
Watershed Stewards Program 2009 Annual Report

Submitted to Clark County Clean Water Program

Submitted by WSU Extension Clark County

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Executive Summary

The Watershed Stewards Program held steady through a tough economic year. With the departure of the Program Assistant, the Coordinator recruited more volunteers to help plan and implement program events. Despite the lack of staff, the program saw about the same number of contacts this year as in 2008 and involved many more volunteers in the program.

The program graduated 32 volunteers from two volunteer training sessions in 2009 bringing the total trained to 272 adults since 2000. This year, 130 active Watershed Steward volunteered 2,493 hours. Outreach activities constituted 35% of these hours, followed by other support at 28%, with restoration, meetings, and monitoring making up the balance. Considering that monitoring opportunities decreased in 2009, Watershed Stewards made up the lack of opportunities by spending more volunteer hours helping the program run.

Stewards presented at various workshops in the community. Eight workshops attracted 208 participants. In addition to the community workshops, staff and volunteers presented shorter subject workshops and promotional presentations to a mix of neighborhood associations, school groups and community groups. Stewards and staff presented to 16 different groups reaching 384 people.

Stewards assisted in outreach through personal contact and conversations at community events such as the Clark County Fair, the Clark County Home and Garden Show, Ridgefield Blues and Birdfest, and Earth Day events. Stewards staffed outreach booths at 21 community events in 2009, making contact with 3,796 people.

The Storm Drain Stenciling program loans stenciling equipment to any Clark County resident to stencil "Dump no Waste, Drains to Stream" by storm drains. The Coordinator did not promote the stenciling program, yet lent the equipment out to 10 groups and individuals. Fifty-two volunteers stenciled 276 drains in 2009. Stencil volunteers learn about stormwater quality and often distribute literature to surrounding home owners that encourages home owners to keep their local storm drains clean and free of pollutants.

The Watershed Steward web page contains fact sheets and information to educate the public about stormwater quality and quantity. People downloaded fact sheets 3,143 times in 2009. Visitation to the web site declined in 2009, but the cause is not known.

Task 1 - Volunteer Training Sessions

Task 1a - Volunteer Training

The Watershed Steward Program conducted a spring and a fall volunteer training session in 2009. The spring volunteer training series graduated 17 new Watershed Stewards and one youth audited the training. Fall training ended November 11th and graduated 15 Stewards. A 14-year sat through the class with her mother. Thirty-two people completed volunteer training in 2009.

Both Watershed Steward training sessions closely follow previous years' training topics (see Appendix A). After each class, trainees rate the speaker on a scale of one to five on presentation style, practicality of the information, visual aids, handouts, and the overall impression of the presentation. Speaker

evaluations are voluntary and anonymous, although not all trainees complete surveys each class. Table 1 summarizes evaluations from spring and fall for each topic.

Table 1: 2009 Training Session Speaker Evaluation Ratings

Topic Area	Spring		Fall	
	# Trainees (% Eval. Returned)	Average Rating	# Trainees (% Eval. Returned)	Average Rating
Intro to WSU Extension & Watershed Stewards	20 (90%)	4.3	19 (100%)	4.7
The Basics of Water	19 (84%)	4.7	17 (94%)	4.6
Salmon and the Endangered Species Act	14 (86%)	4.5	14 (71%)	4.7
Soils/Missoula Floods	15 (73%)	4.3	14 (100%)	3.5
Benthic Macro-invertebrates	17 (65%)	5.0	15 (80%)	4.8
Restoration Field Trip	N/A	N/A	14 (71%)	4.7
Native Plants and small site restoration	14 (50%)	4.5	15 (93%)	4.3
Rain Gardens, Rain Barrels & LID	18 (67%)	4.6	13 (85%)	4.7
Restoration Techniques	14 (50%)	5.0	16 (69%)	4.5
Weed Management	15 (80%)	4.6	15 (67%)	4.5
Composting	15 (80%)	4.6	15 (80%)	4.3
Stormwater Facilities field trip	14 (65%)	4.8	11 (55%)	4.6
Home Gardening/Pest Management	15 (80%)	4.3		
Monitoring			16 (69%)	4.6
Youth Outreach	21 (81%)	4.4		
Pets and Clean Water			13 (15%)	4.9
Adult Outreach	21 (81%)	4.4		

N/A – no evaluations collected for this class

Blank ratings means the topic did not occur during this session

The benthic macroinvertebrate class and outreach sessions consistently scored well and received the most enthusiastic evaluations and response after class sessions. Trainees from both spring and fall scored most sessions highly (above 4.5). Several sessions rated lower than 4.5, the average rating for the class series. In the spring, several topics rated 4.3. These speakers received comments about unfocused presentations or technical difficulties that detracted from the presentation. Similar issues surfaced in fall for the lower-rated speakers. The Coordinator will work with speakers with lower ratings to improve presentation clarity, visual aids, and/or technical aspects.

Spring Training

The first volunteer training series ended April 14th, graduating 17 new Watershed Stewards. One trainee was accompanied by her 16-year old daughter. While 21 people registered, one moved out of town and two developed health problems forcing them to drop out.



Spring Watershed Steward training class on field trip with LCFEG.

During spring session, the Coordinator focused on providing practical information usable in trainee's daily lives. Staff included a session on low-impact development, including rain barrel and rain garden construction. An entire evening on outreach included youth outreach and public speaking to help encourage trainees to focus on outreach.

Full-length evening sessions for several topics allowed more in-depth discussion and hands-on activities for topics such as salmon policy, macroinvertebrates, and LID. While expanding time for these topics eliminated a presentation on native plants, other speakers on soils, IPM, weeds, and restoration all spoke about native plants during their presentations.

As with previous classes, the most highly rated presentations included macroinvertebrates and impacts of urbanization. These presentations integrate active participation and draw many positive comments. The field trip to view Clark County stormwater facilities also received high marks. County staff received many positive comments about their passion and the wealth of information shared through visiting five stormwater facilities. Table 2 summarizes evaluations received from the class sessions.

Table 2: Watershed Steward Spring Training Session Speaker Evaluations

Class Topic	Speaker	Average Rank	Trainees	% Returned
Introduction to Extension, Watershed Stewards, and watersheds basics	Chad Hoxeng, Jen Naas	4.3	20	90%
Clark County CWP Overview and Impacts of Urbanization	Cary Armstrong	4.7	19	84%
Stormwater Facilities field trip	Ken Lader and Julie Christian	4.8	14	64%
Low Impact Development	Jen Naas	4.6	18	67%
Youth Outreach	Bev Walker (WS)	4.4	21	81%
Adult Outreach	Stephanie Hope	4.4	21	81%
Macroinvertebrates	Judy Bufford (WS)	5.0	17	65%
Salmon, Dams and Policy	Tammy Mackey (WS)	4.5	14	86%
Composting	Carlos Rodriguez	4.6	15	80%
Soils	Gordon French	4.3	15	73%
Restoration for small sites	Jim Comrada (WS)	4.5	14	50%
Restoration for large sites w/ follow up field trip	Peter Barber (WS)	5.0	14	50%
Integrated Pest Management and garden management	Charles Brun	4.3	15	80%
Weed Management	Casey Gozart and Denielle Cowley (WS)	4.6	15	80%

Table 3 shows the evaluation of the entire training with 100% of trainees submitting evaluations. Trainees rated the training highly, averaging 4.6 out of five for all topic areas. As with previous sessions, trainees' opinions' split when asked about conveying the information learned in classes to the public. This year, the Coordinator included a session on adult outreach and public speaking, but this apparently did not help some trainees feel comfortable enough to speak to others. The outreach session occurred half-way through the series, which might have influenced their perception of their speaking

abilities due to the length of time between evaluation and the class. Field trips ranked highly although three trainees were unable to attend.

Table 3: Overall Watershed Steward Spring Training Evaluation

Topic Area	Low					High	Average of Responses	N (NR/DK)
	1	2	3	4	5			
I learned a lot about watershed protection in this course.					18	5.0	18 (0)	
I would recommend this course to others.					18	5.0	18 (0)	
The course content provided me enough information to feel confident speaking with others about watersheds.			1	7	9	4.2	17 (1)	
This course is a good use for part of the clean water fee I pay with my property taxes every year.			1	2	13	4.2	16 (2)	
The field trips were a good addition to the regular weekday classes.				2	13	4.1	15 (3)	
I will use the knowledge I gained in this course in my everyday life or work.				8	10	4.6	18 (0)	
The number of classes in the course was just right.			1	4	13	4.7	18 (0)	
Weeknight classes worked out fine for my schedule.				3	15	4.8	18 (0)	
It was easy to get to class at CASEE.				5	13	4.7	18 (0)	
Now that I've finished training, I know what is expected of me as a volunteer.			1	6	10	4.3	17 (1)	
Overall Average						4.6		

*N = number of responses, NR = no response, DK = don't know

Note: The youth auditing the training completed an evaluation and is counted since evaluations are anonymous, making it impossible remove.

Respondents stated they shared class information with over 300 friends, family, and co-workers. While several trainees commented positively on the structure, time, and place of the series, others remarked:

“The classes were very informative. I learned a lot from this class... After the first day I was telling people what I learned.”

I “learned a lot from the class and felt very good about ... learning and gaining knowledge. 1-2 things every class!”

Table 4 shows the self-rated change in knowledge from the series-end survey distributed to all trainees. The survey asks trainees to rate their understanding of the topic before they started the class series and after. All responses are taken on the last night of class. A majority of trainees self-reported changes in knowledge during the class series. For each topic area, at least 80% of respondents reported at least one knowledge level change. The larger changes in knowledge occurred for two topics; understanding the impacts of stormwater (50% with two or three levels of knowledge gain), and understanding Clark County watershed and environmental groups (87% with two or three levels of knowledge change).

Table 4: Watershed Steward Spring Training – Change in Knowledge Levels

Please rate your knowledge of the following topic areas:	Before and After Knowledge Level Change (As percent of respondents)				
	Same	1	2	3	N (NR)
Understanding the impact of stormwater quality on stream health:	19%	44%	31%	6%	16 (2)
Understanding the impact of stormwater quantity on stream health:	13%	38%	50%	0%	16 (2)
Knowing what I can do to improve watershed health:	19%	38%	25%	19%	16 (2)
Recognizing and managing native plants and invasive plants:	19%	44%	31%	6%	16 (2)
Understanding the role of macroinvertebrates and fish species in our watershed:	20%	40%	33%	7%	15 (3)
Knowing what daily activities can improve water management on my own property (composting, natural gardening, etc.)	13%	44%	25%	19%	16 (2)
Understanding the restoration process:	13%	40%	40%	7%	15 (3)
Knowing about watershed projects and groups in Clark County:	6%	6%	56%	31%	16 (2)

*N = number of responses; NR = no response

Note that the underage participant completed an anonymous evaluation and is therefore included in totals.

Testing Specific Knowledge

The Coordinator administered a pre- and post-test to trainees (See Appendix F). The test consists of two parts. Part one asks trainees to self-rate their knowledge of 11 different specific knowledge areas. Part two asks ten fill-in-the-blank questions related to watershed science expected to be covered in the training series. Trainees took the pre-test on the first day of training and the post-test on the last day of training. Table 5 summarizes the tested percentage change in self-reported knowledge for the second part of test which asks trainees ten short answer questions. The purpose of the test is to capture specific information trainees learn during the class series. Using fill-in-the blank answers tests specific learning of discrete information.

Table 5 shows the percentage of trainees who answered questions correctly on the pre and post tests. For all questions, the number of trainees answering correctly at least doubled from the pre-test to the post-test. The question about macroinvertebrates went from 0% correct answers to 57%. A correct answer for this question identifies the role that macroinvertebrates play in the food chain and as indicators for water quality.

One of the questions asked the trainees to define an impervious surface; a very basic question covered multiple times during the class series. Forty-three percent answered the question correctly on the pre-test. The number of trainees who answered correctly on the post-test increased to 100%. Correct answers had to show an understanding that impervious meant water was unable to filter or percolate through a hard surface. Nearly all of the trainees (86%) on the post-test used words like infiltrate or percolate.

Finally, one question asked what each household could do to reduce pollutants from entering the stormwater. There are multiple correct answers for this question, but only 36% of trainees correctly answered the pre-test, while 100% could name three things after the class series finished.

Table 5: Spring Watershed Steward Training - Pre- and Post- Test Results

Please rate your knowledge of the following topic areas:	Percent Answering Question Correctly – (As percent of respondents)		
	Pre-test	Post-test	N (NR)
What role does stormwater play in watersheds?	14%	50%	14 (3)
What is a watershed?	43%	86%	14 (3)
Name three processes in the hydrologic cycle.	14%	29%	14 (3)
What contributes to localized flooding aside from a rain storm?	43%	86%	13 (4)
What are some characteristics of natural streams that provide good habitat for fish or wildlife?	21%	79%	14 (3)
Why are macroinvertebrates important to the watershed?	0%	57%	14 (3)
What is an impervious surface?	43%	100%	14 (3)
Name three things a household can do to reduce pollutants entering the stormwater runoff?	36%	100%	14 (3)
What is the purpose of the clean water fee assessed on all property in Clark County?	14%	86%	14 (3)
What do the following acronyms mean? (NPDES, BMP, ESA, LID)	0%	7%	14 (3)

*N = number of responses; NR = no response

These results tend to support the increased changes in general knowledge participants self-report in at the end of the training session.

Fall Training

The second volunteer training series started on September 9th and ended on November 11th. The class included five teachers from various schools and grade levels throughout Clark County. The Coordinator organized clock hours in the spring and fall, benefiting teachers in ESD 112. Teachers received 2.5 clock hours for each Wednesday class and 4.5 clock hours for the Saturday sessions. Five teachers participated and received clock hours in the fall, while six received clock hours in the spring.

The Coordinator maintained nearly the same syllabus as spring, but used different speakers for some topics. The introductory topic, led by Clean Water Program staff, ranked 4.7 out of 5 and received complimentary comments on the speaker’s style and presentation content. Other presentations also received good ratings. This fall, the Coordinator invited a new speaker on geology and hydrology, but he ranked low because of confusing handouts and a convoluted presentation structure. The Coordinator will work with this speaker to create a more structured presentation with better visual aids and handouts. Ratings of each speaker are shows in Table 6.

All trainees completed a final evaluation which asked them to self rate their knowledge change from before the class series until the last class. The evaluation also asked the participant’s feelings about class structure and logistics. Table 7 shows the fall class’s evaluations of the series.

Table 6: Fall Watershed Steward Fall Training Session Speaker Evaluations

Class Topic	Speaker	Average Rank	Trainees	% Returned
What is a Watershed, Introduction to Extension and Watershed Stewards Program	Bev Walker, Jen Naas	4.7	18	100%
Clark County CWP Overview and Impacts of Urbanization	Cary Armstrong	4.7	17	94%
Hydrology, geology and soils	Dennis Dykes	3.5	14	100%
Low Impact Development	Jen Naas	4.7	13	85%
Pets and Clean Water	Elena Cronin	4.9	13	15%
Stormwater facilities field trip	Ken Lader & Julie Christian	4.6	11	55%
Small site restoration	Jim Comrada	4.3	15	93%
Macroinvertebrates	Judy Bufford	4.8	15	80%
Monitoring	Chad Hoxeng	4.6	16	69%
Large scale restoration	Pete Barber	4.5	16	69%
Composting	Carlos Rodriguez	4.3	15	80%
Weed management	Denielle Cowley	4.5	15	67%
Salmon, dams and policy	Tammy Mackey & John Tyler	4.7	14	79%
Restoration field trip	LCFEG	4.7	14	71%

A majority of the participants (83%) stated that they learned a great deal about watershed protection during the course and would recommend it to others. This outcome mirrors previous classes since class participants enjoy learning about local watersheds.

The lowest ratings occurred when trainees were asked about their confidence to relay the information to others; this is consistent with prior trainings. In the fall, the Coordinator dropped the session on public speaking, but did not see a dramatic drop in ratings for this question. The Coordinator continues to work on providing succinct information and instruction so facilitate participants' ability to do outreach comfortably.

Volunteers responded positively when asked about class timing and logistics. Questions asking about week night trainings and the weekend field trips averaged above a four (on a one to five scale). One person suggested having a few more classes to cover more material, but volunteers wrote only positive comments about the program.

Table 7: Overall Watershed Steward Fall Training Evaluation

Topic Area	Low				High	Average of Responses	N (NR/DK)
	1	2	3	4	5		
I learned a lot about watershed protection in this course				2	15	4.9	17 (0)
I would recommend this course to others				2	15	4.9	17 (0)
The course content provided me enough information to feel confident speaking with others about watersheds		1	1	8	7	4.2	17 (0)
This course is a good use for part of the clean water fee I pay with my property taxes every year.				3	12	4.2	15 (2)
The field trips were a good addition to the regular weekday classes				2	13	4.3	15 (2)
I will use the knowledge I gained in this course in my everyday life or work			1	6	10	4.5	17 (0)
The number of classes in the course was just right			3	5	9	4.4	17 (0)
Weeknight classes worked out fine for my schedule			1	3	13	4.7	17 (0)
It was easy to get to class at WSU Research Station			1	1	14	4.5	16 (1)
Now that I've finished training, I know what is expected of me as a volunteer			1	3	12	4.4	16 (1)
Overall Average						4.5	

*N = number of responses, NR = no response, DK = don't know

NOTE: an underage participant and two people who did not graduate completed anonymous evaluations.

Table 8 shows participant's change in knowledge when asked about specific topics taught during the class series. The fall class reported learning the most about watershed projects and groups in Clark County (72% improved their knowledge two or three levels), understanding the restoration process

Table 8: Watershed Steward Fall Training - Participant Knowledge Change

Please rate your knowledge of the following topic areas:	Before and After Knowledge Level Change (As percent of respondents)				
	Same	1	2	3	N (NR)
Impact of stormwater quality on stream health	11%	44%	44%	0%	18(0)
Impact of stormwater quantity on stream health	0%	33%	50%	17%	18(0)
Knowing what I can do to improve watershed health	6%	28%	61%	6%	18(0)
Recognizing and managing native plants and invasive plants	17%	56%	17%	11%	18(0)
Understanding the role of macroinvertebrates and fish species in our watershed	17%	33%	44%	6%	17(1)
Knowing what daily activities can improve water management on my own property (composting, natural gardening, etc.)	6%	67%	17%	11%	18(0)
Understanding the restoration process	12%	18%	53%	18%	17(1)
Knowing about watershed projects and groups in Clark County	6%	22%	50%	22%	18(0)

*N = number of responses; NR = no response

NOTE: an underage participant and two people who did not graduate completed anonymous evaluations.

(71%), and learning about the impact of stormwater (67%) on stream health as well as knowing what each person can do to improve stream health (67%). The most impressive statistic is that all participants noted some knowledge change in understanding how stormwater affects stream health, showing that participants increased their understanding of stormwater. This class had a number of very knowledgeable and involved individuals, which makes the fact that each person reported learning more about this topic a positive aspect to the training this quarter.

Testing Specific Knowledge

Table 9 shows results from the pre- and post- test given to trainees on the first and last day of class. The table measures the percentage of trainees answering the question correctly on the pre- and post-tests. Compared to the spring session, the increases from the first to the last class are less dramatic, but there are more trainees that answered all the questions correctly on the post-test. All trainees answered questions defining a watershed, understanding stream characteristics that provide good habitat for fish and wildlife, understanding the role of benthic macroinvertebrates in streams, and naming what each person can do in his or her own life to keep pollutants out of stormwater. The highest increases occurred for the question on macroinvertebrates and for knowing why the county assesses the clean water fee. These questions consistently show a large change in the number of correct answers. The macroinvertebrates class is usually a very highly rated class as well, which may influence the recall for the trainees.

Table 9: Fall Watershed Steward Training - Pre- and Post- Test Results

Please rate your knowledge of the following topic areas:	Percent Answering Question Correctly – (As percent of respondents)		
	Pre-test	Post-test	N (NR)
What role does stormwater play in watersheds?	36%	55%	11 (4)
What is a watershed?	67%	100%	12 (3)
Name three processes in the hydrologic cycle.	45%	55%	11 (4)
What contributes to localized flooding aside from a rain storm?	33%	83%	12 (3)
What are some characteristics of natural streams that provide good habitat for fish or wildlife?	45%	100%	11 (4)
Why are macroinvertebrates important to the watershed?	36%	100%	11 (4)
What is an impervious surface?	73%	100%	11 (4)
Name three things a household can do to reduce pollutants entering the stormwater runoff?	55%	100%	11 (4)
What is the purpose of the clean water fee assessed on all property in Clark County?	25%	75%	8 (7)
What do the following acronyms mean? (NPDES, BMP, ESA, LID)	0%	33%	3 (12)

*N = number of responses; NR = no response

These results, similar to the spring session, tend to support the increased changes in general knowledge participants self-report in at

Advertising Watershed Steward Training

The Coordinator sent press release announcements to *The Reflector*, *The Columbian* and *The Oregonian* for both trainings. Press releases appeared in *The Reflector* and *The Columbian* (see Appendix B) and in several online calendars and online volunteering websites such as Volunteer Match (www.volunteermatch.org), Volunteer Washington (www.volunteerwashington.org), and on Craig's List. The Program Coordinator maintains a list of interested people based on returned postcards from community events, sign-ups from the Clark County Fair, and inquiries received from the Web site.

In the spring, staff contacted nearly 100 potential volunteers drawn from a list of people who expressed interest in the program in the previous year. Staff mailed or emailed 59 applications to interested parties and received 16 applications back. Another nine trainees called a few days prior to the first day of training and indicated that they would come on the first day of class with an application. For the fall class series, staff received 19 applications from about 100 notifications sent to interested individuals, with an additional five who contacted the program before training.

Staff collected information from 81 applicants contacting the program to learn more about it, irregardless whether the person took training. Table 10 summarizes where people learned about the class series. The largest number of people learned about the class series during community events, particularly from the Clark County Fair and other Watershed Stewards workshops. Personal referrals and electronic advertising round out the majority of advertising sources.

Table 10: How People Learned About Training

Source	Number
Community Events (fairs, workshops)	21
Battle Ground School District Email	17
Personal referral	17
Internet interest (Craigslist, Volunteer Match, WS web site)	11
Listeservs (Master Gardener, Small Acreage, etc.)	8
Press Releases to local newspapers	7
Newspaper Ads (paid)	0

Press releases for training appeared in *the Columbian* and *Reflector* newspapers (See Appendix B for examples of the press releases). Although the Coordinator ran paid advertising in *the Columbian* for two weeks prior to training, none of the trainees stated they learned of the program through the paid advertising.

Task 1b - Volunteer Management

The Program has 130 active Watershed Stewards out of 274 people trained over the life of the program. Active Stewards comprise volunteers who provided volunteer hours, attended events, and communicated with program staff in within the last twelve months. Table 11 summarizes how Watershed Stewards volunteered in 2009.

Beginning in 2009, staff utilized the online survey tool Survey Monkey (www.surveymonkey.com) to provide another way for volunteers to report their hours. Staff set up a survey asking volunteers to report their name, volunteer time, activity, and activity type which staff then downloads into a Stewards database. About a dozen volunteers use Survey Monkey regularly.

Table 11: Volunteer Hours

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD	% Of Hours
Outreach	176	283	389	23	871	35%
Monitoring	13	30	22	6	71	3%
Restoration	121	136	140	89	486	19%
Meetings	108	63	40	27	238	10%
Continuing Education	20	41	45	27	133	5%
Other support	210	336	122	26	694	28%
Total	648	889	758	198	2,493	

The “other support” number is higher this year because the Coordinator recruited several volunteers to take a greater role in the program by designing and writing the newsletter, designing the Home and Garden Ideas Fair booth, and creating other display and print materials. Monitoring hours decreased as the county deemphasizes volunteer monitoring.

Fourth quarter hours are reported through November and look lean compared to other quarters of 2009. Many Stewards report hours on an annual basis around tax time, so quarterly hours often do not reflect when volunteers actually spent time. In addition, volunteers are more encouraged to report hours in advance of the annual volunteer appreciation event in anticipation of receiving an award.

Newsletter

Staff uses the Steward newsletter as a means to maintain contact and keep Stewards involved. The program distributed newsletters (<http://clark.wsu.edu/volunteer/ws/Impacts.html#Newsletters>) three times during 2009. Typically, newsletters contain articles about Watershed Stewards, a featured program project, such as storm drain stenciling, and publicity about other events. The program prints color copies for distribution at events and emails copies to volunteers and interested individuals on the program’s two listservs.

Task 1c - Volunteer Recognition

The Coordinator tracks volunteer hours and organizes recognition, retention, and advanced training opportunities for volunteers. Currently, volunteers self-report hours and the program uses these hours identify Stewards for recognition at the annual recognition events.

In 2009, the Coordinator recognized several Stewards who worked on special projects or went beyond their volunteer role to assist the program. Three Stewards who designed and worked on the Home and Garden Ideas fair received special thank-yous in April and May. In addition, the Coordinator sent personal thank you notes to many Stewards who helped last-minute to staff booths.

The Coordinator nominated Jac Arnal, a Watershed Steward, for a Sammy Award given out by Clark County’s Endangered Species Program to citizens and groups working toward salmon recovery. Jac won an individual award for his contribution maintaining a restoration project on county property adjacent to his home. He recruited other Watershed Stewards to assist him (see *The Columbian* article in Appendix C).

The annual volunteer appreciation event was held on July 17th at the Rusty Grape Vineyard. Seventy-seven Watershed Stewards and guests attended the event and were treated to a light dinner, entertainment by a local musical group, and opening remarks by Commissioner Steve Stewart. Thirty-one volunteers and 12 volunteer monitors received recognition during the event. See Appendix D for the evening's program.

The Coordinator planned a fall chili cook-off and line dance instruction for November 14th at the Square Dance Center. However, due to limited RSVPs, the event was cancelled. Fortunately, the program did not incur any costs in canceling the event.

Continuing Education

Each year, the Coordinator organizes events and seminars of interest to volunteers. The events are for educational purposes, as well as to promote volunteer retention. In 2008, staff held four different continuing education events with a total participation rate of 32 people. After polling a dozen Stewards, Stewards expressed little interest in continuing educational opportunities, thus the Coordinator did not pursue any continuing education events in 2009.

After a discussion with County staff, the continuing education element will become retention events in 2010 to better fit the program's mission. Retention events will include activities catering to volunteer's lifestyles, such as interpretive hikes, kayak trips, or other similar activities.

Training Manual

The coordinator altered the training manual before the spring training class to improve readability and include more up-to-date and relevant materials for trainees. With help from several volunteers, the Coordinator continues to revise the training manual to create a useful reference guide for volunteers.

Deliverables

The recognition event was held late with pushed the summer event into the fall. The Coordinator planned for the fall social event, but due to lack of interest, canceled the event.

The Coordinator did not implement any continuing education events in 2009. In 2010, the Coordinator will schedule retention events involving more outside opportunities instead of classroom-based activities.

Issues and Recommendations

The Coordinator will hold the volunteer recognition event in early spring to recognize volunteers closer to the year volunteers donated hours.

The Coordinator will focus on active retention events in 2010 which focus on activities that bring volunteers together in the outdoors instead of a classroom activity.



Watershed Steward Jac Arnal with his Sammy Award.

Task 2: Educational Outreach

Task 2a – Community Workshops

Community workshops continue to be popular ways to educate the public about watershed and stormwater issues. Rain barrel workshops remain the most popular. The Coordinator advertised minimally, but still filled all four rain barrel classes.

The Watershed Stewards held eight topical workshops in 2009. Table 12 summarizes all workshops held in 2009. The topical workshops are those sponsored, organized, and advertised by the Watershed Stewards program. This includes rain barrel workshops where participants spend one hour learning about stormwater issues and how to set up a rain barrel and then spend the second part of the workshop putting a barrel together to take home. One hundred forty-six people attended rain barrel workshops in 2009.

Table 12: Topical Workshops

Date	Subject	Presenter	Location	Attendees
February 23	Rain Barrel Construction	David Page	CASEE	32
April 28	Green Cleaning	Patty Page	CASEE	25
May 13	Rain Barrel Construction	David Page	CASEE	44
Sept 24	Rain Barrel Construction	Kathy Lee	CASEE	32
Oct 17	Green Home Audit	Alex Zimmerman, Leslie Johnson (Clark Co), DuWayne Dunham (CPU)	WSU 78 th Street Research Station	9
Oct 29	Green Car Care	Patty Page, Brett Raunig (Ecology)	Eco Auto – 210 W. McLoughlin Blvd	5
Nov 2	Rain Barrel Construction	David Page	CASEE	38
Dec 10	Green Cleaning	Patty Page	Three Creeks Library	23
Total attendees				208

After low turnout for 2008 green cleaning workshops, the Coordinator decided two workshops per year builds interest and garners a higher turnout. These workshops, held in spring and winter, are marketed as “spring cleaning” and “green gifts” to generate higher interest.

Participants complete workshop evaluations to help the program gauge learning and interest in the speaker and topic. Table 13 summarizes the ratings for each workshop. In general, workshop participants agree they will utilize the information learned in the workshop at home, whether for installing rain barrels or making cleaning kits. When asked specifically which information they will use at home, 32% of rain barrel workshop attendees stated that they would use the rain barrel they bought during the class and 6% said they would research rain gardens.

Table 13: Workshop Summary

Topic	Percent surveys returned (N*)	Presented in an interesting way?	Answer Questions you had?	Intend to use this information?	Worth your time	Average
2/23 Rain Barrel	88% (32)	4.6	4.7	4.9	4.9	4.8
4/28 Green Cleaning	92% (25)	4.5	4.2	4.9	4.9	4.6
5/13 Rain Barrel	75% (44)	4.5	4.5	4.9	4.9	4.7
9/24 Rain Barrel	69% (32)	4.5	4.5	4.9	4.7	4.7
10/17 Green Home	100% (9)	4.7	4.6	4.8	4.9	4.8
10/29 Green Car	100% (5)	4.4	3.6	5.0	4.8	4.5
11/2 Rain Barrel	58% (38)	4.4	4.4	4.7	4.7	4.6
12/10 Green Cleaning	83% (23)	4.0	3.6	4.7	4.6	4.2
Average		4.5	4.3	4.8	4.8	

*N refers to number of workshop attendees

Twenty-four percent stated they would use the green cleaning kit at home or use specific recipes mentioned in class. These intentions are low when compared with actual use (see Task 4 for results of follow-up workshop surveys). Most participants agree the workshop was a good way to spend their time, with all workshops receiving an average rating above a 4.6 (on a scale of 1 to 5).

The evaluations contained one question asking participants to rate how much they knew about a topic before the class and how much they feel they knew after attending the class. The difference between the knowledge before and after provides a relative indication of changes in the level of knowledge by each participant. For example, a person reporting a level of knowledge of one before a class and three after the class shows a two-level change in knowledge. Table 14 summarizes this information for six workshops. No change in knowledge questions were asked from the Green Home Audit or Green Car Care workshops.

Table 14: Community Workshop - Participant Knowledge Change

Please rate your knowledge of the following topic before and after the workshop:	Before and After Workshop Knowledge Level Change (As percent of respondents)					
	Same	1	2	3	4	N (NR)*
How much do you know about rain barrels before/after the workshop (2/23)	4%	32%	24%	36%	4%	25 (7)
How much do you know about rain barrels before/after the workshop (5/13)	0%	56%	22%	22%	0%	32 (12)
How much do you know about rain barrels before/after the workshop (9/24)	10%	35%	25%	30%	0%	20 (12)
How much do you know about rain barrels before/after the workshop (11/2)	5%	21%	32%	42%	0%	19 (19)
Aggregate for all Rain Barrel Workshops	4%	39%	25%	31%	1%	96 (50)
How much do you know about green cleaning products before/after the workshop (4/28)	9%	65%	9%	17%	0%	23 (2)
How much do you know about green cleaning products before/after the workshop (12/10)	26%	58%	5%	11%	0%	19 (3)
Aggregate for all Green Cleaning Workshops	17%	62%	7%	14%	0%	42 (5)

*N = number of responses; NR = no response

Respondents varied on their increase in knowledge at the four rain barrel workshops. In aggregate, 39% increased their knowledge one level, while 57% increased their knowledge two to four levels. Of the green cleaning workshops participants responding, 83% reported at least one knowledge level change.

Program staff performed a follow-up survey of 2008-09 workshops. Results for the survey are detailed under Task 4.

Task 2b - Promotional and Subject Presentations

The Program Coordinator and volunteers present at various events. Presentations focus on a particular subject, such as green cleaning, or short presentations on the Watershed Stewards program. Table 15 summarizes the presentations during 2009. The Coordinator and volunteers presented to sixteen groups and 384 people in 2009.

Table 15: Promotional and Subject Presentations

Event	Date	No.	Presentation	Presenter
Vancouver Green Drinks	1/2/09	12	Program promotion	Jen Naas
Fairgrounds Neighborhood Association	1/8/09	10	Ten tips for keeping your stream clean	Jen Naas
W. Hazel Dell Neighborhood Association	1/21/09	5	Ten tips for keeping your stream clean	Jen Naas
Naturally Beautiful Backyards training	2/12	50	Rain barrels and rain gardens	Patty and David Page
Fisher's Grange	3/11/09	30	Rain Barrels	Kim Morris
VanRidge Garden Club	3/16/09	28	Rain Barrels and Rain Gardens	Jen Naas
Master Composter Training	3/19/09	20	Program promotion	Amanda Smeller
Marshall Center Earth Day	4/18/09	3	Green cleaning (0 attendance) & rain barrels	Patty Page & Jen Naas
Clark College Horticultural Club	4/20/09	20	Green Cleaning	Patty Page
Camas Library (for NBB)	4/21/09	24	Rain Barrels and Rain Gardens	Patty and David Page
Proebstal Neighborhood Association	4/21/09	8	Program promotion	Jen Naas
Clark College ESL class	5/7/09	30	Green Cleaning	Jen Naas
Clark College ESL class	5/27/09	20	Green Cleaning	Jen Naas
Vancouver Garden Club	9/15/09	17	Ten tips for keeping your stream clean	Jen Naas
Master Gardener Training	10/20/09	65	Low Impact Development	Jen Naas
Hudson Bay High School	11/16/09	20	Green Cleaning	Jen Naas
Living on the Land training	11/18/09	25	Ten tips for keeping your stream clean	Jen Naas
Total		384		

Promotional presentations often take 20 minutes or less while subject presentations last an hour or more and cover a specific topic. Watershed Steward volunteers present many of the topical workshops, often marketed and set up by other entities. These collaborations often reach a different audience than those people that come to WSU Extension hosted workshops. The Coordinator

continues to seek out alternative groups and collaborations to extend the program's reach into the community and different audiences.

Stewards presented green cleaning to a group of students at Clark College, again at the request of the horticultural club. Students received recipes and information during a short presentation with the option to purchase a pre-packaged cleaning kit. This workshop was more poorly attended than last year, likely due to the set-up and scheduling of the presentation.

Once again, Marshall center Earth Day organizers invited the Watershed Stewards to present two smaller workshops during Earth Day activities. The green cleaning mini-workshop had no attendees and the rain barrel mini-workshop only attracted three people. Due to the low attendance, the program will not attend this event in the future.

Clark College ESL teachers invited the Coordinator to present to several classes again this year. The 45 minute-long presentations include an introduction to the program and a basic description of stormwater quality and quantity issues, along with a presentation on green cleaning products followed by a demonstration. The program benefits from these presentations by furthering outreach into non-native English speaking communities in a way that is an efficient and effective way to reach these communities.

Additional Promotional Activities

The Coordinator authored two articles in 2009 that appeared in *the Columbian*. Both times, *Columbian* staff contacted the program to ask for short articles and pictures.

The Columbian's Sustainable Lifestyles editor section contacted the Watershed Stewards program to write an article for their special section that appeared in *the Columbian* on June 25th. The article featured information about the Watershed Stewards program and discussed common nonpoint source pollution problems. The Coordinator published another article in *the Columbian* Sustainable Lifestyles section on October 28th which discussed rain gardens and rain barrels. Both articles (Appendix E) generated phone calls and interest from the public.

Task 2c – School Events and Education

Stewards continue to work with youth through organized events and on their own. Watershed Stewards helped with the annual Watershed Congress again this year. Stewards observed student presentations and facilitated student discussion groups on ways to improve watershed health. The 12th annual Watershed Congress hosted 200 students from 3rd to 12th grades, representing many different Clark County schools.

The Coordinator organized a day at CASEE for 2nd-4th graders to learn about watersheds with Vancouver Clark Parks summer camp. Two Watershed Steward volunteers and one volunteer from the Master Composter program staffed three stations teaching about composting, storm drain stenciling, and non point source pollution. The program hosted 44 students on August 6th.

Watershed Stewards also presented on two out of three days at the Columbia River Watershed Festival. Volunteers first asked the students to describe a watershed. Students then split into groups and "made" their own watershed using a large piece of crumpled paper, markers, and a spray bottle which simulated rain. Students then discussed nonpoint source pollution with the volunteers and then did

the “life in a fishbowl” activity where students “polluted” their personal stormwater with a variety of common nonpoint source pollutants (dog waste, erosion, oil, fertilizers). Students dumped their own polluted stormwater into a large aquarium to show that each person’s contribution to pollution adds up in our water bodies. Four Watershed Stewards presented to 120 students during the two days the program attended the festival.

Task 2d – Storm Drain Stenciling

The WSU Clark County Extension Watershed Stewards coordinate the Storm Drain Stenciling Program in cooperation with Clark County Clean Water Program. Staff promote the program to stencil storm drains and protect water quality in local streams and lakes. The program provides stenciling equipment and information to people in Clark County as they volunteer for this hands-on project. Any resident can use the equipment to stencil storm drains on public property in unincorporated Clark County. In return, they learn the importance and function of storm drains. Since the departure of the program assistant, the Coordinator is responsible for tracking stenciling projects. Staff did not advertise the program this year, but received interest from Watershed Stewards and Cub Scout/Boy Scout troops. Staff track the number and location of storm drains they stencil during their project. The results are shown in Table 16. This year, without additional advertisement or recruitment, 10 groups stenciled 276 drains in Clark County. Five Watershed Stewards used storm drain stenciling as their hours payback with their family or groups.

Table 16: 2009 Storm Drain Stenciling Statistics

Group	Month	Watershed	Sub-Basin	Storm Drains	Volunteers		Project Hours
					#	Hrs	
WS Ed Fischer	February	Lacamas Creek		6	10	2	20
Cub Scout Pack 317	June	Salmon Creek	Salmon Creek	12	11	1.5	16.5
Margaret Kerwin	June	Salmon Creek	Curtin Creek	6	1	1	1
Miller Family	July	Lacamas Creek	Lower Lacamas Creek	6	3	1	3
Cub Scout Pack 435	August	Salmon Creek	Salmon Creek and Curtin Creek	72	20	3	60
Cub Scout Pack 493	October	Salmon Creek	Cougar Creek	12	9	1.5	13.5
WS Kelly Gilbert	July	Salmon Creek	Cougar Creek	1	2	6.5	13
WS Kelly Gilbert	August	Whipple Creek	Upper Whipple Creek	4	1	1	1
WS Kelly Gilbert	August	Salmon Creek	Mill Creek	4	1	1	1
WS Sue Pickering	September	Salmon Creek	Curtin Creek	47	4	5	20
WS Don Forman	October	Lacamas Creek	Lower Lacamas Creek	15	1	2	2
WS Krystal Templeton	October	Salmon Creek	Salmon Creek	91	1	7	7
Total				276	52	28.5	136

Task 2e – Fact Sheets

The Coordinator produced two video clips in lieu of fact sheets. Both video clips focus on rain barrels and will be published on the web and shown on Clark-Vancouver television when completed. In June, CVTV staff shot and edited the first clip that demonstrates constructing a single rain barrel. Several volunteers assisted the video shoot by editing the script and acting on-camera.

The second clip featured the same two volunteers installing a rain barrel at the WSU Research Station. Staff and CVTV filmed in September.

Task 2f - Web Site

The Watershed Steward web page experienced a sharp drop in visitors in 2009. The program’s most popular downloads of rain barrel fact sheets and rain garden fact sheets dropped substantially from the first half of the year to the second half of the year. It is uncertain why the program experienced the drop in visitors, though other sites tracked by WSU Extension also declined. The Director believe a software glitch is responsible, but has not yet been able to compare tracking logs. Table 17 shows downloads for the program website in 2009.

Table 17: Website Downloads

Fact sheets and Resources	Qtr 1	Qtr 2	Qtr 3	Qtr 4*	YTD
Rain Barrels	429	268	58	56	811
Rain Gardens	195	141	0	17	353
Native Plants	298	535	292	179	1,304
Auto Maintenance	244	180	44	23	491
10 Tips for Streamside Homeowners	90	0	0	0	90
Stormwater Facilities in your neighborhood	94	0	0	0	94
Total Downloads: fact sheets	1,350	1,124	394	275	3,143
Other Documents, Annual reports	221	0	17	0	238
Newsletters	323	187	81	90	681

*Quarter four numbers October-November

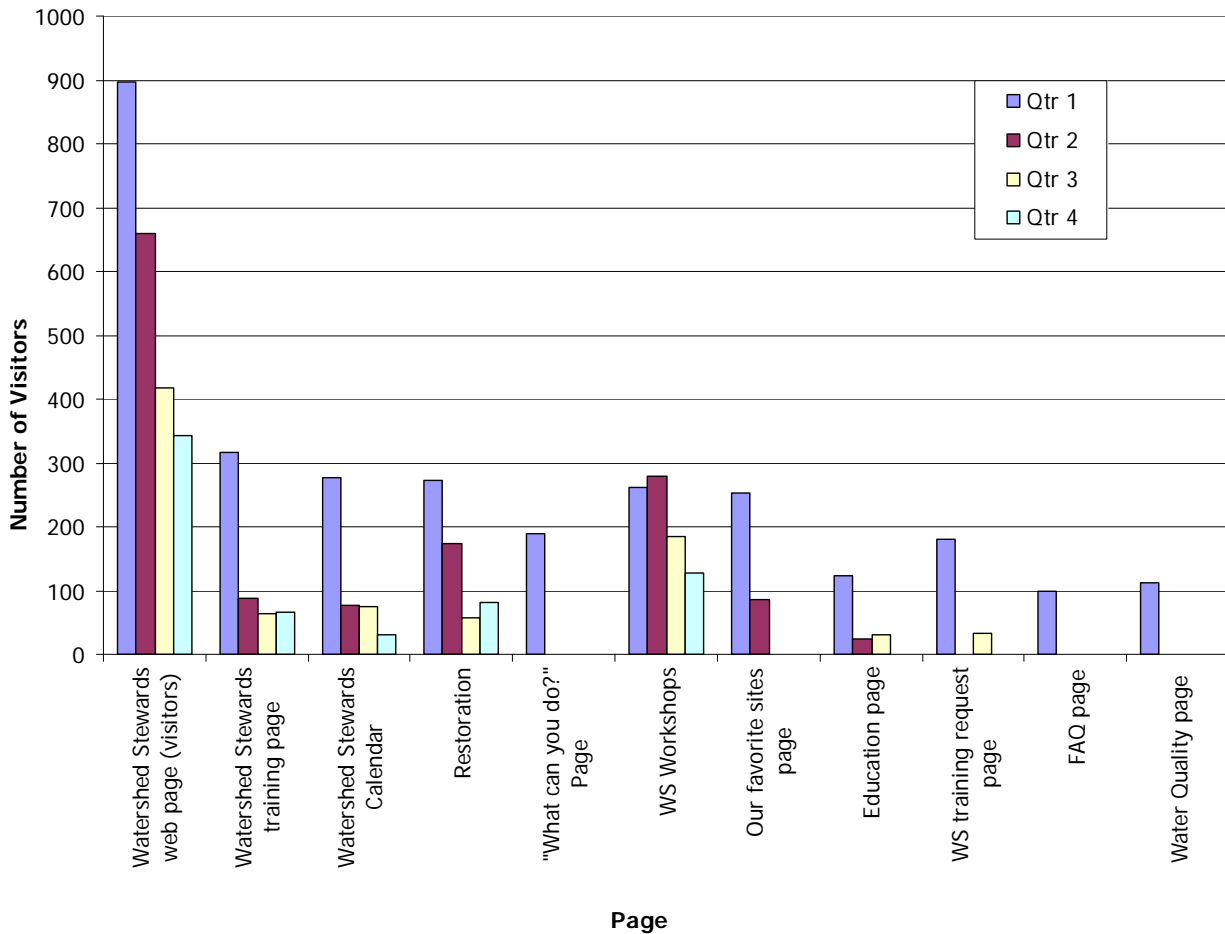
Visitors downloaded the native plant fact sheet more than others. The most marked drop was in rain barrel fact sheet downloads, dropping from more than 400 to 56 downloads from the beginning to the end of the year.

Figure 1 shows the website visitors for the year by quarter. The visitors to the Watershed Stewards website have decreased more than half from Quarter 1 to Quarter 4. Nearly all web pages within the Watershed Stewards directory decreased visitors by more than half.

Deliverables

Staff presented only eight of the required 10 workshops, but did complete the two new workshops as required. While the scope of work required six mini workshops, the Coordinator or volunteers presented 17.

Figure 1: Watershed Stewards Website Visitors



All other deliverables were met on time.

Issues and Recommendations

Staff has never evaluated subject presentations (mini workshop), so the Coordinator cannot report on knowledge gained during these presentations. The Coordinator will create a short evaluation to hand out at future presentations for 2010.

The Coordinator will better plan to ensure deliverables are met as stated in the scope of work.

Task 3 – Community Events

Task 3a – Community Events

The Watershed Stewards appeared at 21 different community events in 2009 (Table 18). One hundred and six volunteers made contact with 3,796 people at these events. Staff find that volunteers often undercount the number of contacts, particularly during busy events when volunteers may make contact with many people at once.

Table 18: Public Events

Event	Location	Date	Contacts	Volunteers
Clark College Green Living and Career Fair	Clark College	Feb 5	46	2
World Water Day	Pearson Air Museum	March 22	40	3
Frito-Lay Earth Day	Frito-Lay	April 22	96	7
Clark County Earth Day	Marshall Center	April 18	51	3
Clark Public Utilities Earth Day	Klineline Pond	April 18	110	3
The Standard Insurance Co Sustainability fair	The Standard Insurance Co, Portland	April 23	30	1
WaferTech Earth Week	WaferTech	April 20-23		Unstaffed
Home and Garden Ideas Fair	Clark County Fair Grounds	April 24-26	741	17
Sturgeon Festival	Water Resource Center	May 30-31	44	3
Head Start Discovery Day	Head Start – Vancouver	June 24	29	Staff
Recycled Arts Festival	Esther Short Park	June 27-28	220	6
Clark County Fair	Clark County Fairgrounds	August 7-16	2,052	50
Clark County Dems Service BBQ	Hazel Dell Park	August 16	11	Staff
MSUUF Green Fair	MSUUF	August 23	21	3
Harvest Festival	WS Ken Slye's farm	Sept 19	9	2
Harvest Festival	78 th Street Research Station	Sept 19	26	1
West Precinct Open House	West Precinct Station	Sept 19	117	1
Washougal Green Fair	Washougal Town Center	Sept 26	27	1
Ridgefield Birdfest	Ridgefield Wildlife Refuge	Oct 11	81	2
Clark College Make a Difference Day	Clark College	Oct 22	40	1
WSU Cougar Pride Days	WSU Vancouver	Nov 3	5	2
Total			3,796	106

The Program attends many events during earth month in April. April events included the Home and Garden Ideas Fair and staffing booths at three Earth Day events including the annual Clark Public Utilities Earth Day event, a booth plus two mini-workshops at the Marshall Center Earth Day event, and at several company-sponsored Earth Day/Earth Week events including Frito-Lay, WaferTech, and the Standard Insurance Company's earth day. Stewards made contact with 1,028 people in the month of April alone, most of which was at the Home and Garden Ideas Fair.

The annual Clark County fair required the most volunteer and staff hours in the third quarter. Fifty Watershed Stewards volunteered to staff the Watershed Steward booth during the 10-day event and reached 2,052 contacts. Volunteers encouraged sign-ups for upcoming workshops and trainings and helped visitors understand the rain garden and rain barrel set up at the booth.

The program partnered with Clark County Endangered Species Act Program, Washington Department of Fish and Wildlife, Clark County Planning and Sustainability departments, Clark Public Utilities, Columbia Springs Environmental Education Center, Clark County HomeLink, Clark Conservation



The Rain Garden display at the Watershed Stewards booth during the Clark County Fair.

District, and Clark County Vegetation Management to produce a comprehensive environmental education display featuring a river painted on the floor. The collection of organizations won the agricultural exhibit award from the International Association of Fairs and Expositions. The booth also received an award from the Clark County Fair for best educational exhibit.

Some Watershed Stewards take on their own projects in their own neighborhoods. Staff recruit volunteers, give advice, and lend equipment as necessary to help Stewards succeed in organizing projects and engaging the community. In return, staff ask Stewards to include education in projects to connect stormwater quality and quantity with restoration work. Two Stewards reported working on their own projects in 2009. Several Watershed Stewards helped Steward Jac Arnal continue his work on county property along Tenny creek. Jac recruited 12 volunteers during two events in 2009. Watershed Steward Dale Fredrikson contacted Clark County Clean Water staff to develop a monitoring project for Rock Creek. Dale is working with staff to survey Rock Creek and report back data. The Coordinator continues to encourage Stewards to develop and implement their own projects.

In addition, one volunteer organized two other Stewards in March to repair and clean up the three demonstration rain gardens behind the CASEE building. Finally, the Coordinator and eight Watershed Stewards worked at Steigerwald National Wildlife Refuge on November 21.

Task 3b - Volunteer Monitoring

Volunteers assist with volunteer monitoring when asked by Clean Water staff. The Program Coordinator no longer recruits volunteers for monitoring.

Deliverables

Staff met all deliverables.

Issues and Recommendations

No issues or recommendations at this time.

Task 4 - Impact Evaluation and Reporting

Task 5a - Evaluation

The Coordinator continues to use evaluations for each workshop and after each volunteer training class. Evaluations provide valuable information about class logistics and some information about knowledge gain during classes and workshops. In addition, the Coordinator sends out follow-up surveys to workshop participants after six months.

2008-09 Workshop Evaluations

In order to assess the behavior change resulting from program green cleaning, rain barrels, and a rain garden workshop, the program sent out follow-up surveys on these workshops held in 2008 and the first half of 2009. Participants were asked if they implemented what they learned in the workshop and if they shared that information with others.

Watershed Stewards presented eight workshops from July 2008 to May 2009 (Table 19). The program hosted two green cleaning workshops, four rain barrel workshops, one rain garden design workshop, and one permeable pavements workshop.

Table 19: 2008-09 Workshop Summary

Topic	Date	Location	Attendees	Surveys Sent	Percent Returned
Rain Barrel	9/30/08	CASEE	35	35	49%
Rain Gardens	10/21/08	First Church of God	13	13	54%
Permeable Paving	11/6/08	Clark County Operations	21	19	37%
Rain Barrel	11/8/08	CASEE	28	28	46%
Green Cleaning	12/11/08	Three Creeks Library	26	23	43%
Rain Barrel	2/23/09	CASEE	34	32	41%
Green Cleaning	4/28/09	CASEE	23	18	78%
Rain Barrel	5/13/09	CASEE	36	36	56%
Totals	8		216	204	50%

Out of 216 attendees, program staff only surveyed 204 people since the program did not have some attendees' addresses. Different surveys were sent for each workshop topic approximately six months following the workshops. Staff sent surveys for 2008 in early 2009 and surveys for the 2009 workshops in fall of 2009. Staff sent the same cover letter and survey to attendees of the different workshops in 2008 and 2009. Follow-up letters were sent to participants of the 2009 workshops but not the 2008 workshops, thus a slightly higher response rate for the three 2009 workshops. The overall response rate is 50%.

Rain Gardens and Permeable Pavements

The program hosted one rain garden design workshop for 13 participants (Table 20). Out of 13 surveys sent, 7 (54%) people completed the survey. Only three people installed a rain garden, although 100% shared the information with 44 other people, two of whom installed a rain garden. Of those sharing information, 14% shared with family, 86% with friends, and 14% with neighbors. One person reported sharing information with other groups.

Table 20: Rain Garden Workshops Evaluation

Attendees surveyed	13
Response Rate	54%
Respondents installing rain garden after the workshop	43%
Respondents sharing information with others	100%
Number people respondents shared information with	44
Number of rain gardens installed by people receiving second-hand information	2

Program staff offered a new workshop in 2008. A Watershed Steward and representative from a local pavement company presented on permeable pavements on November 6, 2008. Twenty-one people attended the workshop, with only seven people (37%) responding to the survey. No people reported installing permeable pavements as a result of the class (Table 21), although all of them (100%) reported sharing the information with family, friends, and neighbors.

Table 21: Permeable Pavements Workshops Evaluation

Attendees surveyed	21
Response Rate	37%
Respondents installing permeable pavements after the workshop	0%
Respondents sharing information with others	100%
Number people respondents shared information with	64

Green Cleaning

The program sent surveys to 41 attendees out of 49 total from two green cleaning workshops and received a 59% response rate (Table 22). Green cleaning kits consists of six natural cleaning products, a microfiber cloth, and natural cleaning guide furnished by Clark County. Eighty-eight percent of respondents used their green cleaning kit after the workshop, and 100% shared information they learned during the workshop with 148 other people. Of those indicating they shared information, 79% shared with family members, 83% with friends, 21% with neighbors, 8% with other groups they interact with, and 13% with "others." Seventy-five percent of participants now make their own green cleaning products at home. When asked why they do not make their own products at home, respondents stated that they haven't finished using the products from their kits or want to use up the cleaning products they currently have before switching to the home made products. One person remarked that they did not find the home made products as effective. Seven people commented that they enjoyed the class and found the information useful.

Table 22: Summary for Green Cleaning Workshops

Attendees surveyed	41
Response Rate	59%
Respondents using the cleaning kit after the workshop	88%
Respondents sharing information with others	100%
Number respondents shared secondary information with	148
Respondents making own products at home	75%

Rain Barrels

The program held four rain barrel workshops in 2008 and 2009 for 133 attendees. Out of 131 surveys mailed, workshop participants returned 63, or 48% (Table 23). Of the respondents, 83% installed the rain barrel constructed during the workshop and 32% indicated installing 57 additional barrels. Several people explained the reason they did not install their barrel. The most common answer dealt with logistical problems: how to connect it to the downspout, needing help connecting it to the house, and waiting to install new siding or gutters before installing the barrel.

Table 23: Summary for Rain Barrel Workshops

Attendees surveyed	133
Response Rate	48%
Respondents installing barrel after the workshop	83%
Respondents sharing information with others	92%
Number respondents shared secondary information with	470
Number secondary who installed rain barrels	19
Number of extra barrels installed	57

A majority (92%) shared the information they learned with others: 63% with family, 75% with friends, 48% with neighbors, 13% with other groups, and 5% with “others.” These respondents shared workshop information with 470 people. Survey respondents reported that 19 people with whom they shared information installed their own barrels.

Even when workshop participants did not install the rain garden, rain barrel, permeable pavements, or use the cleaning kit, most of them shared the information they learned with others. Table 24 shows that workshop information extends beyond those that attend. For every workshop participant, at least three people learned the information.

Table 24: Workshop Participant Behavior Change

Workshop	Attendees (Number surveys sent) (No.)	Responses (%)	Respondents Installing Practice	% Sharing Information With Others	People Receiving Secondary Information
Green Cleaning	49 (41)	59%	88%	100%	148
Rain Barrels	133 (131)	48%	83%	92%	470
Rain Gardens	13 (13)	54%	43%	100%	44
Permeable Pavements	21 (19)	37%	0%	100%	64
Total	216 (204)				726

Task 5b - Organizational Survey

After discussions with County staff, the Coordinator discontinued use of the organizational surveys. The Coordinator will create new surveys to judge knowledge change for use during mini-workshops or other subject workshops presented in 2010.

Task 5c - Reporting

This report constitutes the fourth quarterly report and annual report for 2009.

Deliverables

Staff met all deliverables

Issues and Recommendations

No issues or recommendations at this time.

Table 25: Program Summary

Program Elements		Goals	Audience	QTR 1	QTR 2	QTR 3	QTR 4	YTD	%
Volunteer Training	Volunteer Trainings	1 or 2		0	1	0	1	2	100%
	New volunteers	30	Adults	0	17	0	15	32	107%
	Total Active Volunteers		Adults	124	130	113	130		
	Continuing Education (hours)		Adults	0	0	0	0	0	
Volunteer Management	Annual Steward Picnic	1		0	0	0	0	0	0%
	Volunteer Recognition event	1		0	0	1	0	1	100%
	Continuing Volunteer Education	3	Volunteers	0	0	0	0	0	0%
	Attendance			0	0	0	0	0	
Coordinator Presentations	Promotional/Subject Presentations	6		7	5	1	3	16	267%
	Attendance		Adults	155	102	17	110	384	
Outreach	Workshops (new topics)	2	Adults/ Youth	0	0	0	2	2	100%
	Workshops (existing topics)	8		1	2	1	2	6	75%
	Workshop Attendance		Adults/ Youth	32	69	32	75	208	
	Presentations (at other events)		Adults/ Youth	0	0	0	0	0	
	Presentation attendance		Adults/ Youth	0	0	0	0	0	
	Total Contacts			187	171	49	75	482	
	Factsheets/ Video clips	2	Adults/ Youth	0	1	1	0	2	100%
Storm Drain Stenciling Volunteers		Adults/ Youth	1	12	29	11	53		
Storm Drains Stenciled			6	18	134	118	276		
Track Web Page use - Visitors			896	660	418	342	2,316		
Factsheets Downloads			1350	1124	394	275	3,143		
Other downloads (newsletters, reports)			505	0	17	90	612		
Recruit Water Quality Monitoring Vols	As Needed	Adults	0	0	0	0	0		
Stewards	Community Events			2	9	7	3	21	
	Event Contacts		Adults/ Youth	86	1321	2263	126	3,796	
	Other School Activities		Youth	0	0	164	0	164	
	Restoration Projects (non-WS vols)		Adults/ Youth	0	0	0	2	2	
Outreach Contacts			86	1,321	2,427	128	3,834		
Volunteer Hours	Monitoring (hours)		Adults/ Youth	13	30	22	6	71	
	Stream/wetland Restoration (hours)		Adults/ Youth	121	136	140	89	486	
	Outreach Activities (hours)		Adults/ Youth	176	283	389	23	871	
	Meetings & Continuing Educ (hours)		Adults	128	104	85	54	371	
	Office/Other (hours)		Adults	210	336	122	26	694	
	Total Hours			648	889	758	198	2493	
	Value (@ \$20.25 / hour)*			\$ 13,122	\$ 18,002	\$ 14,789	\$ 3,572	\$ 50,483	
Reports	Organization Surveys	As Needed	CWP	2	0	0	0	2	
	Survey Analysis report	1		0	0	0	1	1	100%
	Quarterly	3	CWP	1	1	1	0	3	100%
	Annual	1	CWP				1	1	100%

* Bureau of Labor and Statistics (<http://www.independentsector.org>)

Appendix A – Watershed Steward Training Syllabus, Fall 2009

Week 1	Wednesday – September 9, 2009	
6:30 p.m.	Introduction to Watershed Stewards – Introduction to WSU Extension and Watershed Stewards. Meet the other people and learn about your role in improving Clark County Watersheds. <i>Jenifer Naas, Watershed Stewards Program Coordinator</i>	WSU Research Station – 1919 BE 78 th Street
7:00 p.m.	Watersheds – Discover the definition of a watershed and learn about each of the watersheds in Clark County. We will discuss some of the challenges that face each of our watersheds. <i>Bev Walker, Water Resources Center</i>	
Week 2	Wednesday - September 16	
6:30 p.m.	Clark County Clean Water Program Overview – We will learn a bit about the Clean Water Program and the current efforts to improve Clark County waters. <i>Cary Armstrong, Clark County Water Resources</i>	WSU Research Station – 1919 BE 78 th Street
7:15 p.m.	Impacts of Urbanization – Water connects all aspects of the environment. Find out how this makes water the driving force behind environmental policy in Washington. <i>Cary Armstrong, Clark County Water Resources</i>	
Week 3	Wednesday – September 23	
6:30 p.m. - 9:00 p.m.	Clark County watersheds: soil and our water supply – We will learn about Clark County hydrology and soils; how they interact and influence the form and function of our watersheds. <i>Dennis Dykes, Hydrogeologist, Bright Fields Groundwater, Inc.</i> <i>Also included: The Missoula Floods</i> – Thousands of years ago during the last ice age, a series of floods swept through Washington, forever changing the landscape. We will view a video about the effects of these floods on our landscape and learn about the geomorphic histories of our lakes and streams.	WSU Research Station – 1919 BE 78 th Street
Week 4	Wednesday – September 30	
6:30 p.m.	Home improvement: save water and be more sustainable at home – We will learn about rain gardens and rain barrels as well as the basics of LID – what it means and how we can each use LID techniques. <i>Jenifer Naas, WSU Program Coordinator</i>	WSU Research Station – 1919 BE 78 th Street
8:15 p.m.	Your pet and clean water – Our pets are our companions. Clean water staff talk about the Canines for Clean Water Program and how your pet can also be a volunteer for clean water! <i>Elena Cronin, Clark County Clean Water Program</i>	
Field Trip	Saturday – October 3	
9:00 a.m. – 2:00	Clark County Stormwater – Tour various stormwater facilities with a county engineer and mitigation specialist to understand where stormwater goes in the county and how we deal with all that water falling onto streets and roads. <i>Ken Lader, Engineer and Julie Christian, Mitigation Specialist, Clark County</i>	Meet downtown for carpool
Week 5	Wednesday – October 7	
6:30 p.m. - 9:00 p.m.	Restoration part 1 – Not all restoration occurs at a large scale. We'll talk about small site restoration including what people might do in their own riparian areas. <i>Jim Comrada, Ecologist/Riparian Horticulturist, ETC</i>	WSU Research Station – 1919 BE 78 th Street

Week 6	Wednesday – October 14	
6:30 p.m.- 9:00 p.m.	Benthic Macroinvertebrates – What do bugs have to do with water quality? We'll find out how to catch, identify, and determine what bugs tell us about water quality. <i>Judy Bufford, Watershed Steward</i>	CASEE 11104 NE 149 th Street Science Room
Week 7	Wednesday – October 21	
6:30 p.m.	Monitoring - What is the monitoring resource center? If you live near a stream or are interested in monitoring, Clark County has resources to help you collect data and learn more about the health of your stream. <i>Chad Hoxeng, Clark County Clean Water Program</i>	WSU Research Station – 1919 BE 78 th Street
7:30 p.m.	Restoration part 2 – Learn about different restoration work done in Clark County and discuss different techniques for large restoration projects. <i>Peter Barber, Lower Columbia Fish Enhancement Group</i>	
Week 8	Wednesday – October 28	
6:30 p.m.	Composting – We will learn the basics of composting and how backyard composting can keep our water clean for us and our environment.	WSU Research Station – 1919 BE 78 th Street
7:30 p.m.	Weed Management – Some of the most common plants in the county are weeds. Find out what the county is doing to control weeds while protecting water quality. Learn how to control weeds at restoration sites. <i>Denielle Cowley, Clark County Weed Management</i>	
Field Trip	Saturday – October 31	
9:00 a.m. to 2:00 p.m.	Restoration Field Trip – We will visit several restoration sites done by LCFEG and see the massive log jams on local rivers. <i>Peter Barber, Lower Columbia Fish Enhancement Group.</i>	Meet downtown for carpool
Week 9	Wednesday – November 4	
6:30 p.m. - 9:00 p.m.	Salmon and the Endangered Species Act – Discover the challenges salmon face as they navigate the Columbia River and all the tributaries that enter the river in Clark County. <i>Tammy Mackey, US Army Corps of Engineers and John Tyler, ESA Expert</i>	WSU Research Station – 1919 BE 78 th Street
Week 10	Wednesday – November 11	
6:30 p.m.	Civil Rights and you – Your responsibilities as a WSU volunteer. Jen Naas, Watershed Stewards	WSU Research Station – 1919 BE 78 th Street
7:00 p.m.	Volunteer Ideas Fair- Join us along with local environmental programs to learn more about where you can volunteer. Presentations by groups like Lower Columbia Fish Enhancement Group, Friends of Steigerwald National Refuge, Gee Creek Enhancement Committee, Salmon Creek Watershed Council, CPU's StreamTeam, Water Resources Education Center,	

Appendix B – Sample Published Announcements and Press Releases

Published Announcements

May 1 Green Cleaning Workshop Listing – East County Community Education

April 30 Rain Barrel Workshop announcement, *The Reflector*

April Workshops announcement, FYI

Watershed Steward Training paid advertising (fall)

Published Announcements

FYI On-line February 04, 2009

The Columbian, February 15, 2009

SUNDAY, FEBRUARY 15, 2009



Our daily offering of meetings and events in and around Clark County
Compiled by Kim Jarvis

Clubs

MONDAY

VANRIDGE GARDEN CLUB, 10 a.m. at the Pleasant View Church of the Nazarene, 801 N.E. 194th St., Ridgefield. Rory Bowman will talk about growing vegetables in a raised bed. Bring donations for Share House in Vancouver. ☛ Maggie Vinneäe. ☛ apply by March 15. ☛ Susan Cox, 360-737-0442 or susanne@vestahospitality.com.

ASSE INTERNATIONAL STUDENT EXCHANGE PROGRAM seeks local host families for foreign boys and girls, ages 15 to 18, for the 2009-10 school year. ☛ 800-733-2773.

RAIN BARREL WORKSHOP, 6:30-8:30 p.m. Feb. 23 at the CASEE Center, 11104 N.E. 149th St., Brush Prairie. \$35 includes one rain barrel and fittings. Sponsored by Washington State University Extension and Clark County Clean Water program. Space is limited. ☛ 360-397-6060, ext. 0.

students avail

☛ Susan Knat
WF_PatronTou

FREE WOMEN'S: 6:45 p.m. Feb. Kung Fu, 10411 Limited to first ☛ 360-892-48

COLLEGE PLANNING parents of college essays by March 2 org/?action=essay

HOME BUYING SEMI short sales and for p.m. Feb. 19 or 10 a Century 21 Expert I 72nd Ave. ☛ RSVP: 2833; Charlie, 360-c21gp@aol.com.

TASTE OF TAI CHI WC Martin Middlewoox fitness levels, 1-4:30 Shanti Yoga Center, Suite 204. \$35; regi ☛ shantiforeveryor

Free Watershed Steward volunteer training starts Feb. 10; sign up now

Offered by WSU Clark County Extension in partnership with the Clark County Clean Water Program, Watershed Steward training emphasizes what you can do to maintain healthy watersheds for your community, fish, wildlife and future generations.

Classes will be held on Tuesdays from 6:30 to 9 p.m., starting February 10 and continuing until April 14. The course uses community experts and environmental professionals to teach the basics of ecology, hydrology, geology, stream restoration and the importance of native plants and fish.

After training, volunteers work on a variety of projects with the Watershed Steward Program and local environmental partners in public outreach and education, stream restoration, water-quality monitoring, classroom presentations or community workshops.

To apply or for more information, please e-mail Jenifer Naas or call her at ext. 7703. More information is also available at <http://clark.wsu.edu/volunteer/ws/index.html>.



The Reflector, February 4, 2009

Page A10 - The Reflector - February 4, 2009

Calendar of Events

Organizations	Education
<p>CASCADE PAYROLL ASSOCIATION will meet Wed., Feb. 4, 6-7:30 p.m., at Clark Public Utilities, 1200 Fort Vancouver Way, Vancouver. Topic: Conducting Background Checks. Rebecca Leckie, 892-8946.</p> <p>THE LA CENTER CITY COUNCIL will hold a work session on Wed., Feb. 4, 6 p.m., City Hall, 214 E. 4th St., La Center. Purpose of the meeting will be to discuss Development Fees and the La Center Junction Sub-Area Plan. (360) 263-2782.</p> <p>COLUMBIA MOTHERS OF TWINS Club will meet Thurs., Feb. 5, 7 p.m., at St. John Lutheran Church, 11005 NE Hwy 99, Vancouver. Vendor Night, with meeting to follow. All mothers or guardians of multiple birth children welcome. Sandy Pagel, 573-3318.</p> <p>FARGHER LAKE GRANGE will meet Fri., Feb. 6, 7 p.m., at the Grange, 3/4 mile west of SR-503 at 369th St., Fargher Lake. 247-6646.</p> <p>BATTLE GROUND TOASTMASTERS will meet Tues., Feb. 10, 12:15 p.m., Rocky's Pizza, 1619 W Main St., Battle Ground. Learn to leadership skills in supportive environment. Rob Duff, 901-6799.</p> <p>COASTAL CONSERVATION ASSOCIATION of Southwest Washington will meet Tues., Feb. 10, 7 p.m., Cannon Beach. Topic: The Oregon Coast.</p>	<p>MASTER COMPOSTER/RECYCLER training offered Thursdays, Jan. 29-April 2, 6-8:30 p.m., Fire Station 83, 213 NE 120th, Vancouver, by Columbia Springs. Training topics include backyard composting, vermicomposting, recycling, building healthy soil, green cleaning. Participants asked to dedicate 30 hours over the following year to community service in exchange for training. 882-4567.</p> <p>CEDAR TREE CLASSICAL Christian School will hold an inaugural preview day Fri., Feb. 6, 9-11:30 a.m., at the campus, 20601 NE 29th Ave., Ridgefield. Prospective families can get a first-hand experience of the private school. Kris Richards (360) 887-0190.</p> <p>WATERSHED STEWARD PROGRAM training will be offered Tues., Feb. 10, 6:30 p.m., and following Tuesdays, plus Saturday field trips. In exchange for free training, participants volunteer at least 40 hours during the first year in public outreach and education, stream restoration, water quality monitoring, classroom presentations, community workshops. Limited to 35 participants. Sponsored by Washington State University Clark County Extension, Clark County Clean Water Program. Jenifer Naas, 397-6060, ext. 7703.</p> <p>SOUTHWEST WASHINGTON HUMAN SERVICES will meet Tues., Feb. 10, 7 p.m., Cannon Beach. Topic: The Oregon Coast.</p>

Green Spring Cleaning

Watershed Stewards demonstrate how to make and use environmentally friendly cleaning supplies for all of your spring cleaning tasks.

WATERSHED
STEWARDS
PROGRAM



Protect our water resources!

Save money!

Safeguard the health of your family and the environment!

Reduce harsh chemical cleansers in your home and garden!

Tuesday April 28th 6:30 - 8:30 p.m.

CASEE - 11104 NE 149th St., Brush Prairie

Cost for the kit is \$15.00

This workshop fills up quickly, so don't delay!
Call now to REGISTER: 360-397-6060 Ext. 0

Watershed Stewards, a joint program of:



Clean Water Program

WSU Extension Programs are available to all without discrimination. If you require accommodation, call WSU Clark County Extension at (360) 397-6060 ext 0 prior to the event.

Watershed Stewards Fall Training paid advertising, Fall 2009
The Columbian Friday A&E Extra

**WATERSHED
STEWARDS
PROGRAM**



Join the Watershed Stewards & Make a Difference!

Learn new things, educate others, and help protect our natural resources.

Attend FREE Watershed Stewards Volunteer Training!

Wednesdays, 6:30 - 9 pm
(plus two Saturday field trips)

September 9 - November 11
78th Street Farm, 1919 NE 78th St.

Information and applications at
<http://clark.wsu.edu/volunteer/ws/training>
or call 360-397-6060 ext 7703

Clock hours available for teachers in ESD 112

Jointly Sponsored by WSU Clark
County Extension and the Clark County
Clean Water Program

WSU Extension Programs are available to all without discrimination. If you require special accommodation, call WSU Clark County Extension at (360) 397-6060 ext. 0 prior to the event.

The Reflector, September 2, 2009

WSU Extension offers classes

Washington State University Clark County Extension offers several free and low-cost classes and workshops in September and October designed for small acreage owners, suburban homeowners and those interested in sustainable living. All are free except where noted below.

"Living on the Land" is a 12-week class series focusing on managing a small farm. Topics include pasture and manure management. The series will take place Wednesdays, Sept. 2-Nov. 18, 6:30-9:30 p.m., at the CASEE Center, 11104 NE 149th St., Brush Prairie. Free with pre-registration required.

A Watersheds Stewards program, offered on 10 Wednesdays, Sept. 9-Nov. 11, 6:30-9 p.m., teaching participants about watersheds and how to protect the environment through everyday actions. Participants are asked to train other county residents. The series is free

with pre-registration required.

A tour of 13 farms around Clark County is set for Sat., Sept. 19, 10 a.m.-3 p.m., in the annual Harvest Celebration.

A tour of Livingston Mountain Alpacas is set for Sat., Oct. 10, 10 a.m.-noon, in Camas.

A tour of Casa de RoyAl will take place Sat., Oct. 24, 10 a.m.-noon, in Ridgefield.

A rain barrel construction workshop is set for Thurs., Sept. 24, and again Mon., Nov. 2, 6:30-8:30 p.m., at the CASEE Center. Fee is \$35.

A "green cleaning" workshop is slated for Thurs., Dec. 11, 6:30-8:30 p.m., at Three Creeks Library in Salmon Creek. Optional green cleaning kit is \$15.

More information about any of these workshops is available by calling Jenifer Naas, 397-6060, ext. 7703, or Erin Harwood, 397-6060, ext. 7720.

Appendix C – Jac Arnal receives Sammy Award

Sammy Awards recognize nine county environmental stewards

The Columbian (6/12/09)

Clark County's ninth annual Sammy Awards honored nine organizations or individuals who have extended themselves to conserve imperiled salmon.

The event, held Thursday at Vancouver's Water Resources Education Center, annually recognizes people who restore stream habitat not because of government-imposed mandates but because they choose to make a difference.

"History would say we haven't been particularly good stewards when it comes to salmon," Sammy Award recipient Harry Barber said Thursday afternoon.

This year's recipients stand out as exceptions:

-- George Nosko. The Salmon Creek cattle rancher contacted the Clark Conservation District in 2006 to help contain erosion on stream banks. After voluntarily enrolling in the Conservation Reserve Enhancement Program, he went well beyond the minimum buffer requirement of 35 feet. He installed a 140-foot buffer planted with native shrubs, with an off-channel watering system to keep his beef cattle away from the creek.

-- Jac Arnal. As a Watershed Steward volunteer, Arnal cleared a half-acre of invasive Himalayan blackberries from a site along Tenney Creek. He worked with other volunteers to replant the area with native trees and shrubs. He's spread his enthusiasm for stream restoration to other local groups, including the Northeast Hazel Dell Neighborhood Association and Friends of the Ridgefield National Wildlife Refuge.

-- Kirk Fitzer. The Hazel Dell Elementary School teacher, an avid fisherman and former Alaska fishing guide, spearheaded an extensive "Salmon in the Classroom" project, including hands-on learning and an aquarium so students could witness salmon transforming from egg to smolt. Fitzer, who caught his first steelhead as a 12-year-old fishing in Salmon Creek, said he hoped to instill a lifelong appreciation of salmon in his students. "What I want to build for children is a memory," he said.

-- Harry Barber. After retiring as a paper industry executive in 1999, the lifelong fisherman jumped into a new role as an advocate for salmon, steelhead and sturgeon. While serving as president of the Lower Columbia Fish Enhancement Group from 2003 to 2008, he guided the organization from one staff member to five with an annual budget between \$1 million and \$2 million. He serves on many salmon advocacy groups and was appointed by Gov. Chris Gregoire in 2007 to the state Salmon Recovery Funding Board.

-- Georgia-Pacific Corp., Concrete Products Inc., BNSF Railway and the city of Camas. The four project sponsors worked with the Lower Columbia Fish Enhancement Group since 2005 to transform much of the lower Washougal River into functional fish habitat. The project includes 12 major structures, re-contouring the sides and planting vegetation in a former gravel mine and planting more than 50,000 native trees, shrubs and willow cuttings along the river's banks.

-- Lower Columbia River Estuary Partnership. The Portland-based organization received a certificate of merit for involving more than 5,000 people through student service learning projects and weekend volunteer tree-planting initiatives. The work has restored critical riparian habitat at the Ridgefield National Wildlife Refuge, Steigerwald Lake National Wildlife Refuge and Lacamas Creek.

Appendix D – Volunteer Appreciation Event Program

2009 Volunteer Appreciation Evening

We thank all of the volunteers for making the program successful and making a positive change in our watersheds.

Since the first training in 2000, 258 volunteer graduates of the Watershed Steward training have collectively volunteered almost 20,000 hours to a variety of outreach, restoration and educational events.

Tonight we honor 31 Watershed Stewards and 19 Volunteer Monitors who, together, have contributed more than 1,700 hours in 2008. Combined, these honorees have donated a more than 6,7090 hours since their training.

Volunteer monitors assist county staff in monitoring water quality at key sites on local streams. In 2008, 28 volunteers participated in 49 monitoring opportunities and contributed 315 volunteer hours.

This event is a cooperative effort of Clark County Public Works, Clean Water Program and Washington State University Clark County Extension with funding from the Clark County Clean Water Program.



For an alternative format, contact the Clark County ADA Compliance Office.
V (360) 397-2025; TTY (360) 397-2445; E-mail ADA@clark.wa.gov

WSU Extension programs are available
to all without discrimination.



Welcome to the annual Volunteer Appreciation Evening hosted by Clark County and WSU Extension. Tonight we recognize the critical importance of the Watershed Stewards and Clark County Volunteer Monitors who provide countless hours of support to local environmental programs and projects.

Clark County Clean Water Program and WSU Extension recognize the following Watershed Steward volunteers:

*500+ Hours
Lifetime*

Cindy Morgan

*300+ Hours
Lifetime*

Monty Multanen
David Olesen

*100+ Hours
Lifetime*

Julie Singmaster
Wes Sumrill
Janet Swihart

45+ Hours in 2008

Jac Arnal
Judy Bufford
Ben Dennis
Doug Malone

Cindy Morgan
David Olesen
Randall Pearl
George Pollock

Monty Multanen
Terry Schulz
Tara Smith
Janet Swihart

Completed 40+ Hours Since Training

Lisa Beranek
Mindy Brooks
Danielle Cowley
Francis Foley
Walt Griffith

Linnea LaRocque
Lois Lee
Kim Moris
Kari Mullikin
Sonya Norton

Eldon Schmidt
Dan Swink
Corinne Thompson
Marilyn Tyrrell

The Clark County Water Quality Monitoring Program recognized the following individuals:

Tim Dean
Sherry Farabee
Graeme Friedrich
Ed Kraft
Linnea LaRocque
Carol Moffet

Kimberly Morris
Bill Owen
Carleen Pagni
George Pollock
Eldon Schmidt
Tara Smith

Daniel Swink
Corinne Thompson
Phil Trask
Glen Tribe
Marilyn Tyrrell
Dennis Yarosz

Appendix E – Watershed Stewards Program Articles in the Columbian

sustainable lifestyles

THE COLUMBIAN, THURSDAY, JUNE 25, 2009

Watershed Stewards Learn to Protect Local Waters and Contribute to a Green Clark County

JENIFER NAAS, PROGRAM COORDINATOR OF THE WATERSHED STEWARDS PROGRAM, WSU CLARK COUNTY EXTENSION



What do the numbers 18 and 350 have in common? Clark County residents should know the first number.

Clark County has 18 different watersheds, or areas of land where all of the water that is located at Washington State University, Clark County Extension offices in Brush Prairie, and is sponsored by the Clark County Clean Water Program. The program trains volunteers to provide education and outreach to Clark County residents to keep local waters clean. Volunteers educate others by hosting community workshops, presenting to local groups, and appearing at community events. Watershed Steward workshops include rain barrel construction, green cleaning products, constructing rain gardens, and using permeable pavements. Last year, 350 people attended workshops, the most popular of which is rain barrel construction. Watershed Stewards continue to teach about rain barrels and will present more rain barrel workshops this fall. Volunteers also present at homeowners associations, garden clubs and other groups interested in learning about watershed topics. Any group wishing to learn more about watershed topics can contact the Program Coordinator.

Volunteers donate more than 2,000 hours per year providing outreach at community events, sitting on local boards and committees, restoring watersheds, planting trees, and spearheading their own environmental projects. These dedicated individuals attend a free class series studying local hydrology, macroinvertebrates, composting, soils, native plants, home water management among other topics and

and the series with a potluck and graduation. The class series is a fun way to learn about your local environment.

While volunteers go through 32 hours of training to learn about watersheds, there are many ways that Clark County residents can help improve their watersheds.

One of the most important ways that residents can help keep local streams and rivers clean is to reduce the amount of fertilizers, herbicides, and pesticides used on the lawn and garden. These chemicals can wash off the ground or plants and flow into your local storm drain. The water from these storm drains flows directly into streams and rivers without treatment, so excess fertilizers and chemicals that make their way into streams cause algae growth or harm animals, fish, and insects that use the water and streamside areas.

Erosion causes serious issues for fish habitat and can lead to flooding. As soil washes off the land, it clogs fish habitat in streams and the clarity of the water.

You can easily prevent erosion by keeping more water on your property. Using rain gardens, rain barrels, and permeable pavements lets rain water soak into the ground, replenishing ground water and easing the impact of runoff on streams.

Finally, care for your local storm drain. Do not pour anything into the storm drain because it will wind up in your backyard stream. Keep garbage and litter off the sidewalk and gutters and pick up after your pet. Pet waste in our streams and rivers creates harmful conditions for swimming, drinking, and wildlife.

People can learn more about the Watershed Stewards by visiting the website (<http://clark.wsu.edu/volunteer/ws/>) or attending our free workshops held in the spring and fall. Workshop dates are posted on the website under the calendar link (<http://clark.wsu.edu/wscalendar/>).

Clark County residents can also sign up to take the Watershed Stewards training, free and open to anyone in Clark County. The volunteer training starts September 9th and occurs once a week on Wednesday evenings (6:30-9:00 p.m.) until November 11th. Prospective volunteers should download an application from the website. To schedule a presentation for your club, borrow storm drain stenciling kits or for more information about Clark County watersheds, email watershedstewards@clarkwsu.gov or call the WSU Clark County Extension office at (360) 587-6060 ext 7703.

BIRKENSTOCK NW

ANNUAL TENT SALE

INTERSTATE
5 NOW

EXIT
5

2 PAIR

\$99

- KEEN
- BIRKENSTOCK
- ROGUE

- NEW BALANCE
- BIRKIS

I-5 EXIT 9 I-5 EXIT 9 I-5 EXIT 9 I-5 EXIT 9

BIRKENSTOCK MON-SUN
Northwest 10-6
360.574.4332

17506 N.E. Delfel Ct., Ridgefield, WA 98642



Rain barrels can be both fun and practical.

Bowl-shaped rain gardens captures rain from downspouts to water plants.

Rain Water Management at Your Home

JENIFER NAAS, Program Coordinator of the Watershed Stewards Program, WSU Clark County Extension

Clark County residents are getting ready for the rain. Each month in the fall, two to four inches of rain fall onto roofs, driveways, sidewalks, and other impervious surfaces—surfaces that do not allow water to penetrate back into the ground. With all the impervious surfaces in our county, a lot of that rain flows straight into storm drains which empty into our creeks. Unlike Portland, Clark County's storm water systems are separate from sanitary sewer systems. This means the water entering into storm drains is not treated before it enters streams and rivers. Why not capture some of that water and use it on your property instead of letting it flow into the nearest drain?

Rain barrels and rain gardens provide two simple ways to capture rainwater, even on small urban lots. These do not take a lot of space or money and can be constructed in an afternoon with careful planning. Bowl-shaped rain gardens capture rain from your home's downspouts which then soaks into the ground and waters rain garden plants.

Before planning a rain garden, you need to understand how your soil handles water by performing a simple percolation test. Build rain gardens well away from building foundations and property lines and call 811 before you dig. Construct the garden by digging six to twelve inches into the soil and create a bowl with a flat and level bottom. Refill the hole with up to six inches of compost and soil, being sure to avoid compaction. Plant your rain garden with a variety of native plants that grow under wetter conditions. There are many great resources to help you plan your rain garden. Contact the Watershed Stewards for more information.

Rain barrels are very popular and easy ways to capture water from your roof. To construct a rain barrel, you will need a large barrel (use only food grade barrels if you plan to use this water for plants), a faucet, an overflow device, and a screen for an inlet. Once the barrel is constructed, raise the barrel up on cinder blocks or a sturdy platform.

Remember, water flows out of the barrel by gravity, so the higher you raise the barrel, the more pressure you get. Cut your downspout and install a flexible downspout to direct water into the barrel. The first good rainfall will fill your barrel quickly, so be sure that you have an overflow installed and directed away from your foundation.

Learn more about the Watershed Stewards, a program of WSU Clark County Extension and the Clark County Clean Water Program by visiting our website (<http://clark.wsu.edu/volunteer/us/>) or attending our free workshops held in the spring and fall. Workshop dates are posted on the website under the calendar link (<http://clark.wsu.edu/usccalendar/>). To schedule a presentation for your club, borrow storm drain stenciling kits, or for more information about Clark County watersheds, rain barrels, or rain gardens, email watershed.stewards@clark.wa.gov or call the WSU Clark County Extension office at (360) 397-6060 ext 7703.

Appendix F – Pre/post tests for Watershed Steward volunteer trainees.

**Washington State University Clark County Extension
WATERSHED STEWARDS PROGRAM POST-TEST**

Name: _____

Answer each question as best you can. Do not guess if you don't know the answer. Write "I don't know." This post-test is for evaluative purposes only.

- 1) Name at least 2 roles stormwater plays in watersheds.
- 2) What is a watershed?
- 3) Name at least three processes other than precipitation that make up the hydrologic cycle.
a) _____ c) _____
b) _____
- 4) What contributes to localized flooding aside from a rain storm?
- 5) Name two characteristics of healthy streams that provide good habitat for fish or wildlife (e.g. riparian vegetation shades streams, stream pools provide fish resting areas etc.)?
- 6) Provide three reasons why macroinvertebrates are important to the watershed.
a) _____ c) _____
b) _____
- 7) What is an impervious surface?
- 8) Name three things a household can do to reduce pollutants entering the storm water runoff.
a) _____ b) _____
c) _____
- 9) What is the purpose of the Clark County Clean Water fee assessed on all property in Clark County?

EXTRA CREDIT!

10) What do the following acronyms mean?

NPDES

BMP

ESA

LID