefield Wildlife Refuge and cleaned up trash along several miles of Lacamas and Round Lakes.

#### **TASK 4 – IMPACT EVALUATION AND REPORTING**

At the beginning of 2001, there were no formal records kept on Steward activities or volunteer hours. The Coordinator developed a spreadsheet that tracks hours for a variety of volunteer activities on a quarterly basis. For the first time since the inception of the program, it is possible to track the hours of individual Stewards. The Coordinator has also carefully tracked Watershed Stewards participation and public attendance at all the public events in which the Stewards participated.

The Stewards made no attempt to track contacts made at public events early in the year, relying on approximations. Beginning with the Clark County Fair in August, Stewards tracked the number and gender of contacts at events. In response to the civil rights review in September, the Coordinator developed forms to track contacts by ethnic category (see appendix).

### **Deliverables**

The Watershed Stewards were visible and active at virtually all environmental events and many large public events during 2001. They were also in attendance at a wide variety of restoration and plant maintenance events, often forming the largest portion of volunteers. Stewards donated a total of 1597 hours during 2001, worth \$24,578 (see Table 3). Many of the Watershed Stewards have far exceeded their 45-hour commitment and intend to continue for the foreseeable future. For the first time, the Watershed Stewards program is showing a cumulative effect from developing and nurturing a volunteer base.

**Table 3**

<b>Steward Hours</b>	<b>Q 1</b>	<b>Q 2</b>	<b>Q 3</b>	<b>Q 4</b>	<b>2001</b>
Education	49	45	88	81	263
Restoration	35	144	186	98	463
Water Quality Monitoring	0	33	97	71	201
Meetings	52	51	25	57	185
Continuing Education	24	43	199	104	370
Other (Office help, etc.)	16	32	63	4	115
<b>Total Hour Value: \$24,577.83 *</b>	176	348	658	415	1597

*\* \$15.39 per hour based on the Economic Report of the President (2000)*

### **Issues and Actions**

- The Coordinator will work with the Extension Chair during 2002 to develop a survey aimed at participants in Watershed Stewards events. This will help measure how Stewards actions help positively change peoples behavior.

### **SUMMARY**

The Watershed Stewards continue to move forward on many fronts. The Advisory Board regularly contributes to decisions made by the Coordinator and will hold quarterly meetings beginning early in 2002.

The format for training improved considerably in 2001 and the Coordinator is already working on more effective ways to promote the two sessions in 2002. Reaction to most of the guest speakers was positive and speakers appreciated the quality of Watershed Stewards volunteers.

Watershed Stewards have started to plan many of their own projects, participating in school programs and working with environmental organizations to restore natural areas. Many of the Stewards from earlier training sessions work independently with little oversight from the Coordinator.

Thanks to the Coordinator's outreach efforts and the hard work of many Stewards, agencies and organizations doing environmental education and restoration call the Extension regularly for advice and assistance. The Coordinator is preparing to make connections with many other organizations including Rotary Clubs, neighborhood associations, and Chambers of Commerce during 2002.

The Watershed Stewards program enters 2002 with a strong volunteer base and a solid training program. The local environmental community recognizes the program as a valuable resource (?) and the Stewards continue to enhance that reputation. The program is finally poised to reach out to members of the public who may have little knowledge of environmental issues. Through partnerships, quality educational materials, and well-trained volunteers, the Watershed Stewards expect to expand and reach new audiences in 2002.

## Appendix A: Volunteer Training Schedules / Agendas

## WATERSHED STEWARDS TRAINING SEPTEMBER 26, 2001 TO DECEMBER 12, 2001

Week 1	<i>Wednesday, September 26, 2001</i>	<i>6:30 p.m. to 9:00 p.m.</i>
6:30 p.m.	<b>Introduction</b> — Learn what the Watershed Stewardship program is about, what you can expect to learn during the course of the training, and what is expected of you as a Watershed Steward. <i>Doug Stienbarger, Gary Bock, WSU Clark County Cooperative Extension.</i>	
7:30 p.m..	<b>Watersheds</b> — Find out what constitutes a watershed and identify and explore the watersheds within Clark County. We will talk about some of the challenges that face each of the watersheds in Clark County.	
Week 1	<i>Saturday, September 29, 2001</i>	<i>9:00 a.m. to 3:00 p.m.</i>
<i>9:30 a.m.</i>	<b>Native Plants</b> — <b>Learn to identify native plants and which plants are most successful for wetland and streambank restoration in Clark County. Discover new ways of propagation and techniques that can be used to maximize the benefits from restoration efforts.</b> <i>Jim Comrada, Mabry Nursery</i>	
<i>11:30 a.m.</i>	<b>Lacamas and Round Lakes</b> – We will visit these jewels near Camas to get an understanding of how lakes and streams differ. Come prepared to hike a little and dress for the weather. <i>Gary Bock</i>	
Week 2	<i>Wednesday, October 3, 2001</i>	<i>6:30 p.m. to 9:00 p.m.</i>
6:30 p.m.	<b>Salmonids in the Columbia System</b> — Discover the challenges salmon face as they navigate the Columbia River and the many tributaries that enter the river from Clark County <i>Tammy Mackey, U.S. Army Corps of Engineers</i>	
7:30 p.m.	<b>Non-Point Source Pollution</b> — Find out how the Clean Water Act of 1974 is having a huge effect in Clark County right now. Learn what the county is doing to comply with federal law and how Watershed Stewards can help. <i>Cindy Meats, Clark County Watershed Resources</i>	
Week 3	<i>Wednesday, October 10, 2001</i>	<i>6:30 p.m. to 9:00p.m.</i>
6:30 p.m.	<b>Endangered Species Act</b> – Find out about the different salmonids living in Clark County which have been listed under the Endangered Species Act. What is being done to protect these fish, and what new regulations are Clark County residents faced with? <i>John Tyler, Clark County ESA Program</i>	
7:30 p.m.	<b>The Conditions of Clark County’s Watersheds</b> — Find out what conditions are currently in Southwest Washington and what State and County agencies are doing to protect water quality. <i>Rusty Post,</i>	

<i>Washington State Department of Ecology</i>	
Week 3	<b><i>Saturday, October 13, 2001</i></b> <span style="float: right;"><b><i>9:00 a.m. to 3:00 p.m.</i></b></span>
9:30 a.m.	<b>Soils – Learn about what kinds of soil can be found in Clark County and how soils affect, and are affected by, water. We will do a soils lab to learn to identify different types of soils. Gordon Franklin, NRCS</b>
11:30 a.m.	<b>Bird Fest at Ridgefield National Wildlife Refuge –</b> Tour the Ridgefield Wildlife Refuge and see some of the many species of bird that utilize this important stop on the Pacific flyway. Talk with representatives of Audubon and Friends of the Refuge. <i>Yvette Donovan, US Fish and Wildlife Service</i>
Week 4	<b><i>Wednesday, October 17, 2001</i></b> <span style="float: right;"><b><i>6:30 p.m. to 9:00 p.m.</i></b></span>
6:30 p.m.	<b>Clark County Geology — Learn about the geologic forces that formed the Pacific Northwest and Clark County. Find out about the Missoula Floods and the Columbia River Gorge. Rod Swanson, Clark County Watershed Resources</b>
7:30 p.m.	<b>Restoration Techniques –</b> Learn about bio-engineering, weirs, willow wattles, coir logs, and other buzzwords in the business of bringing back natural function to our streams. <i>Dick Dyrland, Fish First</i>
Week 5	<b><i>Wednesday October 24, 2001</i></b> <span style="float: right;"><b><i>6:30 p.m. to 9:00 p.m.</i></b></span>
6:30 p.m.	<b>Environmental Information Cooperative –</b> Take a tour of the library at WSU Vancouver that includes many excellent environmental references. Get your own library card and prepare for a lifetime of learning! <i>Carrie Kraten, Environmental Information Cooperative</i>
<b><i>7:30 p.m.</i></b>	<b>Watershed Characterization –</b> Clark County is using the latest in geographic information systems to characterize our watersheds and plan for the future. Learn how advanced mapping technology can give us the tools to plan for development. <i>Bob Hutton, Clark County Watershed Resources</i>
Week 6	<b><i>Wednesday, November 7, 2001</i></b> <span style="float: right;"><b><i>6:30 p.m. to 9:00 p.m.</i></b></span>
<b><i>6:30 p.m.</i></b>	<b>The permitting process –</b> Getting a permit for clearing land and other construction activities has gotten more complicated. Learn how Clark County is trying to make the process more user-friendly. <i>Dave Howe, Clark County Community Development</i>
<b><i>7:30 p.m.</i></b>	<b>Best Management Practices – Find out how local builders are using methods designed to keep sediment and other pollutants from running off into our waterways. Sheila Pendleton, Clark County Community Development</b>

Week 7	Wednesday, November 14, 2001	6:30 p.m. to 9:00 p.m.
<b>6:30 p.m.</b>	<b>Water Quality Monitoring</b> — Hear about the different parameters that are normally measured and learn what parameters are appropriate to use for different conditions in Clark County. <i>Tom Newman, Addy Lab</i>	
7:30 p.m.	<b>Benthic Macroinvertebrates</b> — Discover why the insects that live in a stream or lake can tell us a great deal about the health of the entire watershed. Learn what kind of creatures to look for in different types of water. <i>Jeff Adams, The Xerces Society</i>	
Week 7	Saturday, November 17, 2001	9:00 a.m. to 3:00 p.m.
<b>9:30 a.m.</b>	Water Quality Monitoring Lab – <b>Get some hands-on experience at taking samples, looking at sites, and counting macroinvertebrates.</b> <i>Gary Bock</i>	
<b>11:30 a.m.</b>	Field Trip to East Fork — <b>Explore some of the best salmonid habitat in Clark County. Look at some of the challenges faced by salmon and steelhead trying to survive in the face of human encroachment.</b>	
Week 8	Wednesday, November 28, 2001	6:30 p.m. to 9:00 p.m.
<b>6:30 p.m.</b>	Weed Management – <b>Some of the most common plants in the county are noxious weeds! Find out what the county is doing to control them. Learn about the latest methods to manage weeds with minimal impact on water quality.</b> <i>Phil Burgess, Clark County Weed Management</i>	
7:30 p.m.	<b>Integrated Pest Management</b> — Learn more about how to keep pests under control without chemical treatment. <i>Lynell Tanigoshi, WSU Vancouver Research Station</i>	
Week 9	Wednesday, December 5, 2001	6:30 p.m. to 9:00 p.m.
<b>6:30 p.m.</b>	<b>Local Projects</b> – Learn about how local landowners are working to protect water quality on their own property. <i>Becky Dalenberg, Clark Conservation District</i>	
<b>7:30 p.m.</b>	Mud and Manure Management — <b>Get down and dirty and discover how local farmers are managing the difficult problem of keeping mud and manure under control in our rainy climate.</b> <i>Penny Ramey, WSU Clark County Cooperative Extension</i>	
Week 10	Wednesday, December 12, 2001	6:30 p.m. to 9:00 p.m.
6:30 p.m.	Volunteer Ideas Fair — <b>Explore some of the projects that are going on in SW Washington and surrounding areas.</b> <i>Washington Dept of Fish and Wildlife Clark Conservation District Environmental Information Cooperative River Rangers Program</i>	

## WATERSHED STEWARDS TRAINING MARCH 14, 2001 TO MAY 23, 2001

Week 1	<b><i>Wednesday, March 14, 2001</i></b> <span style="float: right;"><b><i>6:00 p.m. to 9:00 p.m.</i></b></span>
6:30 p.m.	<b>Introduction</b> — Learn what the Watershed Stewardship program is about, what you can expect to learn during the course of the training, and what is expected of you as a Watershed Steward. <i>Doug Stienbarger, Gary Bock, WSU Clark County Cooperative Extension.</i>
7:30 p.m..	<b>The Conditions of Clark County's Watersheds</b> — Find out what conditions are currently in Southwest Washington and what State and County agencies are doing to protect water quality. <i>Dave Howard, Washington State Department of Ecology</i>
Week 2	<b><i>Wednesday, March 21, 2001</i></b> <span style="float: right;"><b><i>6:00 p.m. to 9:00 p.m.</i></b></span>
6:30 p.m.	<b>Watersheds</b> — Find out what constitutes a watershed and identify and explore the watersheds within Clark County. We will talk about some of the challenges that face each of our precious watersheds.
7:30 p.m.	<b>NPDES Program</b> — Find out how the Clean Water Act of 1974 is having a huge effect in Clark County right now. Learn what the county is doing to comply with federal law and how Watershed Stewards can help. <i>Earl Rowell, Clark County Watershed Resources</i>
Week 2	<b><i>Saturday, March 24, 2001</i></b> <span style="float: right;"><b><i>9:00 a.m. to 3:00 p.m.</i></b></span>
9:30 a.m.	<b>Soils – Learn about what kinds of soil can be found in Clark County and how soils affect, and are affected by, water. We will do a soils lab to learn to identify different types of soils. Steve Keirn, SW WA Health District</b>
11:30 a.m.	<b>Field Trip to Lacamas Lake</b> – Find out about lake ecology and how pollution affects one of the most popular recreation sites in Clark County. Walk the Heritage Trail to see how the County and developers are teaming up to protect this valuable resource. <i>Bob Hutton, Clark County Watershed Resources</i>
Week 3	<b><i>Wednesday, March 28, 2001</i></b> <span style="float: right;"><b><i>6:00 p.m. to 9:00p.m.</i></b></span>
6:30 p.m.	<b>Endangered Species Act</b> – Find out about the different salmonids living in Clark County which have been listed under the Endangered Species Act. What is being done to protect these fish, and what new regulations are Clark County residents faced with? <i>John Tyler, Clark County, ESA</i>
7:30 p.m.	<b>Salmonids in the Columbia System</b> — Discover the challenges salmon face as they navigate the Columbia River and the many tributaries that enter the river from Clark County <i>Lisa Harlan, WDFW</i>

Week 4	<i>Wednesday, April 11, 2001</i>	<i>6:00 p.m. to 9:00 p.m.</i>
6:30 p.m.	<b>Bio-engineering and Other Restoration Techniques — An introduction to stream hydrology and how human activities can help recreate natural habitat. Doug Fenwick, NRCS</b>	
7:30 p.m.	<b>Life Cycle of a Restoration Project</b> — Learn about the intricacies of planning and executing a good restoration project. Permitting, working with landowners, managing volunteers, and on-going monitoring will be covered. <i>Donna Hale, WDFW</i>	
Week 5	<i>Wednesday April 18, 2001</i>	<i>6:00 p.m. to 9:00 p.m.</i>
6:30 p.m.	<b>Clark County Geology</b> — Learn about the geologic forces that formed the Pacific Northwest and Clark County. Find out about the Missoula Floods and the Columbia River Gorge. <i>Rod Swanson, Clark County Watershed Resources</i>	
<b>7:30 p.m.</b>	<b>Local Projects</b> – Learn about how local landowners are working to protect water quality on their own property. <i>John Gaddis, Clark County Conservation District</i>	
Week 4	<i>Saturday, April 21, 2001</i>	<i>9:00 a.m. to 3:00 p.m.</i>
<b>9:30 a.m.</b>	<b>Native Plants</b> — <b>Learn to identify native plants and which plants are most successful for wetland and streambank restoration in Clark County. Discover new ways of propagation and techniques that can be used to maximize the benefits from restoration efforts. Jim Comrada, Mabry Nursery</b>	
<b>11:30 a.m.</b>	<b>Field Trip to East Fork</b> — Explore some of the best salmonid habitat in Clark County. Look at some of the challenges faced by salmon and steelhead trying to survive in the face of human encroachment. <i>Bob Hutton, Clark County Watershed Resources</i>	
Week 6	<i>Wednesday, April 25, 2001</i>	<i>6:00 p.m. to 9:00 p.m.</i>
<b>9:30 a.m.</b>	<b>Farm Management</b> — <b>Learn what techniques are used on Clark County’s farms to minimize damage to watershed health. Find out about Best Management Practices (BMPs) and how they help farms run smoother. Doug Stienbarger, WSU Clark County Cooperative Extension</b>	
<b>11:00 a.m.</b>	<b>Mud and Manure Management</b> — <b>Get down and dirty and discover how local farmers are managing the difficult problem of keeping mud and manure under control in our rainy climate. Penny Ramey, WSU Clark County Cooperative Extension</b>	

Week 7	Wednesday, May 2, 2001 6:00 p.m. to 9:00 p.m.
<b>6:30 p.m.</b>	<b>Water Quality Monitoring</b> — Hear about the different parameters that are normally measured and learn what parameters are appropriate to use for different conditions in Clark County. <i>Jeff Schnabel, Clark County Watershed Resources</i>
7:30 p.m.	<b>Benthic Macroinvertebrates</b> — Discover why the insects that live in a stream or lake can tell us a great deal about the health of the entire watershed. Learn what kind of creatures to look for in different types of water. <i>Phil Gaddis, Clark County Public Works</i>
Week 7	Saturday, May 12, 2001 9:00 a.m. to 3:00 p.m.
<b>9:30 a.m.</b>	Water Quality Monitoring Lab – <b>Get some hands-on experience at taking samples, looking at sites, and counting benthic macroinvertebrates. Learn the basics of constructing a database.</b> <i>Lisa Bucy, Clark County Conservation District; Jeff Schnabel, Clark County Watershed Resources</i>
<b>11:30 a.m.</b>	Field Trip to Ridgefield National Wildlife Refuge – <b>Walk the Oaks to Bottom Trail and see what is being done to protect water, plants, and animals on this 5000-acre wildlife preserve.</b> <i>Yvette Donovan, US Fish and Wildlife Service</i>
Week 8	Wednesday, May 9, 2001 6:00 p.m. to 9:00 p.m.
<b>6:30 p.m.</b>	The permitting process – <b>Getting a permit for clearing land and other construction activities has gotten more complicated. Learn how Clark County is trying to make the process more user-friendly.</b> <i>Terry LaRocque, Clark County Community Development</i>
7:30 p.m.	Best Management Practices – <b>Find out how local builders are using methods designed to keep sediment and other pollutants from running off into our waterways.</b> <i>Sheila Pendleton, Clark County Community Development</i>
Week 9	Wednesday, May 16, 2001 6:00 p.m. to 9:00 p.m.
<b>6:30 p.m.</b>	Integrated Pest Management — <b>Learn more about how to keep pests under control without chemical treatment.</b> <i>Lynell Tanigoshi, WSU Vancouver Research Station</i>
Week 10	Wednesday, May 23, 2001 6:00 p.m. to 9:00 p.m.
	<b>Volunteer Ideas Fair — Explore some of the projects that are going on in SW Washington and surrounding areas.</b> <i>Washington Dept of Fish and Wildlife; Clark County Conservation District Environmental Information Cooperative; River Rangers Program</i>

## WATERSHED STEWARDS TRAINING NOVEMBER 10, 2000 TO JANUARY 26, 2001

Week 1	<i>Friday, November 10, 2000</i>	<i>9:00 a.m. to 4:00 p.m.</i>
9:00 a.m.	<p><b>Introduction</b> — Learn what the Watershed Stewardship program is about, what you can expect to learn during the course of the training, and what is expected of you as a Watershed Steward. <i>Doug Stienbarger, Gary Bock, WSU Clark County Cooperative Extension.</i></p>	
10:30 a.m.	<p><b>Watersheds</b> — Find out what constitutes a watershed and identify and explore the watersheds within Clark County. We will talk about some of the challenges that face each of our precious watersheds.</p>	
1:00 p.m.	<p><b>The Watersheds of Clark County</b> — Take a trip around the county to get a look at the wide diversity of watersheds and habitat within our 656 square miles.</p>	
Week 2	<i>Friday, November 17, 2000</i>	<i>9:00 am to 4:00 p.m.</i>
9:30 a.m.	<p><b>Clark County Geology</b> — Learn about the geologic forces that formed the Pacific Northwest and Clark County. Find out about the Missoula Floods and the Columbia River Gorge. <i>Rod Swanson, Clark County Watershed Resources</i></p>	
10:30 a.m.	<p><b>Soils</b> — Learn about what kinds of soil can be found in Clark County and how soils affect, and are affected by, water. We will do a soils lab to learn to identify different types of soils. <i>Gordon Franklin, NRCS</i></p>	
1:00 p.m.	<p><b>The Conditions of Clark County's Watersheds</b> — Find out what conditions are currently in Southwest Washington and what State and County agencies are doing to protect water quality. <i>Dave Howard, Washington State Department of Ecology</i></p>	
2:00 p.m.	<p><b>NPDES Program</b> — Find out how the Clean Water Act of 1974 is having a huge effect in Clark County right now. Learn what the county is doing to comply with federal law and how Watershed Stewards can help. <i>Earl Rowell, Clark County Watershed Resources</i></p>	

### Thanksgiving Break

Week 3	<i>Friday, December 1, 2000</i>	<i>9:00 a.m. to 4:00 p.m.</i>
9:30 a.m.	<p><b>Endangered Species Act</b> — Find out about the different salmonids living in Clark County which have been listed under the Endangered Species Act. What is being done to protect these fish, and what new regulations are Clark County residents faced with? <i>John Tyler, Clark County, ESA</i></p>	

10:30 a.m.	<b>Salmonids in the Columbia System</b> — Discover the challenges salmon face as they navigate the Columbia River and the many tributaries that enter the river from Clark County <i>Lisa Harlan, WDFW</i>
1:00 p.m.	<b>Field Trip to East Fork</b> — Explore some of the best salmonid habitat in Clark County. Look at some of the challenges faced by salmon and steelhead trying to survive in the face of human encroachment. <i>Bob Hutton, Clark County Watershed Resources</i>
Week 4	<b>Friday, December 8, 2000</b> <span style="float: right;"><b>9:00 a.m. to 4:00 p.m.</b></span>
9:30 a.m.	<b>Water Quality Monitoring</b> — Hear about the different parameters that are normally measured and learn what parameters are appropriate to use for different conditions in Clark County. <i>Jeff Schnabel, Clark County Watershed Resources</i>
10:30 a.m.	<b>Benthic Macroinvertebrates</b> — Discover why the insects that live in a stream or lake can tell us a great deal about the health of the entire watershed. Learn what kind of creatures to look for in different types of water. <i>Donna Allard, US Fish and Wildlife Service</i>
12:30 p.m.	<b>Field Trip to Salmon Creek</b> — Field test the water and look for benthic macroinvertebrates to get a feel for the health of the water in our own backyard.
3:00 p.m.	<b>Building and Maintaining Databases</b> — Learn simple ways to take data from a research project and structure it so trends can be identified and how information can be communicated to the public. Find out about on-line resources that support volunteer efforts. <i>Lisa Bucy, Clark County Conservation District</i>

### HOLIDAY BREAK

Week 5	<b>Friday, January 5, 2001</b> <span style="float: right;"><b>9:00 a.m. to 4:00 p.m.</b></span>
9:30 a.m.	<b>River Rangers</b> – Learn how to make this great presentation, aimed at third and fourth graders, which sends home the basics of caring for our water. <i>Susan Duncan, Environmental Information Cooperative.</i>
12:30 p.m.	<b>Field Trip to Ridgefield National Wildlife Refuge</b> — Walk the Oaks to Bottom Trail and see what is being done to protect water, plants, and animals on this 5000-acre wildlife preserve. <i>Yvette Donovan, USFWS</i>
Week 6	<b>Friday, January 12, 2001</b> <span style="float: right;"><b>9:00 a.m. to 4:00 p.m.</b></span>
9:30 a.m.	Bio-engineering and Other Restoration Techniques — <b>An introduction to stream hydrology and how human activities can help recreate natural habitat.</b> <i>Doug Fenwick, NRCS</i>

11:00 a.m.	<b>Life Cycle of a Restoration Project</b> — Learn about the intricacies of planning and executing a good restoration project. Permitting, working with landowners, managing volunteers, and on-going monitoring will be covered. <i>Donna Hale, WDFW</i>
1:00 p.m.	<b>Native Plants</b> — <b>Learn to identify native plants and which plants are most successful for wetland and streambank restoration in Clark County. Discover new ways of propagation and techniques that can be used to maximize the benefits from restoration efforts.</b> <i>Jim Comrada, Mabry Nursery</i>
Week 7	Friday, January 19, 2001 <span style="float: right;">9:00 a.m. to 4:00 p.m.</span>
<b>9:30 a.m.</b>	<b>Farm Management</b> — <b>Learn what techniques are used on Clark County's farms to minimize damage to watershed health. Find out about Best Management Practices (BMPs) and how they help farms run smoother.</b> <i>Doug Stienbarger, WSU Clark County Cooperative Extension</i>
<b>11:00 a.m.</b>	<b>Mud and Manure Management</b> — <b>Get down and dirty and discover how local farmers are managing the difficult problem of keeping mud and manure under control in our rainy climate.</b> <i>Penny Ramey, WSU Clark County Cooperative Extension</i>
<b>1:00 p.m.</b>	<b>Integrated Pest Management</b> — <b>Learn more about how to keep pests under control without chemical treatment.</b> <i>Lynell Tanigoshi, WSU Vancouver Research Station</i>
Week 8	Friday, January 26, 2001 <span style="float: right;">9:00 a.m. to 4:00 p.m.</span>
	<b>Volunteer Ideas Fair</b> — <b>Explore some of the projects that are going on in SW Washington and surrounding areas.</b> <i>Lynn Wilson-Dean, METRO</i> <i>Washington Dept of Fish and Wildlife</i> <i>Clark County Conservation District</i> <i>Environmental Information Cooperative</i> <i>River Rangers Program</i>

Appendix B: Table of Contents for Volunteer Training Guide  
Supplemental Materials

Introduction  
Watersheds; the Water Cycle  
Native Plants

Regulatory Framework  
Salmon in the Columbia River

Non-Point Source Pollution  
The Endangered Species Act  
Soils

Geology of Clark County  
Stream Restoration Techniques

Information Sources  
Watershed Characterization

The Permitting Process  
Erosion Control

Water Quality Monitoring  
Benthic Macroinvertebrates

Weed Management  
Integrated Pest Management

The Conservation District  
Farm Management

Volunteer Ideas Fair