

ALEA



**AQUATIC LANDS ENHANCEMENT ACCOUNT
VOLUNTEER COOPERATIVE GRANT PROGRAM
2013-2015 REPORT**

INTRODUCTION

Since 1984, The Washington Department of Fish and Wildlife's (WDFW) Aquatic Lands Enhancement Account (ALEA) Volunteer Cooperative Grant Program has provided funding to hundreds of individuals and organizations that have implemented fish and wildlife projects throughout Washington State that:

- Protect and enhance fish, wildlife, and their habitats
- Enhance sustainable fish and wildlife recreational opportunities
- Educate the public about our fish and wildlife resources
- Improve public access to the outdoors
- Collect and disseminate fish and wildlife science

ACKNOWLEDGEMENTS

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Cover photo of Hamma Hamma River steelhead was provided by Long Live the Kings.

All other photographs provided by the grantees or WDFW unless otherwise indicated.



VOLUNTEER COOPERATIVE GRANT PROGRAM 2013-2015 REPORT

EVALUATION CRITERIA

- Consistency with WDFW Goals and Objectives
- Public Benefit
- Volunteer Effort
- Overall Costs to Benefits
- Applicant Qualifications
- Measurable Objectives
- Focus on Priority Habitats and Species

GRANT SELECTION

Proposals are accepted once per biennium. They are reviewed and scored by a panel of 18 employees representing a cross-section of WDFW Regions and Programs. A ranked list of projects recommended for funding is presented to WDFW's Director and the Executive Management Team for approval.

Program data.....page 1

Project Summaries



Region 1.....page 3



Region 2.....page 5



Region 3.....page 9



Region 4.....page 11



Region 5.....page 19



Region 6.....page 23



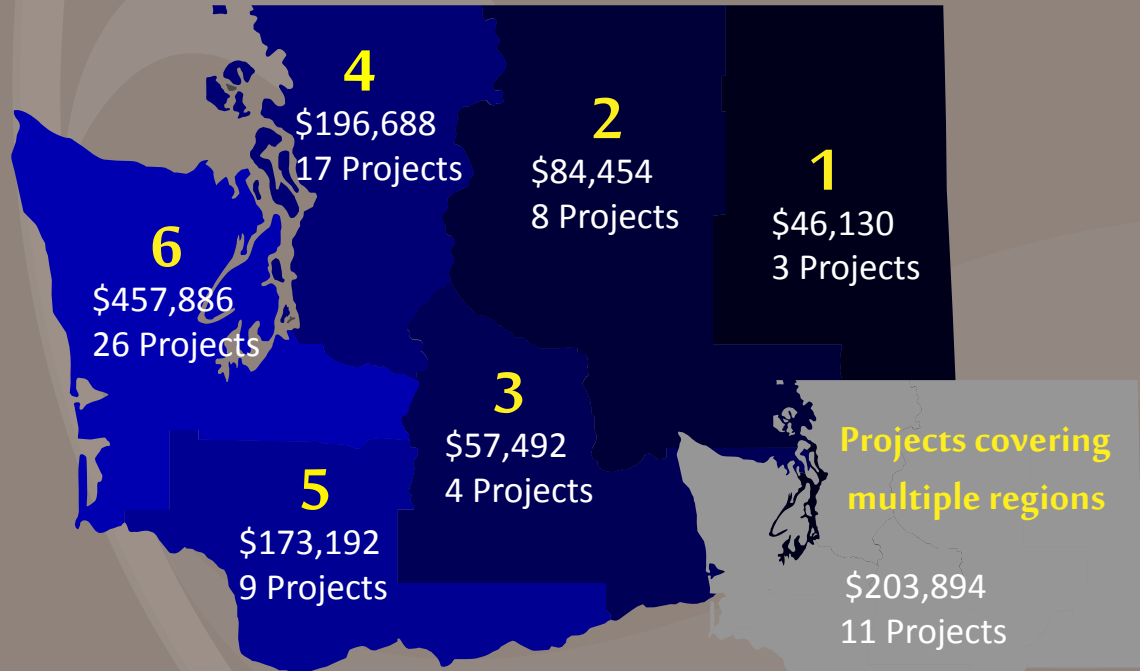
Multiple Regions.....page 35

ALEA GRANT

REGIONS

WDFW is headquartered in Olympia and operates six regional offices throughout the state. Many ALEA funded projects are closely aligned with regional priorities for species and habitat conservation and recovery.

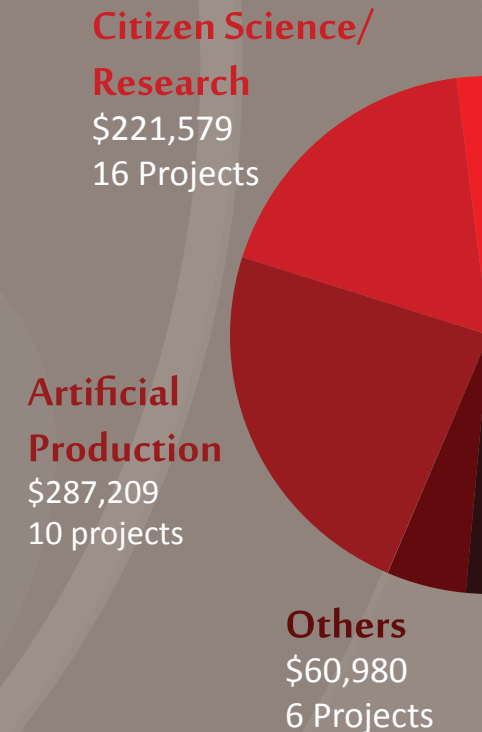
Funds spent and number of projects funded per region



PROJECT TYPES

ALEA grants fund a variety of fish and wildlife projects. ALEA funds standard project types, meeting the criteria are considered. Project types are categorized below.

Funds spent and number of projects funded per project type

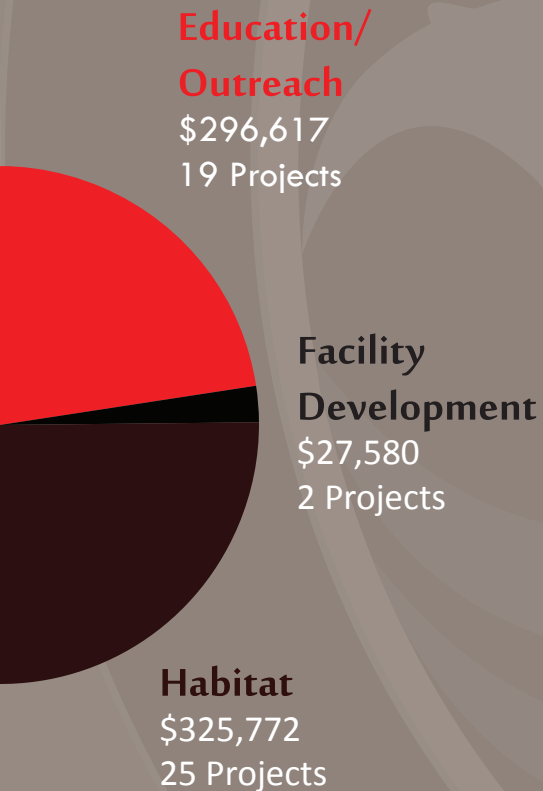


PROGRAM DATA

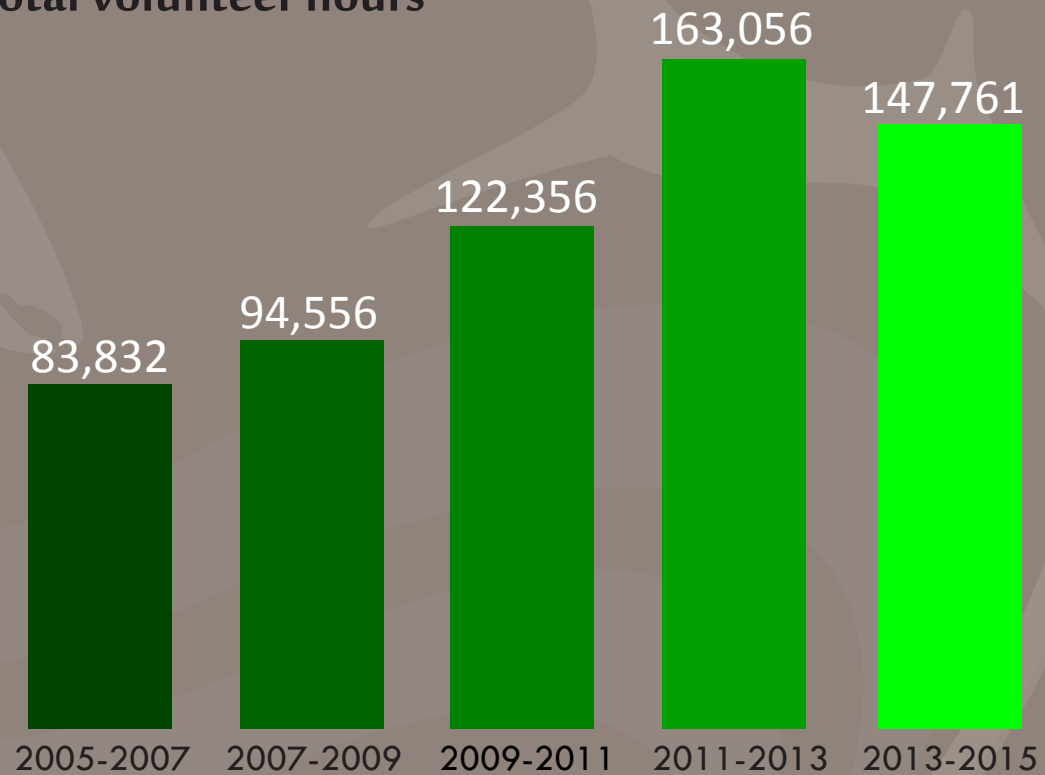
VOLUNTEER EFFORT

and wildlife projects. While shown below, other projects Our diverse portfolio of grants

Volunteer effort is a cornerstone of the ALEA Grant Program. Project proposals are scored, in part, by how much sponsors engage volunteers to conduct their project activities.



Total volunteer hours





REGION 1

Region 1, Master Hunter Volunteer Coordinator Pilot Program ●

Sponsor:	Master Hunter Advisory Group
Type:	Other
Cost:	\$949
Volunteer hrs.:	600

This project supported volunteer efforts in coordinating Master Hunter and other volunteer activities throughout Region 1. Activities included handling problem animals, repairing gates/fences, protecting sage grouse, posting signage and working with WDFW and landowners to coordinate hunts.



Ferruginous Hawk Nesting Platform ●

Sponsor:	Palouse Audubon Society
Type:	Habitat
Cost:	\$546
Volunteer hrs.:	52

This project resulted in construction of an elevated artificial nesting platform in Whitman County for ferruginous hawks. Loss of suitable ferruginous hawk nesting habitat and competition for existing habitat with other species prompted the Palouse Audubon Society to undertake this project.

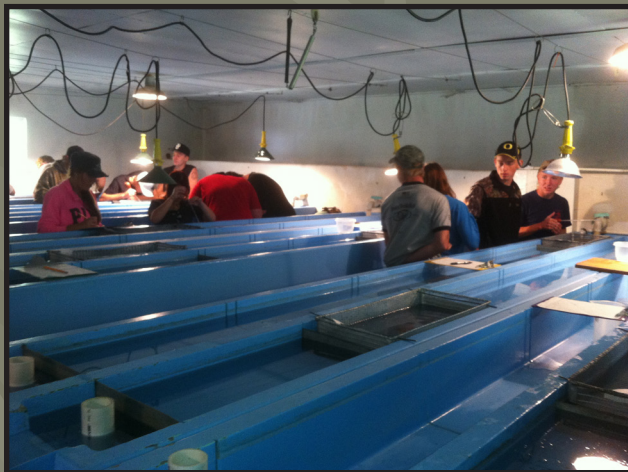


PROJECTS

Colville Fish Hatchery Skills Center

Sponsor: Washington for Wildlife
Type: Artificial Production
Cost: \$44,635
Volunteer hrs.: 2,435

The Colville Fish Hatchery Skills Center project provided an opportunity for 53 high school students to gain skills in aquaculture and hatchery operations while rearing 156,565 trout that were released into northeast Washington lakes to enhance area fisheries. A special partnership between WDFW, the city of Stevensville, Washington for Wildlife and the NEWTECH Skills Center allowed the previously closed hatchery to reopen and begin producing fish again.





REGION 2

P.O.W.E.R - Project Fish ●

Sponsor:	Promoters Of Wildlife & Environmental Resources
Type:	Artificial Production
Cost:	\$1,476
Volunteer hrs.:	614

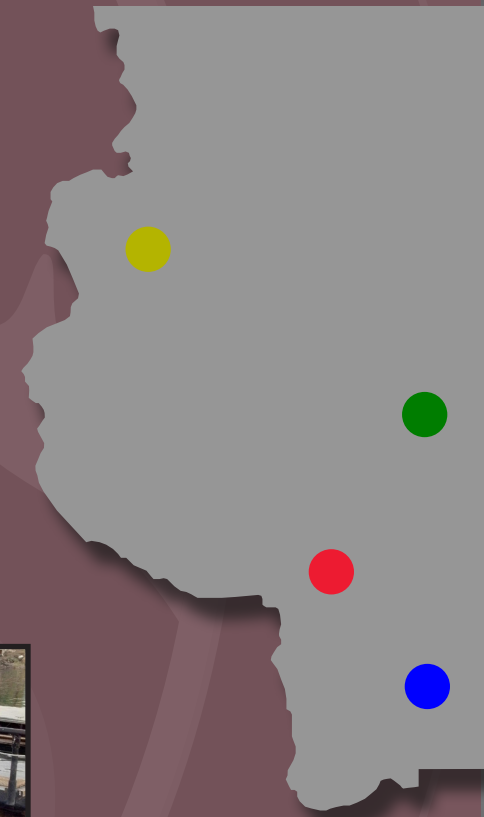
Volunteers reared and released over 295,000 rainbow trout to enhance the public fishery at Banks Lake. They operated and maintained net pens and fed the fish throughout the rearing season.



Potholes Reservoir Recreational Fishing Enhancement Project ●

Sponsor:	Annie Meseberg
Type:	Artificial Production
Cost:	\$6,361
Volunteer hrs.:	80

Volunteers reared rainbow trout in net pens at Potholes Reservoir. They fed the fish through the winter and spring and released approximately 50,000 catchable-size trout to enhance the local fishery.



PROJECTS

Pygmy Rabbit Recovery on Lancaster Property ●

Sponsor: Peter Lancaster
Type: Other
Cost: \$33,600
Volunteer hrs.: 950



This project resulted in construction of a 9.5 acre semi-wild breeding enclosure for endangered pygmy rabbits that includes a separate nursery, artificial burrows and a drip irrigation system. The facility is sited in prime pygmy rabbit habitat on the project sponsor's private property and is operated by WDFW. The enclosure has been a success with 400 kits reared and released during the 2015 field season. Surveys will be conducted in the future to determine whether released rabbits are surviving and breeding on their own.

North Cascade Western Gray Squirrel Distribution, Ecology and Conservation ●

Sponsor: Pacific Biodiversity Institute
Type: Research/Citizen Science project
Cost: \$13,382
Volunteer hrs.: 1,479

This project used volunteers to deploy and check hundreds of hair sampling tubes across the Methow Valley to monitor known western gray squirrel populations and identify squirrels in previously unsurveyed locations. Locations of the sampling tubes were mapped by GPS in order to develop basic range and habitat information on the occurrence of the squirrels in the valley. The grantee also conducted habitat surveys at key gray squirrel sites to complement the hair tube data and get a better understanding of the distribution of this state-threatened species.



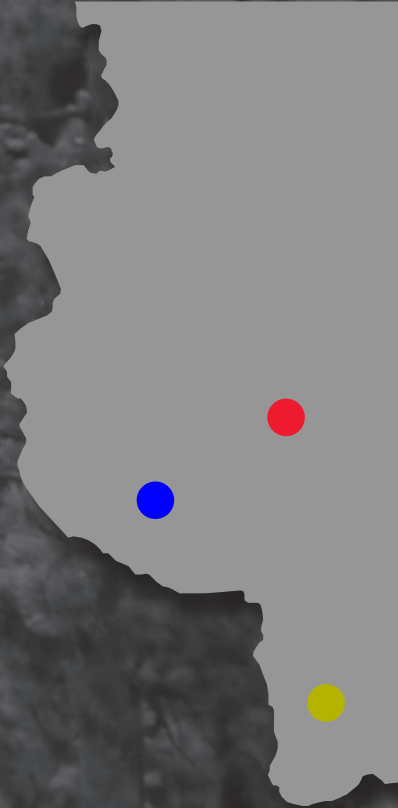


REGION 2

Chelan Ridge Raptor Migration Research and Education Project ●

Sponsor: Hawkwatch International
Type: Citizen Science/Research
Cost: \$8,592
Volunteer hrs.: 3,900

Hawkwatch International continued their efforts at tracking long-term population trends of migrating raptors at Chelan Ridge, a major North American flyway. During the two-year grant period, volunteer teams counted 2,465 migrating raptors and banded 980. The monitoring data gathered from this project has been used to represent raptor population trends for the Pacific Northwest and is shared with a number of agencies and conservation organizations. Additionally, the grantee provided educational programs about raptor conservation, field science and environmental stewardship to over 500 members of the public.



PROJECTS

Frenchman Registered Access Area ADA Hunting Blind ●

Sponsor:	Washington Waterfowl Association - Moses Lake Chapter
Type:	Facility Development
Cost:	\$18,414
Volunteer hrs.:	150

Washington Waterfowl Association volunteers constructed two ADA accessible hunting blinds at the Frenchman Registered Access Area to provide quality hunting opportunities for those with disabilities. In addition, a gravel road was constructed to access the blinds, replacing a path that was previously only accessible by a 4-wheel drive vehicle.



Wenatchee River Access Phase I ●

Sponsor:	Wenatchee Valley Fly Fishers
Type:	Other
Cost:	\$2,129
Volunteer hrs.:	73

This project identified the locations and landowners of 56 properties on the Wenatchee River whose deeds grant easements to river access. The knowledge and use of these particular easements had fallen into obscurity over the years. The results will make property owners more aware of their rights and limitations and may result in greater access to fishing opportunity on the Wenatchee River.



REGION 3

Community Participation in the Restoration of Reecer Creek ●

Sponsor:	Mid-Columbia Fisheries Enhancement Group
Type:	Education/Outreach
Cost:	\$13,000
Volunteer hrs.:	286

An ALEA grant supported Mid-Columbia Fisheries Enhancement Group's efforts in maintaining extensive habitat restoration efforts previously undertaken in the Reecer Creek Floodplain. They replaced 230 dead trees and shrubs, chemically treated 53 acres for weeds, and enhanced plant survival by ensuring consistent watering every other week during the summer. Originally, 1,000 additional native plants were to be installed in the spring of 2015; however, extreme heat prevented installation at that time; the grantee opted to maintain most of them over the summer for fall plantings.



Helen McCabe Park - Fishing Access Improvement Project ●

Sponsor:	Kittitas Environmental Education Network
Type:	Facility Development
Cost:	\$9,166
Volunteer hrs.:	813

The goal of this project was to restore riparian habitat in degraded areas around Helen McCabe Park Pond and improve fishing access for the public. Volunteers installed 400 plants and constructed four fishing platforms with compacted, gravelled trails leading to each. It's expected that these improvements will lead to better fishing experiences and recovery of the pond habitat.



PROJECTS

Oak Creek Wildlife Education Corps ●

Sponsor: Oak Creek Wildlife Education Corps
Type: Education/Outreach
Cost: \$20,432
Volunteer hrs.: 4,500

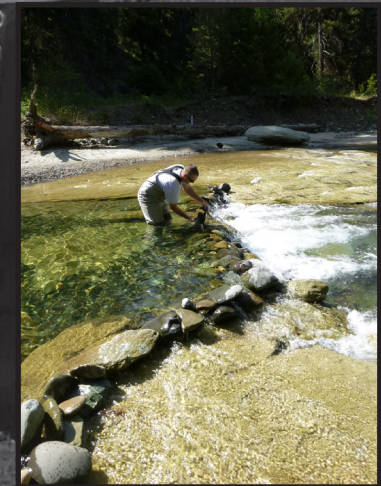
The Oak Creek Wildlife Education Corps goal is to enhance the education and viewing experience of visitors to the Oak Creek Wildlife Area. These volunteers opened and staffed the visitor center during the winter elk feeding period, the elk antler shed hunting season and black-powder and modern rifle seasons. They also conducted public tours, assisted with wildlife area clean up and provided maps and guidance to hunters.



Wild Salmonid Task Force ●

Sponsor: Mid-Columbia Fisheries Enhancement Group
Type: Education/Outreach
Cost: \$14,894
Volunteer hrs.: 755

This project was focused on taking actions to benefit bull trout populations in the Upper Yakima and Naches watersheds. This collaboration between multiple organizations used volunteers and Washington Conservation Corps crews to conduct direct outreach to 2,152 river recreationists about the importance of maintaining bull trout habitat. They also removed 108 recreational rock dams to maintain passage to approximately 94 miles of spawning habitat.





REGION 4

Nooksack Hatchery Steelhead Project ●

Sponsor:	Northwest Washington Steelheaders
Type:	Artificial Production
Cost:	\$2,660
Volunteer hrs.:	125

An ALEA grant supported the Northwest Washington Steelheaders' cooperative project with WDFW, which involves rearing steelhead at McKinnon Pond that will eventually be transferred to Kendall Creek Hatchery for release to augment tribal and recreational fisheries.

Tolt Reach Riparian Enhancement ●

Sponsor:	Sound Salmon Solutions
Type:	Habitat
Cost:	\$7,834
Volunteer hrs.:	387

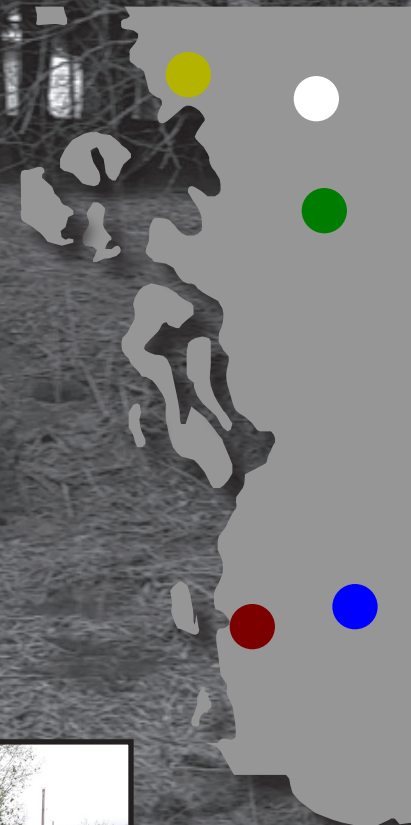
Sound Salmon Solutions engaged community volunteers in habitat restoration activities in the Tolt River reach. Over 1,000 native shrubs and trees were planted at several project areas and eight acres of invasive plants were identified and controlled.



Community Based Native Plant Restoration ●

Sponsor:	Skagit Fisheries Enhancement Group
Type:	Habitat
Cost:	\$21,657
Volunteer hrs.:	2,884

Skagit Fisheries Enhancement Group collaborated with multiple groups to engage community volunteers in restoring degraded riparian habitat in the Skagit and Samish watersheds. Through 16 work parties held over the two-year grant period, volunteers installed 10,000 native plants over 22 acres and helped maintain a native plant nursery that potted and maintained 9,000 plants.



PROJECTS

Students for Salmon ●

Sponsor: Nooksack Salmon Enhancement Association
Type: Education/Outreach
Cost: \$22,895
Volunteer hrs.: 4,646

The Students for Salmon Program educated over 1,000 students in 44 classrooms about salmon, stream ecology, habitat and stewardship. In addition to classroom education, students take a field trip to a local stream to participate in science-based investigations of the habitat to determine if it's suitable for salmon. Half of the students also took a field trip to remove invasive plants and/or install native plants to improve riparian habitat.



Woodland Park Zoo's Amphibian Monitoring Project ●

Sponsor: Woodland Park Zoo
Type: Citizen Science/Research
Cost: \$7,727
Volunteer hrs.: 236

The purpose of this project was to train citizen scientists to collect data on area amphibian populations needed by biologists. Woodland Park Zoo and WDFW staff trained 61 community members in the identification of the life stages of several amphibian species. These volunteers then formed teams to monitor 16 sites in Snohomish and King Counties and submitted their data to WDFW.





REGION 4

WRIA 1 Community Salmon Habitat Restoration Project ●

Sponsor:	Nooksack Salmon Enhancement Association
Type:	Habitat
Cost:	\$12,775
Volunteer hrs.:	1,011

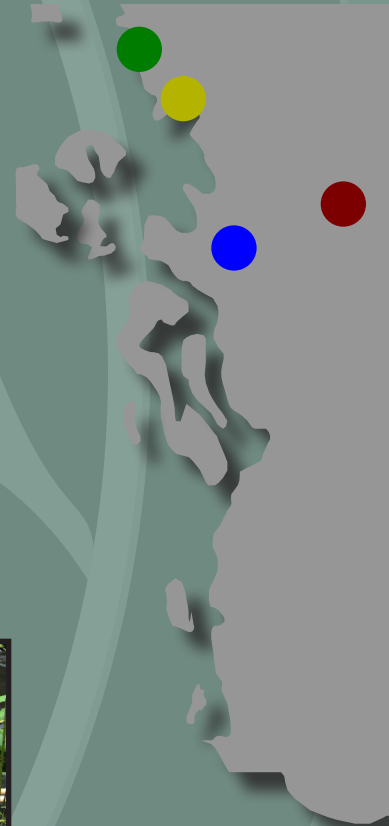
With the goal of improving riparian habitat within the Nooksack River watershed and beyond, community volunteers and students planted over 4,000 trees and shrubs. Squalicum, Macaulay, Terrell and Bertrand Creeks were the focus of the restoration efforts, which will benefit a variety of salmonid species.



Salmonid Population Monitoring ●

Sponsor:	Nooksack Salmon Enhancement Association
Type:	Citizen Science/Research
Cost:	\$11,544
Volunteer hrs.:	4,844

The Nooksack Salmon Enhancement Association utilized volunteers and interns to conduct spawning ground surveys on 20 reaches of 15 Whatcom County creeks during each year of the two-year grant period. The surveys add to long-term data collection efforts to monitor the status of wild salmon populations within the project area.



PROJECTS

Skagit Land Trust Habitat Enhancement Project ●

Sponsor: Skagit Land Trust
Type: Habitat
Cost: \$6,554
Volunteer hrs.: 140

The Skagit Land Trust received an ALEA grant to conduct riparian habitat restoration activities at three sites along the Skagit River: Minker Lake, Lyman Slough and Grandy Creek Conservation Area. More than 6.5 acres of invasive plants were eradicated, followed up by the planting of over 800 trees and shrubs during volunteer and student work parties.



Volunteer Monitoring Program ●

Sponsor: Skagit Fisheries Enhancement Group
Type: Citizen Science/Research
Cost: \$22,262
Volunteer hrs.: 2,658

Skagit Fisheries Enhancement Group engaged more than 69 individuals in conducting salmon spawner surveys in eleven miles of stream and tracking vegetation growth and survival at 85 riparian planting sites. The survey data is provided to WDFW for use in developing escapement estimates and setting harvest levels. The vegetation surveys help evaluate previous planting efforts, identify areas where replanting may be required and direct refinements to future planting plans.





REGION 4

Salmon Stewards ●

Sponsor: Sound Salmon Solutions
Type: Education/Outreach
Cost: \$9,066
Volunteer hrs.: 1,354

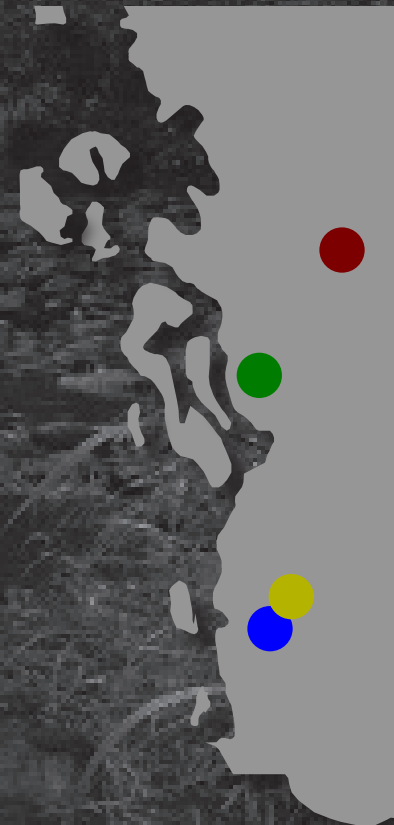
Sound Salmon Solutions' Salmon Stewards Program is focused on promoting sustainable salmon populations by combining environmental education with on-the-ground habitat restoration. Over the two-year grant period, the program involved 567 students in 23 different classrooms who planted over 1,600 native trees and shrubs. The grantee also educated the public about salmon habitat needs at several outreach events and conducted a litter pickup event on the Stillaguamish River.



Volunteer-based Whole-lake Control of Invasive Red Swamp Crayfish ●

Sponsor: University of Washington
Type: Habitat
Cost: \$6,365
Volunteer hrs.: 7,731

This project presented a new model for eradication efforts of red swamp crayfish. The grantee recruited 65 households around Pine Lake to volunteer to take charge of managing this aggressive invasive species in their own lake. This species is known to negatively affect nearshore lake habitat that is beneficial for many fish species. The volunteers used traps to remove over 6,000 red swamp crayfish, while documenting and reporting their data.



PROJECTS

Junior Stream Stewards ●

Sponsor: Skagit Fisheries Enhancement Group
Type: Education/Outreach
Cost: \$21,994
Volunteer hrs.: 2,152

The Junior Stream Stewards program engages middle school students in the study of stream ecosystems and salmon through in-class instruction, watershed tours and habitat enhancement projects. The program was provided to over 1,000 students in four Skagit County school districts. As part of the program, students installed native plants over approximately 14 acres of riparian habitat in the Skagit, Samish and Padilla Bay watersheds.



Duvall Reach Riparian Enhancement ●

Sponsor: Sound Salmon Solutions
Type: Habitat
Cost: \$8,306
Volunteer hrs.: 597

This project was focused on habitat restoration at four sites along the mainstem Snoqualmie River, near Duvall. Over 1,000 native trees and shrubs were planted over 6 acres. In addition, volunteers assisted with potting several hundred plants at Sound Salmon Solutions' native plant nursery for future installations. They were also able to expand the storage capacity of their nursery by adding a large cistern for catching rainwater.





REGION 4

Snoqualmie River Habitat Restoration and Stewardship Project ●

Sponsor:	Stewardship Partners
Type:	Habitat
Cost:	\$10,098
Volunteer hrs.:	548

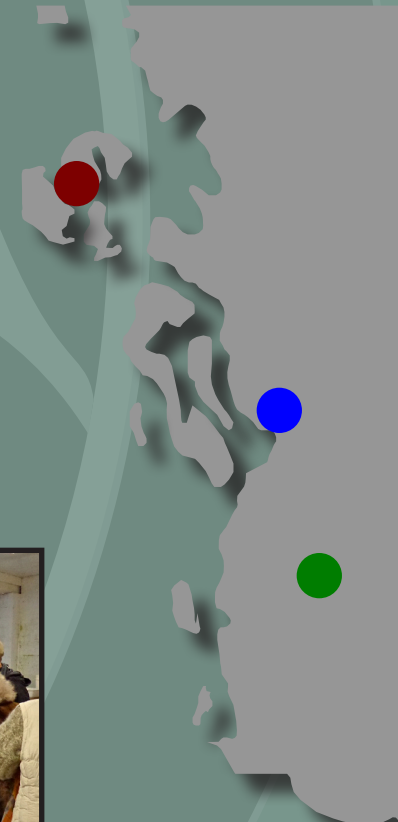


Stewardship Partners hosted seven volunteer events to restore riparian habitat along the Snoqualmie River and its major tributaries. Volunteers planted over 1,700 native trees, shrubs and live stakes (with an additional 6,000 installed by non-volunteer crews). The grantee also launched their Adopt-a-Buffer program, which aims to bring together businesses, volunteers, and local farmers to complete habitat restoration projects in the Snoqualmie Valley.

Hatchery Outreach ●

Sponsor:	Skagit Fisheries Enhancement Group
Type:	Education/Outreach
Cost:	\$8,918
Volunteer hrs.:	601

This project trained community volunteers to lead public tours of the Marblemount Hatchery and provided salmon education opportunities to 141 elementary school children at two Mt. Vernon schools. Students were given five classroom lessons about salmon and their habitat and taken on tours of Marblemount Hatchery. Two classes also raised salmon from eggs to fry in a classroom aquarium and took field trips to local streams to release their fish.



PROJECTS

Forage Fish Habitat Protection in San Juan County ●

Sponsor: Friends of San Juans
Type: Citizen Science/Research
Cost: \$9,977
Volunteer hrs.: 442

This project was focused on conducting surveys of San Juan County beaches to document forage fish spawning habitat so that it can be protected. This habitat is crucial for many species, including salmon, as well as the greater marine food web. A total of 394 field surveys were done on 202 beaches of 14 of the islands. Over 150 landowners gave permission to allow access in support of this research.



Allen Creek Streamkeepers ●

Sponsor: Adopt-a-Stream Foundation
Type: Habitat
Cost: \$6,057
Volunteer hrs.: 408

The Adopt-a-Stream Foundation hosted five volunteer planting events to engage 190 volunteers in planting over 1,000 native trees and shrubs along Allen Creek and its tributaries in the Marysville area. Allen creek is documented to have high temperatures, low dissolved oxygen and high levels of fecal coliform bacteria and riparian plantings are expected to help address all three factors.





REGION 5

Klinline Kids Fishing ●

Sponsor: Klinline Kids Fishing Nonprofit
Type: Education/Outreach
Cost: \$41,698
Volunteer hrs.: 13,017

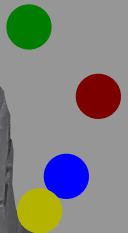


The Klinline Kids Fishing Nonprofit received two one-year ALEA grants during the biennium to support the Klinline Kids fishing event. Taking place at Salmon Creek Park in Vancouver, this two-day event provides an opportunity for kids to learn fishing skills and catch trout in a netted off section of Klinline Pond. There were also many other activities and educational opportunities offered such as archery clinics, building bird houses, fly tying and casting, boating safety and more. Over 10,000 people are estimated to have attended the event of the two-year period, with approximately 5,500 youth participants.

Cooperative Riparian Enhancement Project ●

Sponsor: Lower Columbia Fisheries Enhancement Group
Type: Habitat
Cost: \$55,976
Volunteer hrs.: 3,000+

The Cooperative Riparian Enhancement Project propagated plants used in many riparian restoration projects throughout Southwest Washington. A robust volunteer effort allowed the collection and planting of over 16,000 cuttings. In addition, 9,500 bare-root trees were planted over approximately six acres of riparian habitat.



PROJECTS

Weyerhaeuser Yacolt Burn Hunting Access ●

Sponsor: Yacolt Burn Sportsmen's Club
Type: Other (public access focus)
Cost: \$9,244
Volunteer hrs.: 1,438

This project facilitated public hunting and recreational access to Weyerhaeuser's Yacolt Block during September-December hunting seasons in 2013 and 2014. Volunteers opened and closed access gates, picked up trash, repaired signs and, at times, helped hunters retrieve animals.



Nutrient Enhancement Support ●

Sponsor: Lower Columbia Fisheries Enhancement Group
Type: Habitat
Cost: \$34,818
Volunteer hrs.: 1,000+

Lower Columbia Fisheries Enhancement Group volunteers dispersed approximately 40,000 surplus salmon carcasses into the Lewis, Washougal, Toutle and Kalama watersheds. These salmon carcasses provided marine-derived nutrients to benefit juvenile salmon, wildlife and the aquatic ecosystem.



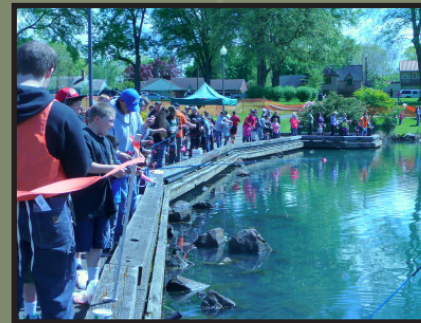


REGION 5

Smiles Dental Kids Fish-in at Lake Sacajawea ●

Sponsor:	Cowlitz Game and Anglers
Type:	Education/Outreach
Cost:	\$2,826
Volunteer hrs.:	469

Cowlitz Game and Anglers, along with other partnering organizations, coordinated the Smile Dental Kids Fish-in at Lake Sacajawea. This event provided 405 youth the opportunity to gain experience fishing for trout in a fun, friendly atmosphere. Numerous volunteers were on hand to impart their fishing wisdom and help kids with catching and cleaning their fish. Youth are provided with a rod & reel so they can continue their fishing adventures after the event.



St. Helens Land Access Program ●

Sponsor:	Southwest Washington Land Access Coalition
Type:	Other (public access focus)
Cost:	\$8,669
Volunteer hrs.:	1,270

This project utilized volunteers to staff and monitor access points at Weyerhaeuser gates to facilitate hunter access to 300,000 acres of the Mt. St. Helens tree farm during November and December of 2013 and 2014. Volunteers also conducted litter pickup, removing 35 bags of trash.



PROJECTS

Lower Columbia Large Wood Materials ●

Sponsor:	Lower Columbia Fisheries Enhancement Group
Type:	Habitat
Cost:	\$14,985
Volunteer hrs.:	1,000

The Lower Columbia Fisheries Enhancement Group purchased 28 pieces of logs and rootwads for installation in the North Fork Lewis River and Washougal River systems. Large wood material benefits salmon by creating pools, reducing velocity, storing sediment and enhancing habitat diversity.



Onalaska High School Net Pen Project ●

Sponsor:	Onalaska High School
Type:	Artificial Production
Cost:	\$8,397
Volunteer hrs.:	3,631

An ALEA grant supported Onalaska High School's aquaculture program by providing the funds needed to purchase new net pen nets. Using the new nets, students and staff reared and released 105,000 coho and 5,500 rainbow trout into Carlisle Lake.



REGION 6



Matheny Pre-commercial Thinning Habitat Improvement ●

Sponsor: Eyes in the Woods
Type: Habitat
Cost: \$8,827
Volunteer hrs.: 1,890

Eyes in the Woods organized six two-day workparties using volunteers to create slash pilings and corridors to facilitate the movement of elk and other species in the Matheny Creek Watershed. Previously, pre-commercial thinning had left large amounts of slash on the ground that prevented adequate wildlife movement and usage of the land. Over the grant period an estimated 65 acres of slash were cleared and piled.



Mayr Brothers Hatchery ●

Sponsor: Grays Harbor Poggie Club
Type: Artificial Production
Cost: \$146,383
Volunteer hrs.: 5,548

The Grays Harbor Poggie Club continued their partnership with WDFW in their operation of the Mayr Brothers Hatchery to benefit tribal, commercial and recreational fisheries. Over the two-year grant period they reared and released approximately 300,000 chinook, 336,000 chum, 900,000 coho and 11,000 rainbow trout while working to maintain and improve the hatchery grounds, systems and facilities.



PROJECTS

Hood Canal Steelhead Project ●

Sponsor: Hood Canal Salmon Enhancement Group
Type: Citizen Science/Research
Cost: \$10,851
Volunteer hrs.: 1,382

The Hood Canal Steelhead Project is a highly collaborative project with the goal of rebuilding steelhead populations, while testing the effectiveness of supplementation on natural populations in the Dewatto, Duckabush and Skokomish rivers. An ALEA grant supported redd surveys, biological data collection and smolt trapping activities.



Yelm Shoreline Protected Area Riparian Enhancement ●

Sponsor: Nisqually Land Trust
Type: Habitat
Cost: \$10,910
Volunteer hrs.: 787

This project was focused on riparian habitat enhancement along the mainstem of the Nisqually River and off-channel freshwater wetlands in Yelm. Volunteers and a Washington Conservation Corps crew installed over 3,300 native trees and shrubs over a total of four acres.



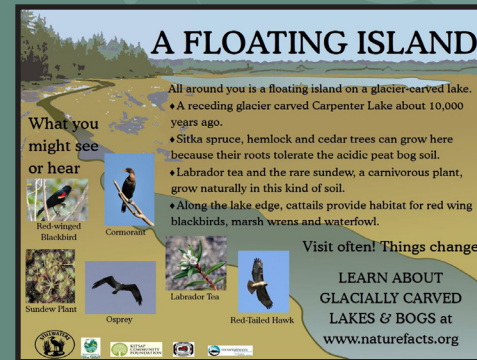


REGION 6

Watershed Interpretive Signs ●

Sponsor:	Stillwaters Environmental Center
Type:	Education/Outreach
Cost:	\$2,928
Volunteer hrs.:	45

The Stillwaters Environmental Center created and installed eight interpretive signs in the Carpenter Creek watershed. The signs detailed the environmental significance of the site, plants and wildlife visitors might see and included QR (Quick Response) codes so visitors could get more information from their electronic devices.



Making Citizen Science More Accessible to Visitors ●

Sponsor:	Port Townsend Marine Science Center
Type:	Education/Outreach
Cost:	
Volunteer hrs.:	\$17,824

This project was conducted to increase the public's knowledge about the threats facing coastal and marine habitats and to engage them in activities benefitting those habitats. Through the Oceanography on the Dock program, volunteers were trained to lead water-quality testing activities for the public. At Fort Warden State Park, six interpretive panels were installed that invite visitors to engage in citizen science to improve the health of the Salish Sea. The grantee also developed online educational programs about toxins in marine environments.



PROJECTS

Endangered Oregon Spotted Frog habitat enhancement at Salmon Creek, Thurston County ●

Sponsor: Bonnie Blessing
Type: Habitat
Cost: \$9,969
Volunteer hrs.: 350

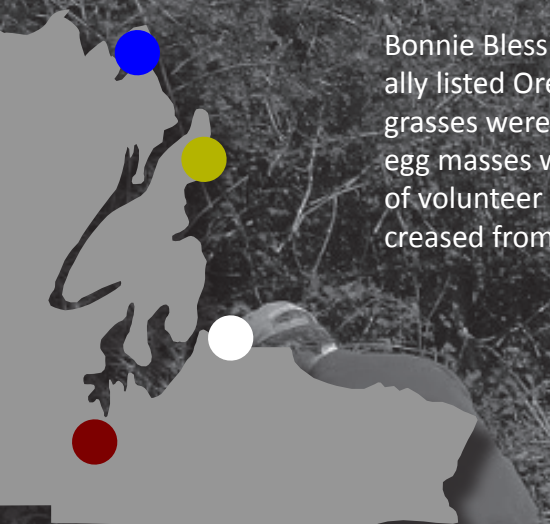
Bonnie Blessing and other volunteers managed habitat for the state and federally listed Oregon spotted frog at a breeding site in Thurston County. Invasive grasses were mowed and removed; Bullfrogs—an invasive competitor—and their egg masses were harvested; and native plants were installed. After three years of volunteer work at this site, Oregon spotted frog egg mass production has increased from 20 in 2012 to 150 egg masses in 2015, according to WDFW staff.



Puget Creek Watershed Restoration/Education Project ●

Sponsor: Puget Creek Restoration Society
Type: Habitat
Cost: \$25,457
Volunteer hrs.: 6,573

The Puget Creek Restoration Society engaged volunteers in a variety of projects within the Puget Creek Watershed. Activities included removing invasive vegetation, assisting with fish rearing projects; avian bat, amphibian, salmon spawner and plant survival surveys; and woody debris and beach monitoring. The grantee also conducted watershed related educational events for students and hosted watershed tours for a variety of school groups.





REGION 6

NOSC Nursery and Riparian Plantings ●

Sponsor: North Olympic Salmon Coalition
Type: Habitat project
Cost: \$17,475
Volunteer hrs.: 564

The North Olympic Salmon Coalition's (NOSC) nursery raises plant stock used for estuary and riparian restoration projects. Over time, these plants will provide shade, woody debris, erosion control and better water quality, improving critical habitat for salmon species. NOSC staff, interns and volunteers worked to upgrade the nursery and planted trees on six acres of riparian habitat on Chimacum and Snow Creeks and the Discovery Bay shoreline.



Union / Tahuya Summer Chum ●

Sponsor: Hood Canal Salmon Enhancement Group
Type: Artificial Production project
Cost: \$12,991
Volunteer hrs.: 2,367

This long-running project continued its efforts at reintroducing summer chum salmon in Hood Canal. Volunteers operated a wier trap 24 hours a day for 8 weeks to collect broodstock on the Union River. The eggs were fertilized, incubated and otolith marked before being reared at a rearing site on the Tahuya River. Approximately 115,000 fry were released. Volunteers also conducted scale, otolith and DNA sampling on the Union, Tahuya and Dewatto Rivers.



PROJECTS

Twin Rivers Ranch Habitat Restoration ●

Sponsor: Capitol Land Trust
Type: Habitat Project
Cost: \$6,926
Volunteer hrs.: 872

This project was initiated to increase the size of healthy riparian buffers along creeks, off-channel ditches and associated wetlands on the Twin Rivers Ranch property. The property had been subject to heavy impacts from agricultural activities and invasive species had dominated the riparian areas. Volunteers and a Washington Conservation Corps crew planted over 1,300 native trees and shrubs over 4.4 acres and removed nearly five acres of invasive plants.



Nisqually Community Restoration in the Ohop Valley ●

Sponsor: Nisqually River Foundation
Type: Habitat project
Cost: \$15,542
Volunteer hrs.: 1,508

The Nisqually River Foundation and other project partners coordinated riparian restoration activities at Ohop Creek. Adult and student volunteers participated in planting events to install 2,040 native trees and shrubs to provide shade, erosion control and woody debris to benefit salmon, other fish and wildlife. In addition, the Nisqually Tribe's habitat restoration crew installed 1,360 bare root plants.





REGION 6

Salmon Spawner Volunteer Monitoring Program ●

Sponsor: North Olympic Salmon Coalition
Type: Citizen Science/Research
Cost: \$14,457
Volunteer hrs.: 2,943

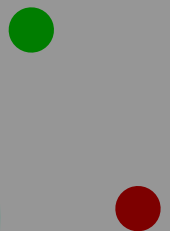
This project used volunteers, trained in WDFW survey protocol, to conduct chum and coho spawner surveys in the fall and winter in Chimacum Creek. They also monitored adult and fry traps on Salmon Creek and adult and smolt traps on Snow Creek. The survey data was forwarded to WDFW to help determine escapement numbers for both chum and coho.



Satsop Springs Rearing Facility ●

Sponsor: Chehalis Basin Fisheries Task Force
Type: Artificial Production
Cost: 4,057
Volunteer hrs.: 1,800+

Staff and volunteers at the Satsop Springs Hatchery collected broodstock and reared and released coho, chinook and chum to enhance sport and commercial fisheries in the Chehalis Basin watershed, Grays Harbor and the coast. Over the two-year grant period, 426,700 chum fry were released, 300,000 chinook smolts were reared and released and 900,000 coho smolts were released. Several area lakes were stocked with approximately 14,000 jumbo trout. They also conducted nutrient enhancement, distributing 14,778 pounds of salmon carcasses at 14 sites. Hatchery maintenance and facility upgrades were implemented to improve the efficiency of the hatchery.



PROJECTS

Lacey Kids Fish-in ●

Sponsor: Puget Sound Anglers - South Sound Chapter
Type: Education/Outreach project
Cost: \$14,443
Volunteer hrs.: 619

This event provided over 1,100 youth workshops on stewardship, fish identification, outdoor ethic, water/boat safety, knot tying, casting and stream habitat. Participants received a rod and reel combo and had the opportunity to catch up to two rainbow trout in a netted off area of Long's Pond in Lacey.



Property Watch - Clearwater GMU Conservation Closure ●

Sponsor: Eyes in the Woods
Type: Other - Conservation closure assistance
Cost: \$6,389
Volunteer hrs.: 1,800+

Eyes in the Woods, in coordination with WDFW, deployed remote cameras on Weyerhaeuser property in the Clearwater Game Management Unit and on other private landowner properties to monitor for illegal activities in the interest of keeping those properties open to the public for hunting, fishing and other recreational activities. Unfortunately, the cooperative effort with Weyerhaeuser came to an end in March and a large cleanup on their property was cancelled when they changed policy to begin charging a fee for access, effectively eliminating the benefit of the partnership for the public.



REGION 6

Tarboo Watershed Plant-A-Thon: How Do Salmon Grow On Trees? ●

Sponsor: Northwest Watershed Institute
Type: Education/Outreach project
Cost: \$12,875
Volunteer hrs.: 171

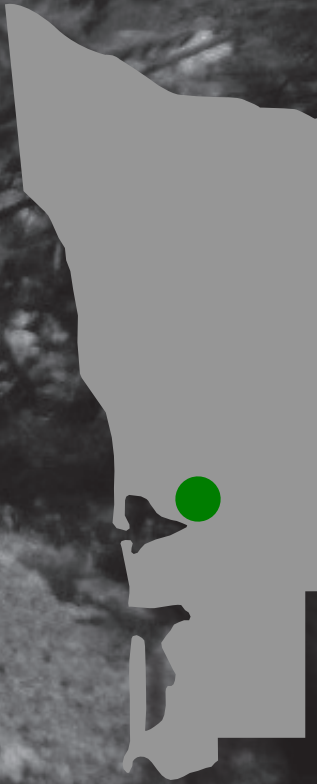
During the 9th annual Plant-A-Thon, 171 children and their parents, planted over 4,000 native trees and shrubs on the Tarboo Wildlife Preserve. The event was preceded by in-class lessons about salmon habitat. Some older students completed field training to serve as crew leaders of the younger students during the plantings.



Tanwax Lake Replacement Net ●

Sponsor: David Potter
Type: Artificial Production
Cost: \$7,553
Volunteer hrs.: 65

The net pen project volunteers at Tanwax Lake replaced a twenty year-old net that was falling apart. A new bird net and framework were also installed to prevent aerial predation. These upgrades helped the cooperator rear and release approximately 25,000 trout into Tanwax Lake.



PROJECTS

Hood Canal Steelhead Project - Lilliwaup Hatchery ●

Sponsor: Long Live the Kings
Type: Citizen Science/Research
Cost: \$22,450
Volunteer hrs.: 272

The Hood Canal Steelhead Project is a collaborative research and recovery project that implements and assesses wild steelhead supplementation techniques in the Hood Canal basin. An ALEA grant supported a variety of activities conducted by Long Live the Kings in support of the project, including: rearing 30,000 steelhead from the Duckabush, Dewatto and Skokomish Rivers at the Lilliwaup Hatchery; releasing (primarily) four-year old fish into their natal streams; operating a smolt trap on the Hamma Hamma River to evaluate outmigrants and monitoring redd creation and steelhead presence through snorkel and on-foot surveys.



Chehalis Basin Restoration through Education and Action ●

Sponsor: Capital Region Educational Service District
Type: 113
Cost: Education/Outreach project
Volunteer hrs.: \$8,581

The Chehalis Basin Restoration through Education and Action project engages and educates teachers, students and volunteers on the importance of healthy riparian habitat and estuaries to salmon, migrating birds and other wildlife. Over 2,000 students participated in environmental education presentations, water quality monitoring activities, or habitat enhancement projects along the Chehalis River.





REGION 6

Nisqually Land Trust Stewardship Volunteers ●

Sponsor:	Nisqually Land Trust
Type:	Habitat project
Cost:	\$8,087
Volunteer hrs.:	3,511

An ALEA grant supported Nisqually Land Trust's community outreach efforts, habitat enhancement and citizen science activities and expansion of its volunteer Site Stewards program. Site Stewards adopt Land Trust sites and regularly monitor the sites for changes in habitat condition.



Clallam County Riparian Project ●

Sponsor:	North Olympic Salmon Coalition
Type:	Habitat
Cost:	\$14,457
Volunteer hrs.:	266

This project had the goals of restoring riparian habitat and providing related educational opportunities to local students. A total of five acres of riparian habitat were planted on McDonald Creek, Siebert Creek and the Dungeness River--all at sites adjacent to salmon spawning habitat. Multiple school groups took field trips to the Siebert Creek Conservation area to learn about healthy salmon habitat and forest ecosystems and contributed by planting native trees. Some students embraced the stewardship ethic they were taught by planting and maintaining trees outside of school hours and without credit.



PROJECTS

Peabody Creek Revitalization ●

Sponsor: Feiro Marine Life Center
Type: Habitat project
Cost: \$7,941
Volunteer hrs.: 1428

The Feiro Marine Life Center initiated this project to get citizens involved in restoration activities along the Peabody Creek as well as educating students about the ecological functions of the creek and human impacts to it. Hundreds of trees were planted along the corridor, invasive plants were removed, litter was picked up and trail maintenance was performed.

Silver Lake Net Pen ●

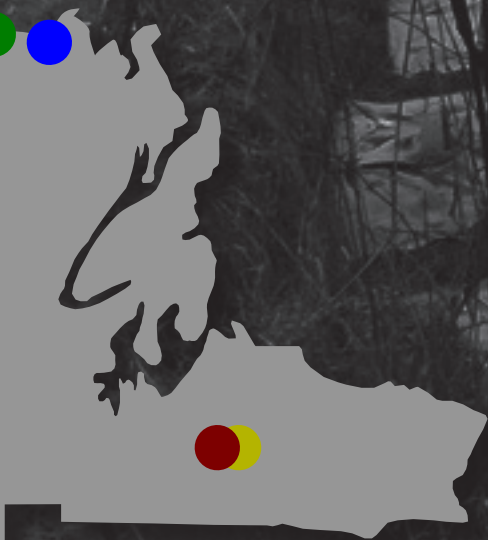
Sponsor: Amy Kenney
Type: Artificial Production
Cost: \$8,754
Volunteer hrs.: 728

Over the course of the two-year grant period, the grantee and volunteers upgraded their net pens and managed the rearing and releasing of 40,000 rainbow trout at Silver Lake to enhance the local fishery.

Volunteer Stream Biological Monitoring ●

Sponsor: Streamkeepers of Clallam County
Type: Citizen Science/Research
Cost: \$8,202
Volunteer hrs.: 1,841

An ALEA grant supported Streamkeepers' collection, sorting and testing of benthic macroinvertebrates at over 20 sites in several Clallam County streams. This monitoring data is used for determining and comparing the biological condition of streams.



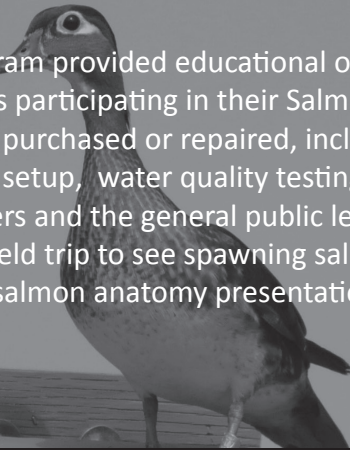


MULTIPLE

Salmon in the Classroom Equipment Maintenance and Supplies ●

Sponsor:	Yakima Basin Environmental Education Program
Type:	Education/Outreach project
Cost:	\$14,982
Volunteer hrs.:	396

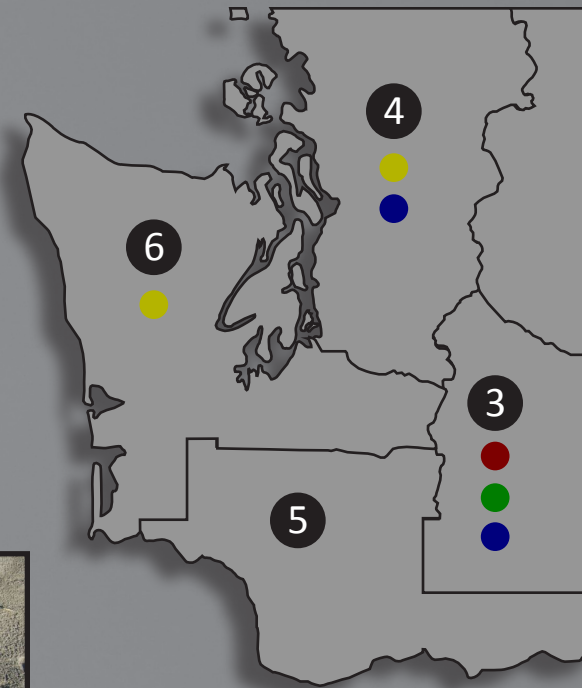
The Yakima Basin Environmental Education Program provided educational opportunities and technical and maintenance support to 98 schools participating in their Salmon in the Classroom Program. Key fish rearing equipment was purchased or repaired, including thirty chiller units. Volunteers assisted classrooms with tank setup, water quality testing, and egg distribution. Over 1,000 students, as well as teachers and the general public learned about the salmon life cycle and habitat needs by taking a field trip to see spawning salmon on the Cle Elum River. In addition, salmon dissections and salmon anatomy presentations were attended by over 2,500 students and teachers.



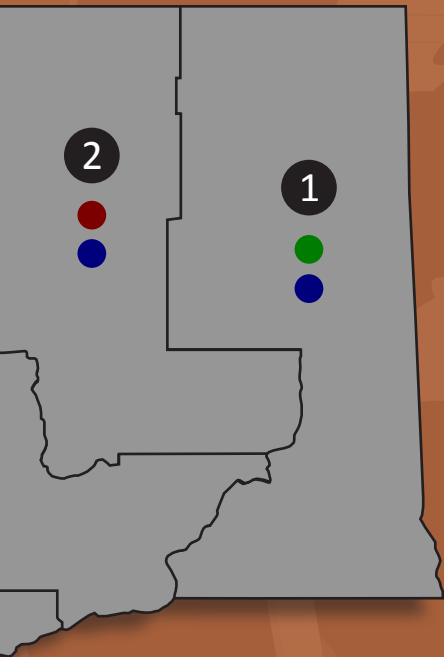
Coastal Observation and Seabird Survey Team (COASST) ●

Sponsor:	University of Washington
Type:	Other (Education/Citizen Science focus)
Cost:	\$24,779
Volunteer hrs.:	1,727

The Coastal Observation and Seabird Survey Team (COASST) is a citizen science program that monitors nearshore environmental health by collecting data on beached birds through mortality surveys. With ALEA grant funds, COASST was able to update, print and disseminate their data collection protocols to volunteers. They also created a photo upload portal so volunteers can directly upload bird carcass photographs to the COASST website, which is linked to the database.



REGION PROJECTS



Citizen Wildlife Monitoring Project ●

Sponsor: Conservation Northwest
Type: Citizen Science/Research
Cost: \$10,250
Volunteer hrs.: 12,270



The Cascade Citizen Wildlife Monitoring Program engages citizen volunteers in collecting baseline data of wildlife presence through the use of remote cameras and snow-tracking in the Cascades. Several target species were identified, including a wolf, multiple wolverines and a lynx as well as more common mammals such as elk, moose, Cascade red fox and pine martens. Data is provided to WDFW and other organizations with interest in monitoring these wildlife species.

Youth Education and Wood Duck Enhancement ●

Sponsor: Richland Rod and Gun Club
Type: Other (Education/Citizen Science focus)
Cost: \$1,474
Volunteer hrs.: 1,581



This project provided opportunities for youth to better understand wildlife conservation principles by actively participating in a project to provide nesting habitat for wood ducks by constructing and installing nest boxes. Youth assembled 47 new nest boxes at wildlife conservation related events while learning about wood ducks and conservation principles. In addition, the grant supported annual maintenance of 400+ nest boxes already installed throughout the Tri-Cities area. Of those nearly half had documented use by wood ducks and over the two-year grant period, over 1,100 ducklings are estimated to have been hatched.



MULTIPLE

Impact of Wolves on Mule and White-Tailed Deer ●

Sponsor:	University of Washington
Type:	Citizen Science/Research Project
Cost:	\$11,105
Volunteer hrs.:	5,976



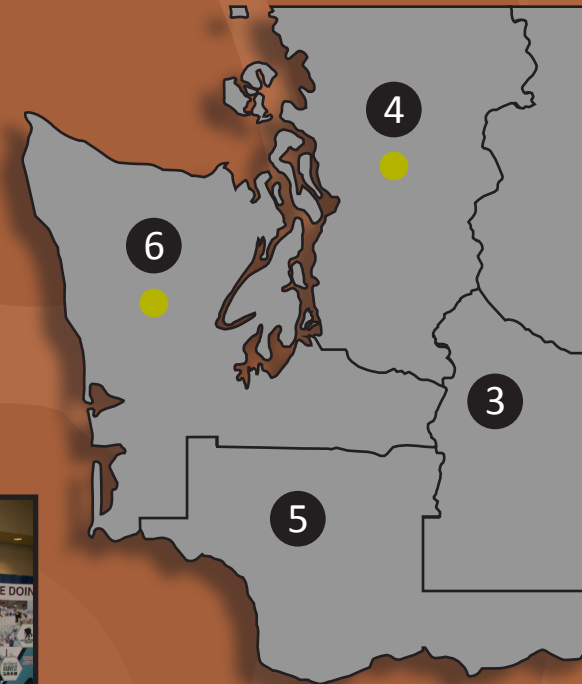
The objective of this long-term study is to understand how recolonizing gray wolves might impact mule and white-tailed deer behavior and abundance. During the grant period 110 deer were captured to collect biological data. Most were given GPS or video camera collars for monitoring locations and behaviors. A grid of sixteen motion-detecting cameras were maintained at each of the four study areas, collecting thousands of photographs to enable forage and occupancy analysis for deer, wolves and other species. The research study culminates in 2018, but preliminary assessment of camera footage suggests that, in areas with wolves, deer are spending more time than normal being vigilant of predators than foraging.

Rockfish Education - Ocean and Puget Sound ●

Sponsor:	Puget Sound Anglers
Type:	Education/Outreach
Cost:	\$11,809
Volunteer hrs.:	350



The Puget Sound Anglers received an ALEA grant to educate charter fleets and recreational anglers about rockfish identification and provide them with descender devices, which quickly return rockfish to depth and reduce the effects of barotrauma. Approximately 570 descenders and 1,500 identification guides were provided to anglers at concentrated fishing locations such as Port Angeles, Sequim, Neah Bay, Westport, Anacortes and more, as well as at sportsmen shows.



REGION PROJECTS

Lek Surveys and Other Greater Sage-Grouse and Columbian Sharp-Tailed Grouse Recovery Activities ●



Sponsor: Spokane Audubon Society
Type: Citizen Science/Research Project
Cost: \$30,189
Volunteer hrs.: 2,703



Spokane Audubon Society coordinated volunteer efforts to complete 59 lek surveys in Lincoln County in support of recovery and re-establishment of greater sage-grouse and Columbian sharp-tailed grouse populations. In addition to the surveys, volunteers also assisted with identifying new leks, trapping and translocating birds, monitoring birds with radio telemetry, data entry and analysis. The data is provided to WDFW to assist with overall population monitoring and enhancement efforts.



MULTIPLE RE

Volunteers Supporting River Restoration in the Mid-Columbia Region ●

Sponsor:	Mid-Columbia Fisheries Enhancement Group
Type:	Habitat
Cost:	\$14,268
Volunteer hrs.:	594

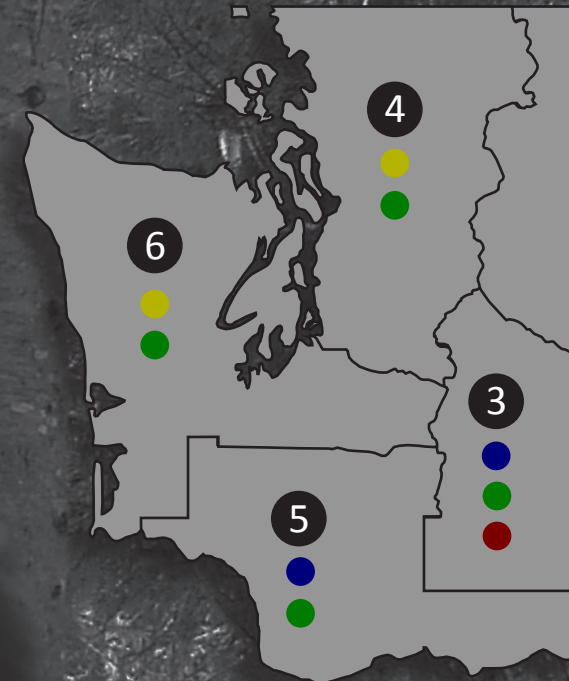
This project expanded student and volunteer involvement in restoration and stewardship activities on the White Salmon River and Yakima River and several tributaries. Native trees were planted and mulched and habitat and water quality were monitored. Students from 23 classrooms also participated in educational activities about salmon and habitat restoration.

Soundwatch Stewards Project ●

Sponsor:	The Whale Museum
Type:	Education/Outreach
Cost:	\$12,000
Volunteer hrs.:	1,818



The Soundwatch Stewards program educates commercial and recreational boaters about responsible viewing practices and regulations when operating near Orcas and other marine wildlife in the Salish Sea. In addition to on shore public outreach, stewards spent 76 days on the water in the Soundwatch vessel to monitor and record vessel activities near marine wildlife and provide their "Be Whale Wise" brochures.



REGION PROJECTS

Cascades Carnivore Project: Conserving the Wolverine and the Cascade Red Fox ●

Sponsor: Jocelyn Akins
Type: Citizen Science/Research
Cost: \$15,313
Volunteer hrs.: 4,690

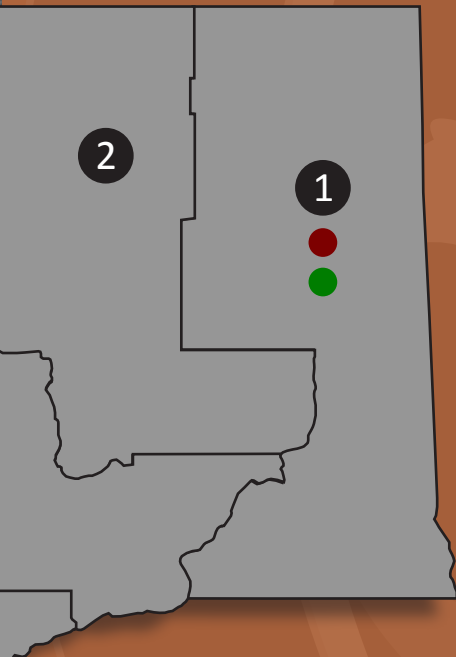
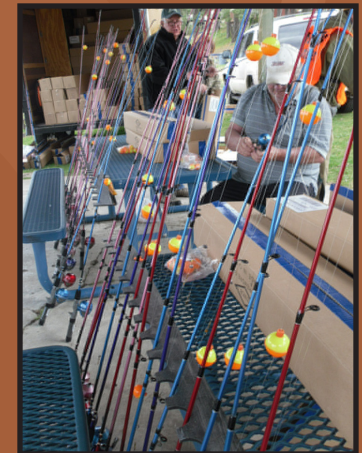
This ongoing citizen science effort is focused on conducting remote camera surveys, snow tracking and trail searches for Cascade red fox, wolverine and gray wolf in the South Cascades. Documenting the presence of these elusive carnivores is providing information to assist wildlife managers in assessing their distribution and conservation status.



Eastern Washington Kids Fishing Events ●

Sponsor: Inland Northwest Wildlife Council
Type: Education/Outreach
Cost: \$57,727
Volunteer hrs.: 4,406

The Inland Northwest Wildlife Council helped coordinate six events to introduce children to the fun of fishing by providing special fishing opportunities and workshops. Over the grant period two fishing events each were held in Kennewick, Yakima and Spokane that accommodated approximately 7,400 youth. Volunteers were heavily involved in preparing rods/reels and assisting young anglers in their efforts to catch a rainbow trout.





ALEA

