

2014 Annual Report



WSU CLARK COUNTY EXTENSION

493 adult volunteers
25,812 hours contributed
44,655 educational contacts

Washington State University Clark County Extension engages people, organizations, and communities in Clark County to advance knowledge, economic well-being, and quality of life by fostering inquiry, learning, and the application of research. Extension fosters and promotes partnerships with public agencies, NGOs, community groups and members, and individuals to implement the shared mission of WSU Extension and Clark County. Extension opened in Clark County on November 1, 1917.

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4-H Youth Development and Family Asset Building

240 adult volunteers
13,000 hours mentoring
1061 youth members
99 subject matter clubs

WSU Clark County Extension's 4-H program helps young people in 4-H achieve future life successes through structured learning, encouragement, and adult mentoring. A national Tufts University study shows 4-H helps youth excel beyond their peers:

- 4-H youth are 56% more likely to be physically active; less likely to be sexually active by grade 10; and exhibit significantly lower drug, alcohol, and cigarette use.
- 4-H youth Report better grades at school; they are more likely to attend college and pursue careers in science, engineering, or computer technology; they are three times more likely to actively contribute to their communities.

Clubs Program

"The 4-H program allows a diverse group of youth and families opportunities to problem solve, accept losses and wins with grace, and appreciate the hard work needed to learn these lessons!" - Leader

"I was able to build upon this [4-H] foundation of life skills I learned throughout my 12 years as a Clark County 4-H member in college to help me break into the career of my dreams just days after graduating from WSU." 4-H Alumna

4-H clubs bring Clark County youth together under the guidance of caring adults for year-long, hands-on learning in a community environment that fosters the four essential elements for positive youth development.

- 88% of youth improved self-responsibility, communication, decision-making, teamwork, & leadership.
- 4-H Clubs raised approximately \$100,000 to send youth to national competitions, increase educational opportunities through clinics and exhibition shows, and reach out to the community.

Youth Efforts Against Hunger

in 2014, 350 4-H and FFA youth help provide 10,000 pounds of food (\$50,000 value) to the Clark County Food Bank to help alleviate hunger. 56 of these youth agreed they can make a difference in their community through community service.

Youth Entrepreneurship Program – BizKidz

Working with the Salmon Creek Farmers Market, 40 youth participants developed entrepreneurship skills through growing, marketing, and selling their product at the farmers market.

Science, Engineering, and Technology (SET)

Programs such as school enrichment, food smart families, and farm to fork all teach scientific principles in their activities, but specific SET activities included:

- Forty youth participated in 4-H Robotics clubs, increasing engineering and problem solving skills.
- 700 youth participated in the two-part National Youth 4-H Science Experiment: building rockets and finding a solution to feed hungry people after a mock catastrophic experience.

Food Smart Families

This program trained 590 youth about youth nutrition, cooking, and budgeting. Three teens were trained and they taught about 100 additional youth.

- 85% of youth increased knowledge and skills relative to nutrition, cooking, and budgeting.

Farm to Fork Field Days for Kids

This program teaches youth where food comes from and how it is produced. Kids visit the Heritage Farm where they rotate through four educational stations. Youth learn about composting, food safety, chickens and eggs, hands-on produce harvesting, and identifying different kinds of produce.



"I didn't know that cucumbers grew on a vine."

"The carrots tasted so much better than in the grocery store."

- 85 youth ages 5-14 attended Farm to Fork Field Days.
- All participants agreed they learned about the role agriculture plays in their lives.

School Enrichment

Classroom and After School More than 350 youth in Clark County learned gardening, science, and healthy eating from 4-H staff in their classrooms.



4-H Robotics



Health & Wellness

- **Generated \$486,686 in grants and fees.**
- **Created 13 jobs.**
- **Four interns found jobs.**

Benefit-to-cost ratio of SNAP-ED programs equals almost \$4.7 million annually in Clark County.

Restorative Community Service Garden

In partnership with Clark County Juvenile Justice, this program provides youth offenders from Clark County opportunities for meaningful service emphasizing their positive contribution and community membership. Trained adults mentor youth.

- 24 adults mentored 55 at-risk youth who produced 1000 pounds of produce for 300 needy citizens in 2014.
- Almost all youth felt they were listened to and made positive contributions to the community.
- Since 2004, 1,204 youth with 350 mentors grew 21,312 pounds of produce for the Clark County Food Bank.

WSU Clark County Extension Health and Wellness programs promote healthy food choices, exercise, and safe food practices to low-income families, youth, and the general public. This strengthens our community and contributes to the local economy by making participants less reliant on social and medical services. Healthy people are more employable; they rely less on medical services which reduces both medical and insurance costs. Businesses do not need to pay for extra help or overtime when an employee is sick and businesses decrease lost production due to illness.

- Partnered with over 1,000 individuals, schools, NGOs, businesses, health care organizations, agencies, and volunteers.

Supplemental Nutrition Assistance Program - Education

Under this federal grant funded Supplemental Nutrition Assistance Program - Education (SNAP-ED) program, Food \$ense and the Expanded Food and Nutrition Program (EFNEP) teach low-income school children to make healthy food choices and increase exercise. Successful learning decreases the costs of health care related to poor food habits, decreases obesity rates, and reduces potential diseases, all of which decrease reliance on local social services. SNAP-ED programs show a benefit-to-cost ratio of \$10.64/\$1.00 which translates to a benefit to Clark County of almost \$4.7 million annually from the federal grants received.¹

Food \$ense provides nutrition education to low income youth and their families through classes in schools, community centers and housing projects. Classes help families reduce obesity and potential diseases, decreasing health care costs related to poor food choices. Healthier children increase their learning abilities.

- 5,000 families learned to make healthy food choices and consume more fruits and vegetables, manage limited budgets, and increase exercise.
- Master Gardeners and 4-H partnered to help families and youth produce more of their own food and prepare it themselves.
- Staff provided education at three Clark County farmers markets twice per month. Vendor's reported increased sales when Extension was present.

¹ *Journal of Nutrition and Behavior*, 2002, 34:1, [Pages 26-37](#)



The Expanded Foods and Nutrition Program (EFNEP) helped 91 low income families (368 family members). They acquired the knowledge, skills, attitudes, and changed behaviors necessary to increase nutritionally sound diets and improve total family diet and nutritional welfare. Research shows that better health correlates with reduced health care costs, less absenteeism from work, and less dependence on emergency food assistance.

Impacts:

- 98% of participants made healthy food choices within a limited budget.
- 96% of adults now select food more closely aligned with dietary guidelines, 63% eat more vegetables, and 55% eat more fruits.
- 50% percent of adults increased their physical activity.
- 44% ran out of food less frequently before the end of the month and 49% more often used a list for grocery shopping.

The program also provided nutrition classes in five Vancouver School District elementary schools in grades 3-5. Children attended an average of six classes. More than 815 children learned about making healthy food

selections at school, at home, and away from home by focusing on eating more fresh produce, making healthy snack selections, and the importance of eating breakfast. Teachers and families indicate students become more attentive due to eating breakfast and making healthier food choices at lunch.

- 26% eat more vegetables, 21% eat more fruits, and 28% eat healthier snacks.
- 46% of youth use safe food handling practices more often and 75% improved their ability to prepare simple, nutritious, affordable food.
- 23% of children increased physical activity.

Food Safety for Food Workers

This program provides food handlers the food safety knowledge necessary to meet the Person In Charge (PIC) standards which improve the skills of food workers, improve health inspection scores, and eliminate or reduce foodborne illnesses in the community. Regulations stipulate that food service establishments have a Person In Charge with food safety training beyond the basic food handlers card. When Public Health closes a food business due to food borne illness (FBI) or violations, owners must take an extensive food safety class (offered by Extension) before reopening. The Extension - Public Health partnership provides a local educational resource to help workers, restaurant owners, and managers follow health regulations.

- 123 food handlers from 45 food facilities took PIC classes in 2014. Since 2006, 1,632 food handlers from 440 food facilities took classes.
- Restaurant health inspections scores improved and 97% of restaurants made at least one change in their facility.

"I have worked in the food industry for 15 years and felt I knew it all or heard it all. This class explained the purpose of many things I do on a daily basis." - Restaurant worker

Volunteers contributed 1,734 hours of service valued at \$40,003²

Prevention helped one participant keep her job driving a school bus while decreasing health care costs to herself and the school district.

"I lost over 30 pounds in 16 weeks, reduced my A1C blood glucose so [I am] no longer pre-diabetic." - Participant

Master Food Preserver Volunteers

Food safety programs teach consumers how to prevent foodborne illness with safe food handling practices. Teaching 3,500 youth hand washing helped prevent Norovirus outbreaks in schools and decreased general illness. Extension trained 20 Master Food Preservers (MFPs) to help more than 1,463 individuals safely preserve locally purchased food, both to save money and to have more control over where their food comes from.

- Volunteers trained 12 limited resource families to preserve produce.
- MFP volunteers tested 133 pressure cooker gauges of which 47% were inaccurate. Each inaccurate gauge could cause food borne illness or botulism poisoning. Each FBI case costs from \$5,000 to \$100,000.



"I teach others to safely preserve their own food and I love being a resource to ...lots of different people."

Diabetes Prevention Work

Extension partners with the Diabetes Prevention and Control Alliance, Washington State Department of Health Diabetes Prevention and Control Program, and Washington State Health Care Authority to bring the National Diabetes Prevention Program to communities in Clark County and around Washington. The national evidence-based program, led by the Center for Disease Control, helps people with pre-diabetes prevent or delay the onset of type 2 diabetes, a disease consuming one in five U.S. health care dollars. Nationwide implementation could save the health care system \$5.7 billion and prevent 850,000 case of type 2 diabetes.³

The program teaches participants to manage their lives through healthy food choices, regular physical activity, and lifestyle management to prevent diabetes.

- 64 pre-diabetic Clark County residents participated in one of seven 12 month programs and lost between 5% and 15% of their body weight, participated in 160 minutes of weekly physical activity, and prevented the onset of diabetes.
- Most (95%) participants lowered their blood cholesterol levels, their A1c readings, and reduced or eliminated expensive medications.

² \$23.07/hr volunteer time from [Independent Sector](#).

³ *Health Affairs*, 2012, 31:1, [pages 50-60](#).

30% of participants purchased fresh produce at farmers markets weekly.

44% of limited resource families consumed fruits and vegetables 5-7 weekly.

Vendors noticed more purchases from limited resource families using EBT tokens and fresh match tokens.

Environmental Stewardship in an Urbanizing County

- **Volunteers contributed 19,277 hours of time valued at \$444,720**

Healthy Families at Farmers Markets

Clark County Public Health, three local farmer's markets, and New Seasons grocery store provided \$4,214 for demonstrations and educational displays at local farmer's markets for low income families. The project provided information on selecting fresh produce on a budget, demonstrating a recipe using different produce, and activities to increase fruit and vegetable consumption. Limited income families received a \$4-5 bag of produce.

The Healthy Families at Farmers Markets' booth set up at three Clark County markets presented at eight market events where 385 market shoppers visited the booth and 237 received food bags.

Media Literacy – FOODMANIA: Kids & Food in a Media-Driven World

Only 2-4% of ads children watch promote fitness or good nutrition. Interventions that increase nutrition-related knowledge can prevent negative effects of unhealthy media messages and reduce children's obesity risk. The long-term goal of FoodMania is to prevent childhood obesity by increasing healthy eating behaviors among children aged 9-14 years.

A joint program between 4-H and Health and Wellness, Clark County is one of five counties participating in this five year research project. After taking training in the FoodMania curriculum, staff recruited 14 parent-youth pairs for training from schools, community groups, and youth groups in late 2014. All pairs attended six two-hour sessions.

- All demonstrated increased knowledge and skills evaluating advertising and helping them make more informed choices around healthy food.

WSU Master Gardener Volunteer Program

The WSU Master Gardeners' (MG) 252 para-professional volunteers (58 new in 2014) promote landscaping practices that yield environmental, economic, and aesthetic benefits. The WSU MG program performs outreach to the public through tours, workshops, and public events, such as organic vegetable gardening, fruit tree care, composting, and pest management. 84% of workshop participants increased their knowledge. The program endowment stands at \$165,000.

Answer Clinic Staffed by MG volunteers at the WSU Clark County Extension office, volunteers answered questions from 929 members of the public via walk-ins, email, and phone calls. Questions include plant identification, soil testing, general plant care, disease solutions, and general garden care.

Outreach Master Gardeners staffed outreach booths at 29 community events, reaching 6,909 people with information about pest management, water-wise gardening, and best practices in the garden. Events included the Clark County Fair, Home & Garden Idea Fair, the Recycled Arts Festival, neighborhood events, and more.





Fruit Tree Care Workshop



Hazel Dell Elementary School garden

Workshops Volunteers coordinated 25 workshops for the community, on topics including organic fruit tree care, composting, and alternatives to pesticides, attended by 273 people. Workshop participants completed evaluations assessing their knowledge about topics before and after the class session.

- 78% of participants who completed evaluations reported gains in knowledge.

Community Work Master Gardeners serve as garden mentors at several area senior/assisted living centers. The program enhances the quality of life for residents by helping them grow edible and ornamental plants in gardens at their living facilities.

Volunteers help residents decide what to plant and work with them on garden maintenance through to harvest. This activity encourages socialization and participation in a beneficial physical activity.

Sixteen Master Gardeners serve at the Fort Vancouver National Historic Reserve where they use historically accurate plant varieties to recreate the gardens of that time.

Youth Programs Master Gardeners reached 667 children in 2014. Master Gardeners presented to 100 fourth-graders on Good Bugs/Bad Bugs at the Columbia Springs Watershed Festival and to 171 first graders at Yacolt Elementary School. They provided hands-on garden education at the Hazel Dell Elementary School and community garden to 396 children attending the school and area Boys and Girls Clubs.

Small Acreage Program

Partnering with Clark County's Department of Environmental Services' Clean Water Program, the Small Acreage Program (SAP) trains land users how to steward their land and save money by doing so. Since 2003, 400 people (owning 3,318 acres) graduated from Living on the Land:

Stewardship for Small Acreages (LOL), a 12 week training. Among the 345 LOL graduates (282 households) through 2012, 182 households implemented 587 BMPs on at least 2,012 acres affecting at least 1,200 livestock (excluding poultry). Respondents shared what they learned with at least 2,724 other people. More than 45% tested their soil, 54% of respondents with septic systems inspected their system, and 54% of the households with wells tested them, all as a result of what they learned. 77% agreed funding the LOL through Clean Water Program fees was a good use of the fee.





"WSU [Small Acreage Program] allowed us to avoid costly and messy trial and error mistakes and put into action best practices on our first try. We can't thank you enough WSU."
Peggy Sue Snoey, True North Ranch

SAP provides best practices workshops, property tours, and relevant publications. A signage program also recognizes those landowners "doing their part for clean water".

- 287 participants attended Best Management Practices workshops and tours. Between 57% and 100% of respondents increased their knowledge about various BMP topics.
- A follow-up of 427 previous event participants showed that at least 101 implemented 155 BMPs on their property.



The Aalbue family receives a small acreage program sign recognizing their management practices.



"Thanks to the 'Living On the Land' program, our farm and farm planning has unfolded a very useful and productive livestock farm focused on stewardship and our goals." Ken & Laura Slye, Compass Rose Alpacas - Living on the Land graduate 2005

SAP holds an annual Small Acreage Expo; two-thirds of participants increased their knowledge about property management and how management affects water quality.

- 99 people participated in the Small Acreage Expo. 58% to 100% of respondents learned "some" to "a lot" about various topics related to managing their land.

Local Economic and Agricultural Related Business Development

Agricultural Entrepreneurship Business Planning

This 10 week class series provides both established and start-up farm businesses the knowledge and skills necessary to build business plans for their operations. Topics include marketing, market analysis, business structures, taxes, licensing, insurance, payroll, risk management, regulations, record keeping, and budgets. In 2014, the program graduated 22 participants owning 18 properties comprising at least 192 acres and included three existing small farm businesses. Participants developed draft business plans to make and keep their operations profitable.

What graduates say.....

"Thorough curriculum-brought up important topics we didn't know we needed to consider. Excellent speakers, lots of community resources and support."

It has been inspiring to listen to everyone's hopes and dreams and to see where we fit in the big scheme of small farming.

"I plan on using my business plan as a living document that I will constantly revisit and amend."

Since 2008, 166 people graduated, representing 1,458 acres and 90 existing businesses.

- 50% - 75% of respondents increased their knowledge of topic areas covered.
- 92% of responding graduates changed management practices.
- 86% of responding graduates said changes improved their business.



Other Activities

Food Hub Tour Six growers and food processors toured three food hub operations in the Portland metro area. As a result, a Clark County berry grower plans to add pie making to his farm operation. This value-added activity will likely increase profitability.

Green Certification Staff worked with one of the largest local berry growers (250 acres) to differentiate his crop through certification with the Food Alliance in Portland, OR. This green-type certification can increase the value of a farm's production.



Local Agriculture Production, Food Systems, & Food Security

Extension works with large commercial operations and direct market farmers on smaller acreages on topics such as small fruit, vineyard, greenhouse, orchard, medicinal herb, tree fruit, water rights, marketing, etc.

Workshops

- *Best Management Practices for Controlling Soil Pathogens without Using Pesticides* for 17 nursery owners who learned about soil steam disinfection for disease management.
- *Building Soil Health for Productivity and Lowering Costs* with 30 nursery owners participating.
- *Women in Agriculture*, improving financial management in agricultural businesses using SWOT analysis. Using a regional webinar format, 20 women farmers participated at our local site along with 675 women in Idaho, Washington, and Oregon.



Agriculture in Clark County

1,929 farms
5,283 operators & farm workers
74,758 acres in farming
\$51 mil. crop & livestock sales
\$364 million in food processing
(top 3 = milk, fryers, & berries)



Local high tunnel

Harvest Celebration Farm Tour Twelve farms opened their doors to 610 members of the general public on a Saturday in September to help them connect with local farmers and understand what local farming looks like. Over 12,000 people have toured farms since the first Harvest Celebration in 2000.

Farm Finder A [web-based farm locator](#), this searchable database lists over 1800 Washington and Oregon farms and helps consumers find farms that sell their product directly to the public. The site had 99,330 visitors in 2014.

Applied Research and Education

High Tunnel Planning proceeded for installing a high tunnel in 2015 to begin vegetable variety trials to increase farmers' profitability.

Apple Maggot Research conducted in SW Washington on apple maggot infestations contributed to our understanding of apple maggot, which helps the apple industry in Washington protect its exports from this pest and ensures that exports continue to countries that prohibit infested fruit.

Technical Assistance

Staff consulted individually with 83 producers about production practices, pest management, fruit marketing, (berries, apples, tree nuts), nursery production, container crops, Christmas tree production, and high tunnels. Follow-up showed 54% made changes in their operation based on the advice provided.

"As a result of your advice I purchased a new commercial cannon sprayer for my blueberry farm and spend 40% less time managing Spotted Wing fruit fly".
- Brush Prairie blueberry grower.

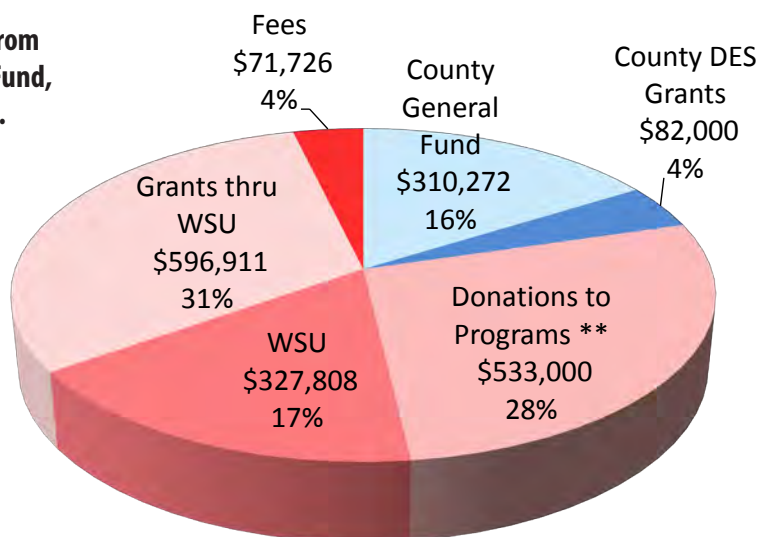
Budget

Per the Interagency Agreement between Clark County and WSU Extension, the county contributed \$310,272 from their General Fund, as well as another \$82,000 for specific programming in 2014. WSU contributed \$1,529,445 directly and from fees, grants, and donations, for a total budget of \$1,921,717.

Return on Investment = \$4.93

For every \$1 contributed from the Clark County General Fund, Extension leverages \$4.93.

2014 WSU Extension Office Funding



** Includes sales for Junior Livestock auction at Clark County Fair.

Thanks to all our partners and collaborators.....

Affordable Community Environments
Amazia Veterinary
Battle Ground School District (2 schools)
Boys and Girls Club
Camas School District (1 school)
Camas Farmer's Market
Cascade Harvest Coalition
Castle Rock S.D.
Clark College (Community Ed, ESL)
Clark Conservation District
Clark County (Public Health, DES -
Vegetation Mgmt., Environmental
Health, Corrections, Fair, DSHS, Youth
Commission)
Clark County Farm Forestry
Clark County Food Bank
Clark County Food Systems Council
Clark County Historical Museum
Clark County Juvenile Court
Clark County Saddle Club
Clark / Cowlitz Farm Bureau
Clark Public Utilities
The Columbian newspaper
Columbia Springs Environmental
Education Center (CSEEC)
Columbia United Providers
Cowlitz River Club
Educational Opportunities for Children
and Families (aka Early Childhood
Education Assistance Program ECEAP)

Educational School District #112
Evergreen School District (14 schools)
Farmers (numerous)
Farmers Markets (Vancouver, Salmon
Creek, Camas, Battle Ground)
Fisher's Grange
Food businesses (381)
Fort Vancouver Regional Library
Fred Meyer
Friends of the Ridgefield Wildlife Refuge
Hazel Dell Schol & Community Garden
Healthy Living Collaborative
La Center School District
Latino Community Resource Group
Lower Columbia River Fish Recovery
Board, Technical Advisory Committee
Master Gardener Foundation
Nature Scaping
Oregon State University Extension
Parents Again
Partners in Careers
Peace Health Medical Center
Plant-a-Row for the Hungry Garden
Rain or Shine Nursery
Reflector weekly newspaper
Ripley's Horse Aid Foundation
Salvation Army
Sea Mar (Nutrition Programs, WIC)
Second Step Housing

Share Aspire
Shorty's Nursery
WSU Small Business Development Center
Specialty Nursery Association of Clark
County
SW Washington Child Care Consortium
Trinity Lutheran Church
US Department of Fish and Wildlife
USDA / NRCS
Vancouver Housing Authority
Vancouver Library
Vancouver, City of (Vancouver Parks and
Recreation)
Vancouver School District (5 schools, 7
Family Centers)
WA State Department of Agriculture
WA State Corrections
WA Department of Ecology
WA Department of Fish & Wildlife
WA Work First
Washougal School District (1 school)
Wilco Farm Stores
Wildlife Botanical Gardens
Wolverton Mt. Gun Club
WSU Vancouver (Human Development,
nursing)
WSU Extension (Small Farms Team)
YWCA



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