A photograph of a rain garden installed in a concrete curb next to a paved road. The garden contains various green plants and grasses. A blue informational sign is placed in the garden. The sign has a green top section with the title 'Rain Garden' and a blue bottom section with text about stormwater treatment and stream health. The background shows a road and a car.

# 2013 Annual Report

Clark County  
Environmental Services

# From the Director...



*Don Benton, Director*

#### **Major department functions:**

- Clean Water & Stormwater Management
- Environmental Permitting
- Legacy Lands (county-owned critical habitat lands)
- Solid Waste & Recycling
- Sustainability & Outreach
- Vegetation Management

#### **Independent advisory commissions**

##### **supporting operations:**

- Clean Water Commission
- Noxious Weed Board
- Solid Waste Advisory Commission



This 2013 Annual Report highlights the work of the Department of Environmental Services (DES) for the past year. It has been another exciting and challenging year for the four-year old department. As you will see throughout this report, the department has made significant progress and achievements in all of our divisions.

We have had many challenges since my appointment as Director in May. Faced with the bankruptcy of our Clean Water Division and a five year old, potentially 30 million dollar law suit for not complying with the federal clean water law, we had to make swift and sometimes painful decisions. I requested mediation with the plaintiffs on the lawsuit and eventually settled it for 3.6 million. With the help of a good management team we reduced our expenses significantly and were able to avoid layoffs. Unfortunately, the clean water fee will need to be raised in order to fund full compliance with the law going forward and to pay the penalty for our past non-compliance. Even though these two challenges were disruptive to our day to day operations, all of our divisions were able to achieve significant successes in 2013.

We hosted many hazardous household waste collection events, continued our efforts to eliminate Japanese knot weed, monitored our local streams and set up outreach displays at numerous community events. Our DES staff of scientists, engineers, technicians and outreach professionals continue to work hard in meeting the goals of the department, county and community in conserving and protecting our natural environment.

A major goal for the department in 2014 is to build additional partnerships with businesses, community groups, and other organizations in the county. Combining efforts will increase efficiency, avoid duplication of efforts, and make the best use of public resources.

I value openness and transparency and am proud to lead a department that provides a high level of customer service. I have met with a number of citizens and helped resolve their concerns. I welcome public contact and input on any issue – my door is always open and you are always welcome or you can call me directly at (360) 397-2121 ext. 5358.

Sincerely,

A handwritten signature in blue ink that reads "Don Benton". The signature is fluid and cursive.

Don Benton,  
Environmental Services Director

## Just a few of our major accomplishments in 2013 include:

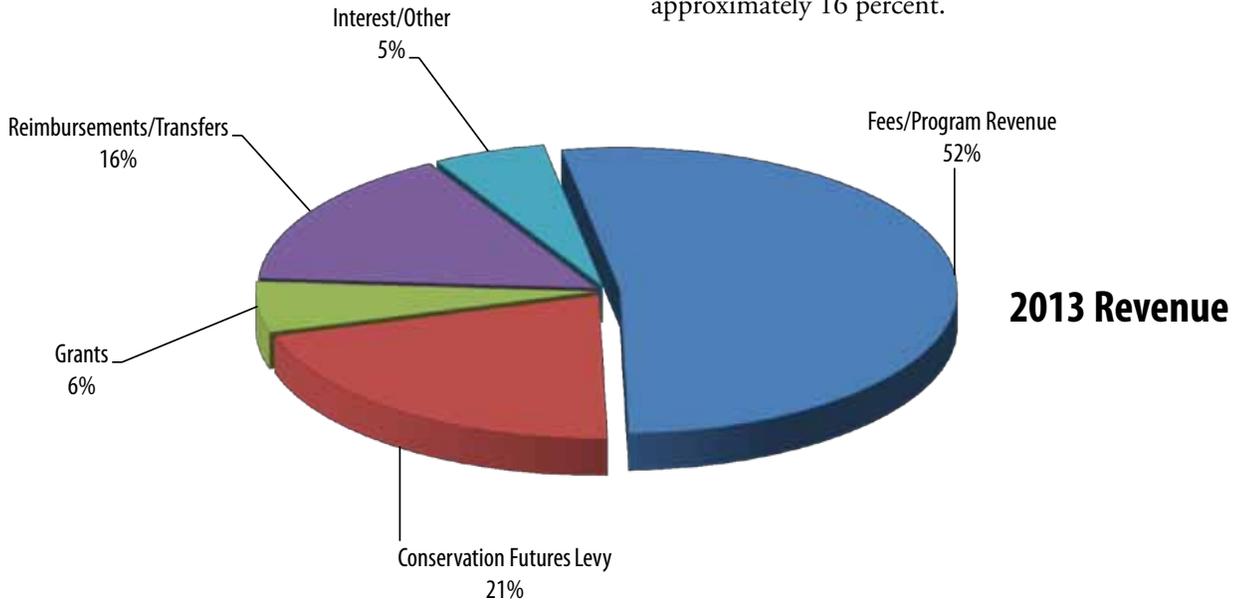
- Balanced the Clean Water budget by maximizing efficiencies and consolidating services saving taxpayers over \$2 million and identified an additional \$2.11 million in future savings.
- Resolved a 5-year legal process regarding the county’s compliance with state and federal clean water mandates.
- Successfully completed the first EPA audit of the county’s stormwater permit.
- Established a college internship program with the Environmental Studies Department at WSU Vancouver to give local college students real experience in environmental science.
- Earned a \$1.5 million legislative appropriation for much needed stormwater infrastructure projects.
- Resolved more than 50 individual water complaints, with leaking motor oil and washing paint equipment over storm grates dominating the issues.
- Secured \$1.1 million in state grants to conserve Flume Creek Canyon near Ridgefield which is critical habitat for bald eagle nesting sites in Flume Creek.
- Implemented a new yard waste contract which resulted in a 16% reduction in customer rates.
- Exceeded the recycling rate required by the State of Washington for the second year.
- Selected a vendor and started the master planning process on the old Leichner landfill and secured a \$200,000 grant from the Department of Ecology.
- Secured a \$1.2 million grant to provide education on pollution prevention and recycling
- Over 100 Clark County schools participating in our “Save Organic Scraps” recycling and composting program.
- Treated 1,600 miles of county roads with our roadside spray program, an increase of 50% over the last 2 years.
- Produced \$1.7 million in net revenue from sustainable forestry practices at Camp Bonneville and pumped \$750,000 in private payroll into Clark County’s economy.
- The Small Acreage Program’s *Living on the Land* class graduated 374 people through 2013 and 182 families (households) implemented over 580 best management practices that help reduce stormwater pollution on over 2,000 acres of land.

## What’s inside...

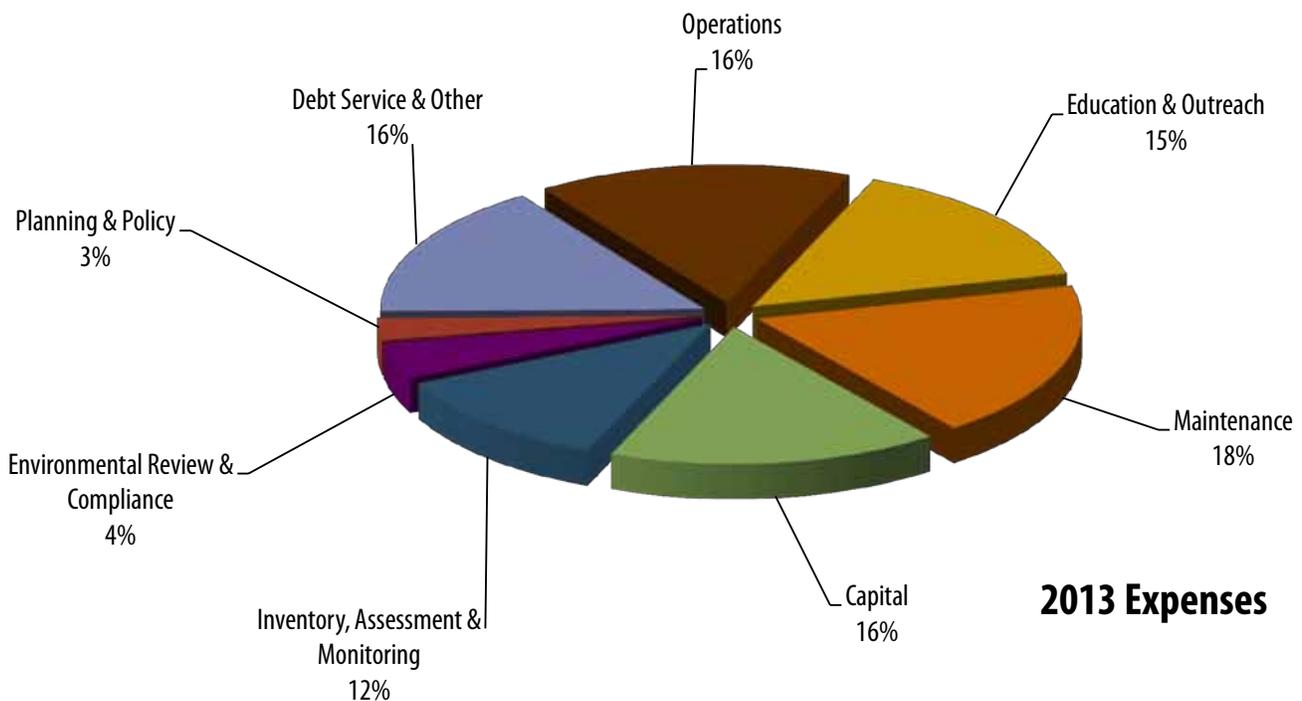
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# Budget

Funding for Environmental Services' programs and services comes from several sources. Revenues totaled \$13.5 million in 2013, with the largest components coming from three dedicated funding sources; the Conservation Futures Levy, Clean Water fees from the Clean Water program and taxes and fees from the Solid Waste programs. State and federal grants account for six percent of total revenues. Reimbursements and other internal transfers account for approximately 16 percent.



Capital project spending and maintenance activities consumed 34 percent of all expenditures in 2013. Examples of capital projects include stormwater facility repairs, construction projects, and environmental enhancements, such as habitat improvements.



# Enhancing & protecting our environment

## Sustainable Forestry

The Sustainable Forestry Program at Camp Bonneville had another outstanding year, grossing approximately \$1.7 million with a net operating revenue of \$1.2 million. This work included attaining 2013 goals of thinning the diseased, dying, or otherwise undesirable timber out of 382 acres. In all, a total of 664 loads of commercial timber were shipped from the camp to local mills.

Work at Camp Bonneville generated local jobs and at least \$750,000 in payroll back into the community this year alone, with over 95 percent staying in Clark County as prevailing wage or better jobs. Up to 30 thinning operators worked on site during the year, averaging around five workers on the site through the operating season in 2013.

**\$1.7 million**  
in revenue

Revenue generated from these logs was used to resurface six miles and rebuild another 1.2 miles of forest roads within the camp. In addition, three 70-year old timber bridges were replaced with new pre-stressed concrete structures. The revenue also provided \$84,000 worth of new road maintenance equipment to the facility's staff for upkeep of these road infrastructure improvements.

County forestry staff has observed significant canopy rejuvenation in the forest management units thinned in late 2012 and early 2013. The forest health at Camp Bonneville will continue to improve and will yield Clark County an equitable, sustained income for a very long time.



*Above -thinning operation at Camp Bonneville.*

*Right - forested area after thinning process.*



# Noxious weeds

1,600 miles  
of road & 2,000  
acres treated

2,975 lbs garlic  
mustard pulled

Certified 1,290  
acres weed free

## Noxious Weed Control

In February, the Vegetation Management Division revitalized its noxious weed control program by working through a Lean Kaizen (a process improvement project) to increase program efficiency and effectiveness. Field Inspectors with Vegetation Management implemented the program during the 2013 growing season, with several exciting changes. Technology improvements led the way with a new GIS application for mapping noxious weed occurrences. This software also automated both the sending of notification letters to property owners and follow-up on those notifications.

Helping the public recognize and safely treat noxious weeds on their property involves outreach at fairs and community events. Thirteen new brochures describing specific noxious weeds and how best to control them were developed for distribution at events. Outdated violation notification letters to property owners were also replaced with colorful and informative postcards.

Field inspectors worked closely with the Noxious Weed Control Board, including five new members of the agricultural community, to revise the noxious weed control code, streamline the procedure for notification and enforcement, and establish more options for working with the public.



Volunteers pulled 2,975 pounds of garlic mustard at Earth Day community events.

New brochures inform property owners how to treat noxious weeds on their property.

## **Partnering to improve Salmon Habitat in the East Fork**

Clark County is partnering with The Lower Columbia Estuary Partnership (LCEP) and other local environmental groups to restore fish habitat on the East Fork of the Lewis River. In 2013, with county support for the proposal, LCEP received a grant for \$350,000 to design restoration projects for two county-owned sites along the river. One effort focuses on improving 40 acres of wetland at the La Center bottoms and the other will improve a half-mile of side channel three miles upstream. Proposed improvements include reconnecting the channel to the main river which would re-establish an important refuge for fish and wildlife. Other efforts involve planting native vegetation and installing woody debris into the stream to provide fish habitat. Construction could begin in 2015 with plans for additional funding.

These two county-owned parcels are part of the county's Legacy Lands Program. They are among several properties acquired along the river to preserve and enhance habitat and to facilitate development of the East Fork Lewis River Greenway Trail.

Partnering with other agencies that have the expertise and resources to take on major habitat restoration work helps the county better manage the land, conserves county resources, and supports the region's salmon recovery plan.

### ***East Fork stream habitat enhancement project***

Environmental Services completed the Upper Daybreak Side Channel Project in 2013, which improves off-channel habitat for salmon by increasing access and improving habitat within two side channels of the East Fork.

Improvements include increasing water flowing into these side channels, installing approximately 70 logs, and planting native vegetation.

## **Fast Facts:**

- Environmental Permitting staff provided permit coordination for an average of 31 capital projects in design, environmental compliance for an average of 15 projects in construction, and mitigation monitoring or maintenance activities for an average of 54 projects post construction during 2013.
- Environmental Review staff processed 228 new development applications and issued 179 permits during 2013.



## Benefits:

- Protects 105 acres of intact mature forest
- Protects 30 acres of wetlands, shorelines, and flood plain on Flume Creek
- Protects and restores 25 acres of North Pacific oak woodland
- Provides protection for over 30 priority and special-status species.

## Flume Creek Acquisition Grant

In 2013, Clark County, in partnership with the city of Ridgefield, Columbia Land Trust and the US Fish and Wildlife Service, was awarded an Urban Wildlife Habitat Grant from the Washington Wildlife and Recreation Program. The \$1.1 million dollar grant will match the same amount from the county's Conservation's Futures program to fund the purchase of approximately 120 acres in the Flume Creek Watershed southwest of Ridgefield. The property, which is adjacent to Lake River and the Ridgefield National Wildlife Refuge, contains designated priority habitat and includes a mile of critical riparian corridor suitable for salmon rearing.

The acquisition of this property helps the county implement the county's Shorelines Management Program and the Growth Management Act Comprehensive Land-Use Plan. It also helps meet several public access and recreational goals, including access to areas for hiking and nature trails and a connection to the new Lewis River to Vancouver Lake Water Trail.

*Left: South Fork of Flume Creek*

*Right: Hiking trail on property*



*Lake River - view of Flume Creek Habitat Area on the left. Ridgefield Wildlife Refuge on the right.*

# Improving our community and infrastructure

## Fast Fact:

The renovated stormwater facilities in the Parkside neighborhood can treat and slow more than two million gallons of stormwater runoff, protecting nearby Whipple Creek and tributaries from damage.

## Stormwater Construction

Federal, state and local laws require the county to collect and treat polluted runoff to protect the environment. Without proper stormwater management, runoff picks up oil, fertilizers, pesticides, pet waste and other contaminants and carries that pollution into streams and waterways, where it can harm fish and other aquatic life.

In June 2013, Clark County expanded and combined three existing stormwater facilities into one to better manage polluted stormwater runoff from roads, roofs and other hard surfaces in the Parkside neighborhood at NE 4th Avenue and NE 146th Street.

The project improves water quality treatment and reduces high flows from heavy rainstorms, which increase the risk of erosion in Whipple Creek.

Construction was followed by planting more than 4,000 native plants over the winter months that improve the appearance of the area, including 2-foot tall deciduous and conifer trees, shrubs, rushes and sedges.

The \$698,700 project was funded by a grant from the Washington State Department of Ecology and the Clean Water Fee paid by property owners in unincorporated Clark County.





*Leichner landfill - active (top photo), today (bottom photo)*

## Master planning effort begun for Leichner Landfill

In the fall of 2013, Clark County began a master planning process to guide decisions about the future use of county-owned property at 9411 NE 94th Avenue. The county purchased the 120-acre site from private owners in December 2012, with the intent of encouraging job creation on a 35-acre portion of the property zoned for light industrial development. A 74-acre portion of the property, which encompasses the closed Leichner landfill, will be included in the master planning process, but its redevelopment will be limited for at least another 5 to 10 years because of the constraints of environmental regulations on closed landfills.

The county and a team of experts will study the entire 120-acre site and analyze potential reuses from the perspectives of market demand and their environmental effects in early 2014. The master planning process will provide public outreach through neighborhood mailings and open houses and seek feedback from residents, businesses, and private developers.

The master plan will not determine what specific uses will develop at the site, but will provide a conceptual design identifying where buildings and roads and other infrastructure might be located to support future development. Typically, such a plan assumes a site develops in phases over several years. For more information, visit [www.clark.wa.gov/leichner](http://www.clark.wa.gov/leichner).

## Planet Clark Emerald House

The Plant Clark Emerald House at 9717 N.E. 25th Ave was dedicated on May 24, 2013. This public-private partnership transformed a residential lot in Hazel Dell into a home highlighting environmentally sound building techniques and demonstrates how projects can be good for the environment and also make sense financially.

Clark County worked closely with Evergreen Habitat for Humanity, Quail Homes and more than 30 other partners over a two-year period to create the 1,154-square-foot home for a low-income family.

The Emerald House, which won both a Community Pride and a National Association of Counties Achievement Award, was designed to use 60 percent less energy and water than a typical home. The high-performance project offers numerous examples of affordable construction suitable for other projects in Clark County.



# Modeling sustainability & partnerships

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The cleaner emissions  
of **one** natural gas truck  
equals **removal** of  
**325 cars**  
from the road

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*Better for the environment - new yard waste trucks run on compressed natural gas.*



## Planet Clark Emerald House features include:

- Natural light and solar heat to reduce electricity use.
- Insulated building panels and triple-glazed energy efficient windows to reduce heating costs.
- Low-flow water fixtures and centrally located water heating and plumbing.
- A rain garden to treat storm runoff from hard surfaces.
- Low-maintenance landscaping to limit the need for water and fertilizer.
- Rain barrels to collect water for irrigation.

Private businesses contributed more than \$40,000 to the project and Evergreen Habitat for Humanity contributed \$40,000 in labor and supplies. Clark County contributed \$40,000 to cover the cost of energy efficient windows and other features. The county also donated the vacant lot.

## Lower yard waste rates & more efficient trucks better for people & the environment

In June of 2013, Clark County implemented a new contract with Waste Connections of Washington Inc. that lowered curbside yard waste collection rates and promotes more environmentally beneficial practices.

Residents of unincorporated Clark County, Battle Ground, La Center, and Yacolt who subscribe to yard waste collection service saw their monthly bills decrease by approximately 16 percent as of August 1, 2013.

The county sought proposals in 2012 which stipulated that companies incorporating environmental initiatives would receive additional consideration. In its proposal, Waste Connections agreed to upgrade its fleet to new trucks that run on compressed natural gas (CNG). These trucks emit fewer pollutants and get higher mileage per gallon than trucks that run on diesel. In addition, compressed natural gas costs less than diesel. Waste Connections installed the county's first CNG fueling station at its facility on Northeast 94th Avenue.

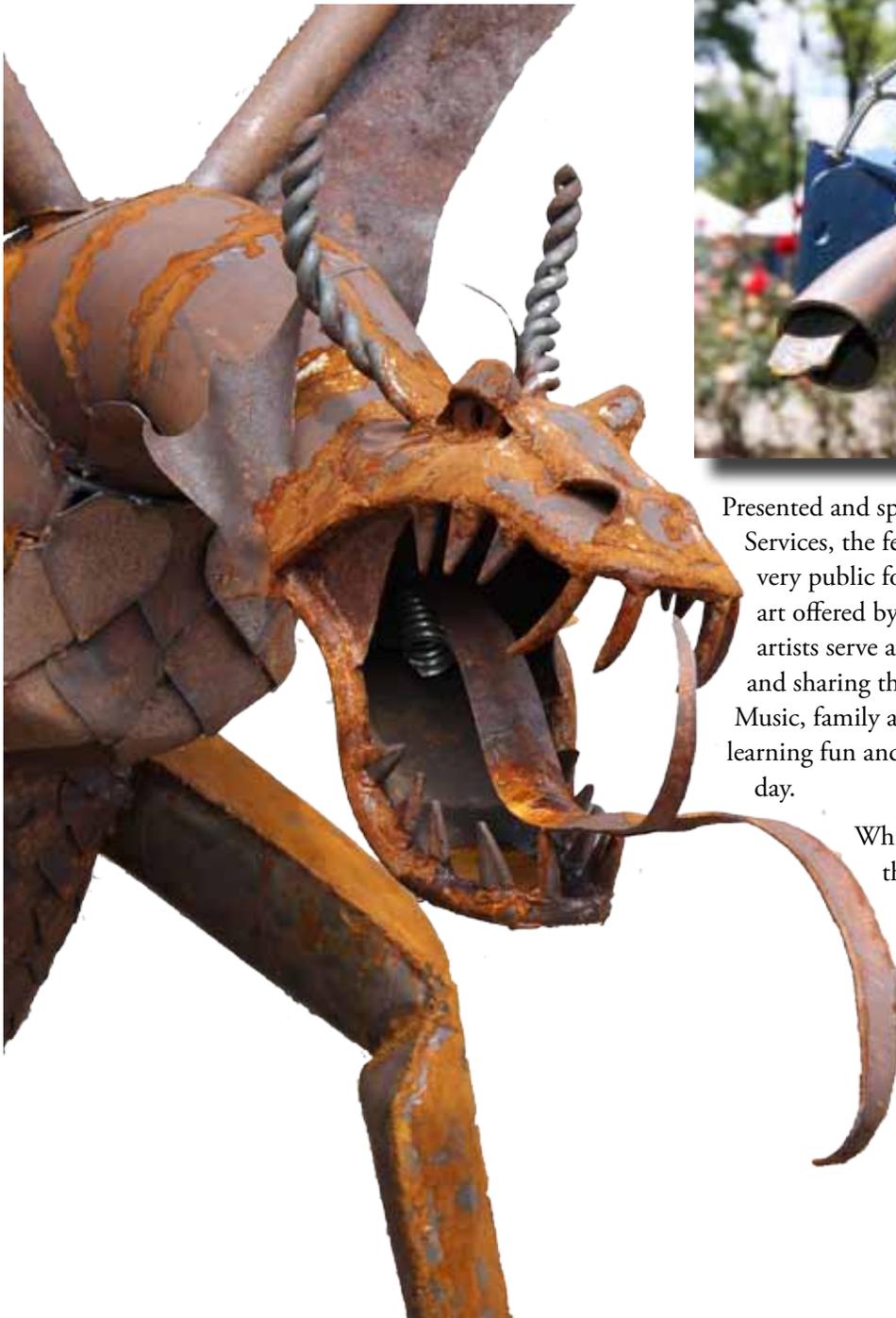
Through this contract, county residents will continue to get great service at a lower cost. Waste Connections' move to compressed natural gas is right in line with the county's policies of environmental stewardships and sustainable practices and the entire community will benefit.

# Engaging the community

## Recycled Arts Festival breaks attendance record

The 2013 Recycled Arts Festival (RAF), featured live entertainment, family-friendly activities and more than 120 vendors selling art works crafted from recycled items. In its eighth year, the festival broke an attendance record with more than 25,000 visitors.

Held in scenic Esther Short Park in downtown Vancouver, Washington, the two-day festival is about more than recycling. The festival brings the concepts of sustainability, waste reduction, reuse, and natural resource protection to the community, providing inspiration, information, and entertainment to thousands of visitors each year.



Presented and sponsored by Clark County Environmental Services, the festival is a showcase for recycled art and a very public forum for local environmental outreach. All art offered by vendors is made of recycled materials and artists serve as educators for the weekend, interacting and sharing their “green lifestyles” with the public. Music, family activities and a festival atmosphere make learning fun and easy and inspire people to come spend the day.

While wildly popular with the general public, the festival has also attracted corporate sponsorship and business partnerships. In 2013, Columbia Credit Union was one of our financial sponsors of the festival with a contribution of \$10,000. In addition, many other partners contributed time and services to make this a successful event.



3,125 people  
76 outreach  
events

3,159 hours  
donated by volunteers



*Wildwatch participants can track and record lady bugs in their own backyard.*

## Waste

On average, we each  
generate 8.3 lbs. of  
waste per day....

4.5 lbs recycled,  
2.89 lbs to the landfill  
per capita

## Green Neighbors Program completes year one

2013 marked the first full year of the Green Neighbors program which was developed to assist and inspire residents develop more sustainable lifestyles and build a strong environmental community in Clark County.

ClarkGreenNeighbors.org, the web-based core of the program, offers tips and opportunities from energy efficiency to tracking weather or backyard wildlife. The site features an events calendar, a clickable interactive house,

environmental calculators and quizzes. Visitors to the site can also

become a “green neighbor” by joining an online social community to offer and exchange ideas.



The program also offers a monthly newsletter and Wildwatch, a family-friendly way to encourage citizen science. Activities vary and include bird and bee counting, storm tracking, and even nest watching - collecting records on bird nests, eggs, young birds and fledglings. Visit ClarkGreenNeighbors.org for more information or to sign up for the Green Neighbors newsletter.



## Fast facts:

- The amount of waste diverted from the landfill through reuse or recycling increased to 65 percent, up 1 percent from 2012 and 8 percent from 2011.
- The county’s recycling rate of 54 percent exceeded the 50 percent goal set by the State of Washington for the second time.
- While total waste generated per person per day is up slightly, recycling has increased while the garbage collected remains stable.
- Over 66,000 tons of residential recycling and yard debris were collected by the curbside collection program.
- 1,213 participants brought 8,936 tons of material to 23 collection events.

# Making the most of resources with WSU Clark County Extension

## Promoting healthy families

### Out of 9,975 students two weeks after the class series, those who:

Eat more fruits and vegetables	6,484
Eat breakfast including 3 food groups	3,491
Use food labels to compare nutrition when selecting snacks	1,995
Tasted a new food and had it at home	8,479
Can identify healthy food choices	9,257

### Out of 2,200 parents receiving newsletters, those who:

Ate more meals together as a family	1,710
Selected foods lower in fat, sugar, and sodium	1,002
Purchased healthier snacks more often for their children	1,932
Ate more fresh fruits and vegetables	1,598
Read nutrition labels when choosing foods	1,554
Increased physical activity to 60 minutes or more most days	1,665

Washington State University Extension has partnered with Clark County for 96 years. In 2012, Environmental Services continued that relationship by welcoming WSU-E into the department, allowing for greater coordination and sharing of resources toward common goals. Featured below are two of WSU Clark County Extension's many community programs.

## Healthy families - healthy communities

WSU Food \$ense, a nutrition education program targeting limited resource families, teaches families how to make healthy food choices, why good nutrition is important, and how to prepare low-cost, nutritious, and tasty foods. The program emphasizes increasing consumption of fruits, vegetables, low fat milk, fixing healthy portion sizes, stretching food dollars at the grocery store, and increasing physical activity.



In 2013, WSU Clark County Extension worked in 52 elementary and middle school classrooms, reaching 9,975 youth, 62% of them received free or reduced meals at school and their families were SNAP eligible. Youth participate in discussions, read books about healthy food choices, try new foods, and often get to prepare snacks. Topics included selecting nutritious foods using the MyPlate food guide, healthy portion sizes, selecting snacks, hand washing to stay healthy, and the importance of being physically active. Parents also receive a weekly newsletter on these subjects.

Classroom teachers report seeing increased fruit and vegetable consumption, increased consumption of white milk over chocolate milk by youth.

10 years...

1,000 youth

15,000 lbs  
of produce  
grown

**Clark County provides financial support to WSU Clark County Extension for the following programs (2013 statistics):**

**4-H Youth Development** -2714 contacts; 241 volunteers giving at least 3017 hours; 1,000 youth participating

**WSU Master Gardeners** - 192 volunteers giving at least 24,034 hours; 11,028 contacts (including commercial horticulture)

**Small Acreage Program** - 240 acres impacted; 50 events/classes; 1,782 contacts

**Commercial Horticulture** - 33 businesses assisted; 152 acres impacted;

**Small Farms** - 19 farm businesses assisted (15 others planning a business); 377 acres impacted; 5 events/classes; 1,480 contacts

**WSU Master Food Preservers** - 21 volunteers; 250 hours provided

**Nutrition and Diabetes Education** - 85 events/classes; 12,545 contacts (9,023 of them youth)

## Restorative community service garden

WSU Clark County Extension 4-H Youth Development and Food Sense nutrition programs partner with Clark County Juvenile Court to work with juvenile offenders through the Restorative Community Service (RCS) project. This project focuses on accountability, change, and re-integration into communities by providing juvenile offenders the opportunity to fulfill their obligation for community service. The RCS program focuses on life skills and experiences that will help youth in their daily lives and to provide them the feeling of satisfaction of giving back to the community.

Trained community mentors work with juvenile offenders to grow organically produced food for the local food banks and homeless shelters. The youth learn basic gardening skills and the challenges those less fortunate face to provide healthy food options for their families. Youth also learn food safety and basic cooking skills to provide for themselves.

During the past 10 years, the program worked with 1,000 juvenile offenders who grew over 15,000 pounds of produce for local food banks. Additionally:

- 88 percent learned to make healthy food choices.
- 90 percent learned science can be fun in the garden.
- 99 percent felt they did something important to help their community.





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For other formats, contact the Clark County ADA Office: **Voice** (360) 397-2322; **Relay** 711 or (800) 833-6388; **Fax** (360) 397-6165; **E-mail** [ADA@clark.wa.gov](mailto:ADA@clark.wa.gov).