



Mid Klamath Watershed Council

Summer 2016, Eighteenth Edition

Meet Us in the Middle: Collaboration in the Mid Klamath

Taking Care of the Place We Live Summer Stewardship Interns 2016

by Carol Earnest

In early July, seven local youth were hired by the Mid Klamath Watershed Council to take part in the annual summer internship program. Interns gathered each morning Monday-Thursday to participate in watershed restoration and monitoring projects, as well as community service projects. Despite early mornings, hot days, and some long drives, the interns completed an impressive amount of work as a team, while keeping positive attitudes.

Throughout their five-week long internship, the 2016 youth crew worked with MKWC's Fisheries, Foodsheds, Forestry, Fire and Fuels, Plants, and Watershed Education Programs.

Interns removed over 5,000 invasive plants, improved fish passage on five Klamath tributaries, learned juvenile salmonid identification skills, placed 53 brush bundles in cold water refugia areas, piled brush on two acres of land to improve community resiliency to wildfire, took water quality data, helped at four Back to the Garden youth workshops which involved 47 participants, and improved three community gardens.

In addition, three interns embarked on a four-day backpacking trip in to the Siskiyou Wilderness to scout for and pull invasive plants. Two interns took forest measurements with the Western Klamath Restoration Partnership's (WKRK) Forestry plots crews and learned GPS navigation, compass orientation, how



Interns take a break while hiking into Youngs Valley in the Siskiyou Wilderness. From left to right: Autumn Allgier, Anna McLane, and Ryan Mollier

to use a clinometer, relescope, lazer range finder, and an increment borer.

The work and commitment of this outstanding crew far exceeded our expectations, and as they move on to other life experiences we wish them well, though they will be missed.

This years 2016 Youth Intern Crew were Autumn Allgier, Tashawna Brink, Emmanuel Cyr, Zaine Huhtala, Johnathan Markin, Anna McLane, and Ryan Mollier!

The following people and organizations supported this program: MKWC Staff, Karuk DNR Staff, Teri Chanturai, Tammy Markin, California Department of Fish and Wildlife, Dean Witter Foundation, Humboldt County Resource Advisory Committee, National Forest Foundation, Salmon River Restoration Council, U.S. Fish and Wildlife Service, and the U.S. Forest Service.



Interns work with MKWC's fish passage crew to improve fish passage at the mouth of Camp Creek.



Interns work with local gardener Teri Chanturai at the Orleans Community Garden.

Collaboration in the Mid Klamath

Big “C” and Little “c”

by Luna Latimer

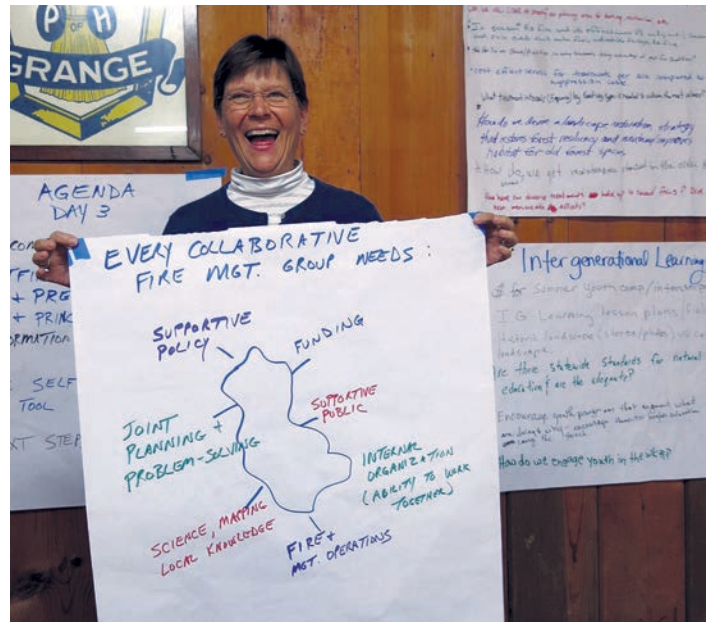
The problems we face as people living in a place—and people wanting to maintain and restore this amazing place where we live—are complex problems, and no single person or organization has the answer or the capacity to solve the problems on their own.

Collaboration is the basis through which I accomplish anything big and lasting in my personal and work life. These days, at MKWC, I think about collaboration every day. We collaborate on a daily basis with landowners, volunteers, land management agencies, Tribes, and other non-profit organizations. There are lots of examples of what I call little “c” collaboration. This type of collaboration helps make the wheels of life turn. We collaborate when Tanya Chapple borrows weed wrenches from the Forest Service for a volunteer workday or an employee of the Karuk Tribe volunteers to go out with our Watershed Education Director, Carol Earnest, and whichever group of kids she is with that particular day.

As MKWC grows we are doing more collaboration, but also moving into an era of Collaboration with a big “C”. Big “C” collaboration is fueled by the many little acts of collaboration, but it is often more formal and at a larger scale. Examples of this type of collaboration involve almost every program at MKWC.

Each year the Plants program undertakes Collaboration with the regional planning meeting where a diverse group (Six Rivers and Klamath National Forests, Karuk Tribe, SRRC, Yurok Tribe, Hoopa Tribe, Caltrans, Siskiyou and Humboldt County Department of Agriculture, and NRCS) convene to discuss the state of invasive weeds, what they are doing to address the problems, and how to work together to be more effective and efficient. Weeds know no political boundaries.

The Fisheries program spends countless hours on a Candidate Action Table—a cooperative planning tool between USFS, USFWS, Karuk Tribe, SRRC, and others—that guides which



Mary Huffman with the WKRK Collaboration Mind Map

projects should move forward. Given the limited funds and the limitless work—we need to agree on how to best move forward as a people of place.

The Fire and Fuels Program collaborate on a yearly Prescribed Fire Training Exchange (TREX). Putting good fire on the ground around homes in the mid Klamath is as complex as it gets.

Part of the shift towards Collaboration is a shift at a National level with the National Cohesive Wildland Fire Management Strategy. This is a strategic push to work collaboratively among all stakeholders and across all landscapes, using best science, to make meaningful progress towards Resilient Landscapes, Fire Adapted Communities, and Safe and Effective Wildfire Response. This Cohesive Strategy has helped create the fertile ground for the Western Klamath Restoration Partnership (WKRK) (see the *Good Fire People* article on page 14.) Never before have we seen such an amazing process of people coming together to find common ground and chart a path forward.

As we collaborate more on both the smaller, daily level and on the larger “C” level, we become better at communicating, listening, and learning how to compromise, so that projects can move forward with buy-in from all the stakeholders who live and work in the Mid Klamath. Our work here is becoming a model for other communities also wrestling with similar complex issues. Though each stakeholder may not get exactly what they want, the hope is that everyone can live with the collaborative decisions we make in this inclusive process, as we envision a future here in our Home.

Orleans/Somes Bar Firewise Events in 2016

By Nancy Bailey

Firewise = Fire-prepared = Fire-resilient = Fire-adapted *An Active Process*



As many locals know, Orleans/Somes Bar is a nationally recognized “Firewise Community”...and while we are not completely prepared for wildfire, being “Firewise” points to the fact that we are working hard to become more fire-adapted and fire-resilient. These terms signify not only being prepared to survive a wildfire but ultimately benefiting from, accepting, and working with fire. Given the speed at which vegetation grows around here, working toward fire-resiliency is not something that has an endpoint, but instead is an ongoing process which takes effort and energy from every resident and landowner; it doesn’t stop with one event or project.

Many Firewise communities and others who are working in that direction hold educational or demonstration events each spring to early summer. The official “Community Wildfire

Preparedness Day” sponsored by the National Fire Protection Agency, this year was on May 7th. Towns all over the country planned and carried out a variety of events on or near that date. Here in our community, the Firewise Committee, a collaboration between the Karuk Tribe, MKWC, the USFS, and the Orleans Volunteer Fire Department (OVFD), decided to have multiple events starting in late April and going in to June.



The Spring 2016 Brushing Crew: Pictured front: Chris Root, Skip Lowry, Bonnie Clark, Jonathan Mohr, and Logan Frantz. Back: Dylan Sullivan and Tim Murray (contractor). Not pictured: Shan Davis, Alexis Rush, and Andrew Sommers



Before and after photos showing the fuels reduction work done on Ishi Pishi Road—a prime example of community involvement.

Demonstration Project Upper Ishi Pishi Road Collaboration

In April, crew members from MKWC's Fire and Fuels crew, joined the Hoopa Tribal Civilian Community Corps (HTCCC) and several neighborhood volunteers to work on a roadside brushing project along upper Ishi Pishi Road. Using chainsaws, weed eaters, and a chipper, the group worked on both sides of the road to reduce dangerous fuels directly adjacent to several homes. The two-day event was a prime example of community involvement, and the best kind of project: having been instigated by the residents of upper Ishi Pishi who were self-motivated and excited about the project. Thank you HTCCCs and neighborhood volunteers for a successful demonstration project. Of course, there is always more to do, but this ambitious treatment was a great start!

Local Educational Events

In early June, Firewise partners organized a series of educational events, visiting four local schools, with a grand finale Community Firewise Event held at Orleans Elementary School. The event, partially funded by Humboldt County Title III, included an activity the day before when parents and children together looked at their homes and filled out a fire-safe inspection checklist and then received an extra gift while attending the next day's event. Highlights of that day included the "Smoke Trailer", loaned by the Humboldt Fire District,



HTCCCs with OSBFSC crew and volunteers during the Firewise Brushing Project from April 25-26 2016.

which simulates a house on fire and teaches how to respond and get out safely; a fun interactive "Firewise obstacle course", teaching fire-safe behavior; tables with fire-safe literature and water system information, provided by MKWC and the OVFD; Fire engine show-me tours of a variety of fire-fighting vehicles from the USFS, OVFD, the Yurok Tribe, and CalFire; a cross-cut saw demonstration; ice cream for all (donated by Varsity Ice Cream in Eureka); and yes, the requisite visit from Smokey Bear.

Meeting in the Middle

Smokey Bear's New Message: Partnering with Reddy, the Squirrel

If you have visited with Smokey Bear lately, you know that he is still represented by the well-known slogan "Only You Can Prevent Wildfires". While in some regions its true, that most wildfires are human caused, here in the Mid Klamath, a majority of wildfires are currently caused by lightning strikes. When houses are built in or near the forest, fire becomes a serious concern.

U.S. Forest Service scientist Jack Cohen has shown that 85 to 95 percent of houses burned in wildfires could have been saved with a few simple precautions. Cohen's research suggests that what owners do within 100 feet of their homes has the most effect on whether those homes burn when a wildfire passes through.

Smokey's standard message does include many important tips, especially for children, who need to learn how to be careful with fire: not to play with matches, stove and heater safety, the importance of smoke alarms, and etc. Unfortunately, Smokey Bear has successfully made us frightened of all wildfire. Because the Forest Service understands that this fear of all fire does not match with what we know about forest

ecology, the agency has begun to change Smokey's language to include a more holistic and healthy view of fire.

A much more relevant message, is brought to us by someone named "Reddy, the Squirrel". Reddy, a cheeky girl squirrel in work boots and hard hat, carrying a rake, says: "Forest Fires Happen. Be Ready!" Reddy was introduced originally by the organization Forest Service Employees for Environmental Ethics (FSEEE) in 2002, who saw the need for a fire mascot with a new attitude. Reddy encourages homeowners to trim trees and clear brush. Preparation not Prevention, says Reddy, is the key. Our local fire prevention partners are keenly aware of not only the "fire-adapted" concept and the "Be Ready" focus, but also of our community's unique outlook, due to the long Native American history of cultural fire use in this watershed. The Orleans Firewise Committee has had extensive conversations about Smokey's legacy and message and is in basic agreement that Smokey's new message should incorporate a distinction between "good fire and bad fire" and highlight the need for using fire as a tool, in order to bring our forests back into balance. As Smokey's website says: "Not all fires, or their effects, are bad for the environment."



When Wildfire Comes to Town

Introducing the Community Liaison Program (CLP)

When wildfire comes to the area, the Forest Service sends Incident Management Teams (IMTs) who normally rotate off a fire incident after 14 days. The longer fire seasons will see many IMTs rotate on a large fire. While we know that there are health and safety concerns that mandate this rotation, we are also aware that the transition between teams is often not smooth. Information is not adequately carried over from one IMT to the next, and relationships being built between firefighters and community are suddenly eclipsed. A Community Liaison Program (CLP) can provide a framework for continuity of communication and trust in these situations.

As a community we want to be kept informed; we want up to date information, honest communication, and respect from officials. We want some say in the impacts of a fire camp in our town. And we want to be heard when we have place-based knowledge of fire history and fire behavior. These concerns can be met through the CLP, which the Orleans/Somes Bar Fire Safe Council is developing for the local community.

The Salmon River has been successfully modeling a CLP since 2009. As one of the highest per acre wildfire regions in the country, its residents have had decades of experience

with wildfire in and around their communities. After the 2008 fire season, which had seen a serious breakdown in communication between fire officials and the community, the Salmon River Fire Safe Council, with the support of Klamath National Forest management, created the Salmon River CLP to reestablish mutual trust. The CLP provides a two-way structure of communication that is both streamlined and transparent. The community is represented by a tiered structure of liaisons (trusted individuals with knowledge of fire and community), so that they are better and more accurately informed and heard, and the fire managers benefit by receiving trusted information in a timely manner.

For more information on the Salmon River Communities' experience and the CLP model see: <http://fireadaptednetwork.org/a-trusted-translator-the-role-of-the-community-liaison-in-creating-better-wildfire-outcomes/> To see Karuna Greenburg's presentation on the Salmon River CLP see: http://mkwc.org/index.php/download_file/view/1114/540/

Call Nancy Bailey at 530-627-3202 if you would like to be involved in our Orleans/Somes Bar version of the Community Liaison Program.

Klamath River Prescribed Fire Training Exchange (TRES)

Oct 3-Oct 15, 2016

A multi-organization burn team, including the Happy Camp FSC, TNC, Karuk Tribe, MKWC, USFS, local VFD's, and other groups will be implementing prescribed burns in the Happy Camp and Orleans areas this fall.



photo by Konrad Fisher

Controlled burning to protect communities requires close coordination with multiple organizations and residents to be successful. Only when we share co-ownership of fire and related smoke can we burn at scales that can reduce the threat of future wildfires. This year the Klamath TRES will be based in Happy Camp. TRES organizers will be working with regulatory agencies and residents to coordinate these burns over the coming months.

For more information, call Happy Camp FSC members:
Cathy Meinert; hm: 530-493-2672, cell: 253-324-5750,
Rachel Rhinehart; 530-493-2029,
or Will Harling at MKWC: 530-627-3202.

Sugar Pine (*Pinus lambertiana*)

by Dean Davis

Sugar Pine is the largest member of the pine family in the world, and it is well adapted and widespread in the Klamath Bioregion. Its long, sweeping branches are an attractive and familiar sight to us all, often towering over the average forest canopy. Sugar pine maintains a rapid and robust growth rate into old age, well beyond the Douglas-fir, ponderosa pine, incense cedar, and true firs that share its habitat from the river bottoms to the high country.

This year is showing favorable cone production on many of the larger trees, causing the branches to droop with the heavy, second-year cones. Good cone years are periodic, and flowers are often initiated in dry spring conditions. Somehow they also seem to know when their neighborhood is flowering, and much of the elder population contributes simultaneously to the dance, helping to insure good pollination and seed set. Containing 150 to 250 seeds per cone, they are a favorite food of squirrels and birds, which contribute greatly to their reproductive success by storing seeds in open areas. Groups of seedlings arising from a single spot are often seen on road cutbanks...forgotten food from past stashes. Pine seeds are also a favorite food of larger mammals, like bears and humans. The Karuk call it u'sip, or pine cone tree, and maintained and protected productive family trees that were easily collected.

Sugar pine exhibits a complex genetic structure, and casts great variety both within and between stands. Its genome has just been mapped this last year, and has revealed more than 10 times the genes that we have. We are simple in comparison. Some of that genetic depth likely contributes to its long life

and giant stature, protecting it from the ravages of age and detrimental conditions and organisms.

Sugar pine is locked in battle right now with an exotic disease originally from Asia called blister rust (*Cronartium ribicola*). This invasive fungus has a complicated life cycle, but forms perennial cankers that eventually kill



The Sugar Pine cone photo from garden.org



King Creek Sugar Pine
photo by Deems Burton

enough cambial tissue to predispose the pines to death from reduced growth, fire, and insect attack. Young trees are rapidly killed directly in huge numbers. Sugar pine's relatives grow in Asia, and genes from ancestors are still present at extremely low frequencies that provide some resistance to blister rust, acting much like a genetic memory. The U.S. Forest Service has a poorly funded, but successful program to identify and breed sugar pine to accumulate and enhance these rare traits for eventual deployment into the forests.

Future success of sugar pine depends on adequate population numbers of both resistant and susceptible trees to provide abundant seedlings to stand against the disease onslaught. We can expect and are seeing a crash in tree numbers, with a gradual increase in vigor and health in survivors over many, many years. We can all do our small part by becoming passionate advocates for this majestic tree, doing our best to protect old growth cone producers as well as seedlings and saplings wherever they make their home.

Sulfur Cinquefoil (*Potentilla recta*)

by Tanya Chapple



The *Potentilla recta*
photo from wikimedia.org

Sulfur cinquefoil is a relatively new weed to the mid-Klamath. Sulfur cinquefoil, native to the eastern Mediterranean, began its tour of North America before 1900 in Ontario, Canada. Since then it has moved through the Northeast U.S., the Great Lakes, and into the Pacific Northwest, with Northern California as a new frontier. The Happy Camp Ranger District weeds crews have been digging it up for many years already. This plant is not showy; its creamy yellow flowers close up during the heat of the day and it disguises itself as any dusty roadside plant. Like most weeds at the early stages of population growth, it can be found along roadsides or other disturbed areas. But, the real disturbing part about this plant is its affinity for the high



photo from nhgardensolutions.wordpress.com



drawing by Janus (Jan) Kops (1765–1849), from wikimedia.org

country, with locations at several trailheads into the Marble Mountain Wilderness.

As mentioned before, sulfur cinquefoil is nondescript from a distance, a dry looking plant about knee high, but looking closer, a most noticeable thing about this plant is its cannabis shaped leaves. The leaves and stems are covered with a fuzz that is irritating to the skin and unpalatable to wildlife and livestock. It has five-petal flowers about the size of a nickel. There are several native cinquefoils that look very similar, especially *Potentilla gracilis* and *P. glandulosa*, so make sure to double check your ID before attempting to eradicate this plant. The invasive sulfur cinquefoil is larger than the native cinquefoils and the most noticeable thing to me is the minor, but immediate, skin irritation it causes.

If you see unknown plants that collaborate poorly with their neighbors, making them possible invasive plants, please send me a photo or bring in a fresh sample. This includes any suspected sulfur cinquefoil. Stop by the MKWC office or email me at tanya@mkwc.org.

Beavers—Midwives to Juvenile Salmon

by Blythe Reis



A yearling beaver

photo by Cheryl Reynolds, courtesy of Worth a Dam

Beavers do not eat fish! That is why they are the perfect midwives for juvenile salmon. They create great habitat for juvenile salmon by building ponds and side channels off of the main current of creeks and rivers. These sidechannels engineered and built by beavers offer a great place for juvenile salmon to hang out and find refuge—so much so that watershed restoration workers call beaver ponds “coho-tels.”

Beavers are incredible dam builders. They maintain their pond habitat by reacting quickly to the sound of running water, and damming it up with tree branches and mud. When a recording of running water was played in a field near a beaver pond, despite the fact that it was on dry land, the beaver covered the tape player with branches and mud. The largest beaver dam is 2,790 feet in length—more than half a mile long—in northern Canada.

The North American beaver (*Castor Canadensis*) is the largest rodent in North America. Adults usually weigh from 24 to 71 lb. Their body length ranges from 29–35 inches, with the tail adding a further 7.9–13.8 inches. The beaver is semi-aquatic and has many traits suited to this lifestyle, including a large,



Beaver mom and kit photo from creamteabirding.blogspot.com

flat, paddle-shaped tail and large, webbed hind feet. The unwebbed front paws are smaller, with claws.

A membrane which covers their eyes allows the beaver to see underwater. The beaver seals its nostrils and ears while submerged. A thick layer of fat underneath its skin insulates the beaver from its cold water environment. Beaver teeth turn orange from the high iron content in the food they eat. The hard orange enamel covers a softer layer underneath that constantly chisels away while they chew, giving them a permanent sharp edge.



Beaver dam on local creek, with Rocco Fiori from Fiori Geosciences and Bob Pagluico from NOAA

Beavers used to range from the Arctic tundra to the deserts of northern Mexico, and from the Atlantic to the Pacific Ocean and have been around for a long time. The oldest fossil record of beaver in North America is seven million years old. The primary predators of beavers are mountain lion, coyote, and bobcat, though bears have been known to tear open a lodge. Beaver’s diet consist mainly of the leaves, buds, and inner bark of growing trees. They also eat tulle roots, blackberry vines, fennel, pondweed, and various scrub plants.

Beavers are active mainly at night. They are excellent swimmers and may remain submerged for up to 15 minutes. They use their flat scaly tail both to signal danger by slapping the surface of the water and as a location for fat storage. They construct their homes, or “lodges,” out of sticks, twigs, rocks, and mud.

For more info on beavers, including campaigns to save the beaver, solutions to beaver caused problems, and educational videos, check out this great website: <http://www.martinezbeavers.org/wordpress/2015/07/19/dam-builders-a-review/>

Another highly recommended book, about a homesteading family that recreated beaver habitat in the 1920s in British Columbia is: *Three Against the Wilderness* by Eric Collier.

Creating Memorable Field Trips through Collaboration

by Carol Earnest

The Mid Klamath Watershed Council (MKWC) has been offering watershed education activities to local schools since 2001. Whether it is fall salmon surveys, creek mouth enhancement, or measuring rainfall, students in the Mid Klamath are monitoring and restoring their watershed throughout the year, with the support of the Karuk Tribe Department of Natural Resource, U.S. Forest Service, and U.S. Fish and Wildlife Service. While many watershed education activities involve students from Orleans and Junction Elementary School, the program is expanding to involve more downriver and upriver youth, building connections between youth and their watershed, their neighboring river communities, and their local natural resource specialists.

A key example of these freshly forged relationships presented itself recently. This past spring, over 30 students from Yreka High School's Natural Resources class, taught by Mr. Christian Birch, visited the newly constructed Goodman Pond, an off-channel habitat situated adjacent to Middle Creek in the little town of Horse Creek, CA. This spring-fed, off-channel pond provides crucial cold, slow water for juvenile salmonids, especially imperiled Coho. The Goodman Pond is the newest addition to a series of constructed ponds in Seiad Valley and Horse Creek that are successful in keeping water temperatures favorable and salmonid populations stable.

Due to its freshly constructed state, the Goodman Pond needed some basic pond help, like tree cover, woody debris, and bank stabilization. So, MKWC tasked the Yreka High School students with a two-day restoration project: plant trees, add woody debris to the pond to provide shade, and stabilize the banks. The first day, students learned about and planted 30 native trees around the pond. The second day, a new group of students built two willow walls to stabilize the pond banks with MKWC Fisheries Monitoring Coordinator, Jimmy Peterson. Additionally, students added four brush bundles to the pond to increase cover for salmon utilizing the pond, and planted 30 willow cuttings around the pond bank.



Watershed Education students build a willow wall.

Karuk Tribe Department of Natural Resources fisheries specialists, Alex Corum and Kenneth Brink, started each day with a presentation on the purpose of the ponds, how they are monitored, and the salmonid life cycle. They ended each day with a visit to the Downstream Migrant Fish Trap located on the Klamath River. There they showed the students what they caught that day, how to collect data on the catch, and discussed fish identification, invasive species, and disease. Their presentations and field forays helped to put the restoration project in context.

This was the first time MKWC, with the addition of dynamic fisheries specialists from the Karuk Tribe Department of Natural Resources, has coordinated a project with Yreka High School. Birch was enthusiastic, said, "You got us", and was already drumming up future field trip possibilities. We look forward to working with them more in the future.

MKWC's Watershed Education Program coordinates restoration and monitoring field trips, including fall salmon surveys, Downstream Migrant Fish Trap visits, fish passage improvement, invasive weed pulls, and habitat improvement. During the summer months, the annual Klamath-Siskiyou Outdoor School takes place, as well as three youth restoration raft trips in July. Summer Youth Interns also work during the summer, helping with a variety of projects in each of MKWC's programs.

The Watershed Education Program would like to thank the following funders for making these cost-free activities a possibility: California Department of Fish and Wildlife, U.S. Fish and Wildlife, Humboldt County Resource Advisory Committee, New Belgium Brewery, National Forest Foundation, Pacific Power Foundation, and the Ford Family Foundation. Additional thanks to the Karuk Tribe Department of Natural Resources, Klamath River Outfitters, Yreka, Seiad Valley, Happy Camp, Somes Bar, Orleans, and Weitchpec schools, MKWC staff, and community volunteers for all your support!



Yreka High School students plant trees at Goodman pond.

Collaborating to Create Coho Habitat at Aikens Creek

by Mitzi George Wickman

Throughout the Mid Klamath River tributaries, loss of winter rearing habitat has been identified as a problem for the survival of coho salmon and spring Chinook, which are species that live at least one entire year in freshwater before migrating to sea. In Aikens Creek, the Karuk Tribe Fisheries Program documented good salmon spawning gravels and cold water, but found very little slow velocity and flood plain habitat necessary for juvenile salmon to survive during the winter months when large storms and floods scour pools. To address this problem, in 2015 and 2016, the Mid Klamath Watershed Council and partners have been working to develop a fisheries restoration plan for that portion of Aikens Creek. These partners include the Yurok Tribe, Karuk Tribe Fisheries Program, U.S. Forest Service, U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, National Oceanic and Atmospheric Administration, and Fiori Geosciences, Inc. The collaborative design that we are working on will include the creation of alcoves to provide velocity refuge for these salmon fry. This increased effort was made possible from funding from the California Department of Fish and Wildlife.

The lower 3,000 feet of Aikens Creek has seen some drastic changes in the last century. Prior to the late December 1964/January 1965 flood, Aikens Creek drained into Bluff Creek at the current Highway 96 Bridge that crosses Aikens Creek (see 1960 photo, below). It was during that momentous flood that Bluff Creek breached a wall of bedrock to occupy its current channel, leaving what is now the Aikens Creek



Aikens Creek on January 18, 2016, after a large storm, showing high velocity flows.

West Campground. (Exactly how Bluff Creek breached a bedrock wall has not been verified.) The dry and rocky ground that remained after Bluff Creek's desertion was graded with bulldozers, turned into a campground and became a destination for rocks, dirt, and gravel associated with road slides. Aikens Creek was pushed to the base of the hill, where it remains today (see March 2014 aerial photo, next page).

This site is important culturally to both the Yurok and Karuk Tribes. We are working closely with both Tribes' archaeologists and with their cultural resource committees to make sure that the final design plan meets their approval.



Aikens Creek in 1960. Bluff Creek highlighted in green and Aikens Creek in blue.



Aikens Creek Jimmy Peterson, Fisheries Project Coordinator, measuring flow on March 6, 2016



Charles Wickman examining the Karuk Tribe Sudden Oak Death monitoring.



The 2016 Fish Passage crew

We have chosen Aikens Creek as a restoration site because, though currently locked into a restrained channel, with the help of some heavy equipment, it can be given room to expand during high flows. In addition, it is a low gradient stream that is accessible to spawning Chinook, coho, steelhead, and Pacific lamprey. This project is part of the Six Rivers National Forest Aquatic Restoration Environmental Analysis. Once our fisheries restoration project is implemented, we will be expecting to see a lot more adults from all these species returning to Aikens Creek to spawn.

The Mid Klamath Watershed Council and partners would like your help understanding the history of this special place. Please contact either Mitzi Wickman (mitz@mkwc.org), Toz Soto (tsoto@karuk.us), Michael Belchik (mbelchik@yuroktribe.nsn.us), or Leroy Cyr (lcyr@us.fs.gov) with any information and/or historic photos you have of the Aikens Creek area.



Aikens Creek in 2014, Bluff Creek highlighted in green and Aikens Creek in blue.

MKWC and the Karuk Tribe:

Since 2009, MKWC, in collaboration with the Karuk Tribe, various state/federal agencies, and private landowners, has been designing and constructing off-channel ponds along the Klamath River corridor. To date, 12 of these off-channel ponds have been constructed between Camp Creek, in Humboldt County, and Horse Creek, in Siskiyou County. Over seven more ponds are in various stages of design and

implementation within the watershed. According to the Karuk Tribal Fisheries Program's population estimates, over 20,000 juvenile coho have utilized these ponds in the past five years. Some of the fish that were tagged in the ponds as juveniles, have been documented returning as adults to their natal streams!



The Alexander pond, before construction in 2009, top; starting to fill in fall of 2010, middle; in 2014, below left; and in 2016, below right.



Decoursey pond coho



Joey Polmateer, a MKWC fisheries technician with a coho salmon in Lower Seiad Pond.

Going Forward with Pond Projects *by Jimmy Peterson*



Before and after photos of the Stender Pond project



Mitzi Wickman measuring water quality between Seiad Creek and Stender Pond.



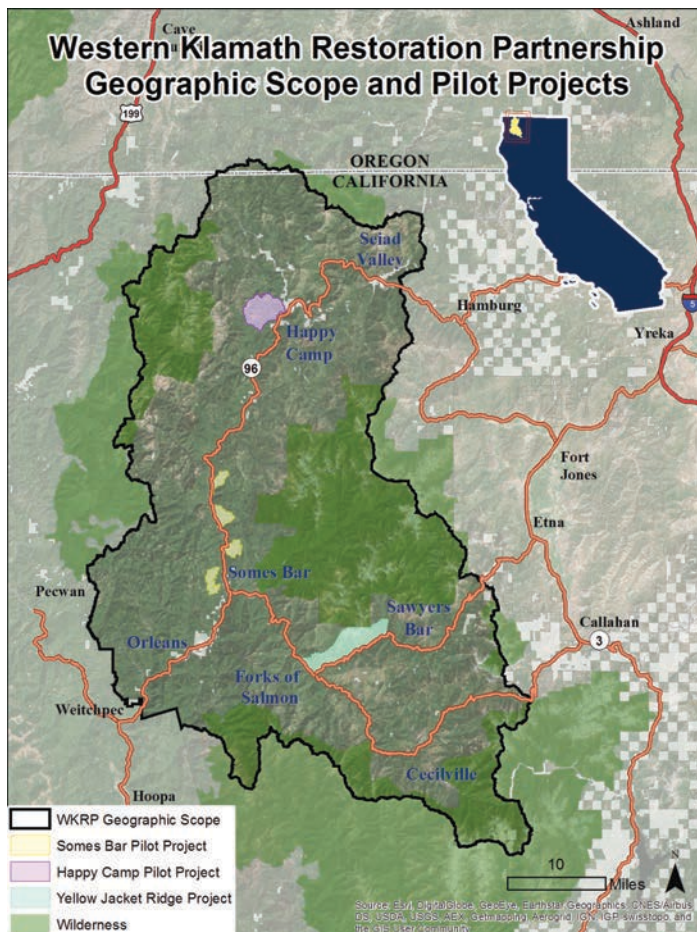
The O'Neil pond before and after work completed (top left and right). The O'Neil pond created a calm refuge for the fish during a high water event (lower left). A school of salmonids seen in the O'Neil pond (lower right).

Restoring the Balance of Fire in the Klamath Mountains after a Century of Fire Exclusion

By Will Harling

In the far northwestern corner of California, local, state, and federal agencies are turning to tribal fire wisdom as a solution to the region's recent history of megafires. Here along the Klamath River, the Karuk and Yurok Tribes have retained traditional fire knowledge despite a century of persecution for managing their lands and resources with intentional fire. But it was their frequent fires, combined with lightning fires in the high country, that kept fuel loading down, shaping the stately, resilient and diverse forests that naturalists and explorers expounded on throughout the 19th century.

In a noble battle to save these towering groves from the timber barons, the first Forest Service Chief, Gifford Pinchot, turned to fire suppression—a cause made righteous overnight by the great fires of 1910—as a *raison d'être* for funding his infant agency. Even now while fire science has begun to align with traditional ecological knowledge supporting controlled burning, the culture of fire suppression has continued to grow, claiming over 50% of the annual U.S. Forest Service budget.



As Six Rivers National Forest supervisor Merv George, Jr. said recently during a field trip to review a large, innovative fire management project, “You can’t win games with just a defense! We need to get our offense on the field.” The offense he refers to is a set of strategies collaboratively developed for restoring fire



process in the Western Klamath Mountains. The Western Klamath Restoration Partnership (WKRK) is a group that includes local, tribal, state, and federal entities with a stake in the outcome of these big fires. The group came together over the past three years in intense multi-day workshops to hammer out an agreement over where work needs to be done.

The WKRK aims to restore fire processes to nearly 50,000 acres around communities and along strategic fuelbreaks, using three pilot projects in the geographic corners of their 1.2 million-acre planning area. These collaborators believe that we need “good” fire on the landscape before the next megafire comes. In recent years, it is just 3% of wildfires that account for 97% of the fire on the landscape, consuming the powder keg left in the wake of the “fire drought” of the past century. These are the “bad” fires, the ones that have turned some of the last few streams that anchor threatened coho salmon in this section of the Klamath River into sediment choked mud slurries in the next summer thunderstorm.

Climate change has tipped the scales in favor of fire, lengthening burning seasons drastically, and pitting firefighters against an increasingly formidable foe. This lesson has been driven home to residents in the Klamath Mountains where we have lost nearly two firefighters a year on average for the past decade. Fire on the landscape is only understood through a relationship to a specific place over time. It is the complex dance between rainfall, topography, soil, and climate that shapes how fires burn, and the forests that are created or destroyed in their wake. It drives the rates of earth and wood flowing off the mountains into the streams. Well-placed fires, along with unimpeded natural fires, are the only proven way to create old-growth conifer forests, legacy oak groves, grasslands for elk and deer and game, healthy rivers, and resilient human communities.

The WKRK is currently working on three pilot projects to demonstrate how we can both restore fire process to the

Wildland Urban Interface (WUI) in places where it has been absent for over a century, and also how to utilize recent fire footprints to protect adjacent communities and restore fire process over large landscapes. The furthest along of these three projects is the 6,500 acre Somes Bar Integrated Fire Management Project, which is about to go out for public scoping that will start the formal NEPA process.

At a recent public meeting in Orleans, Orleans/ Ukonom District Ranger Nolan Colegrove described what is different about this project. “The community has been involved in the planning of this project from the very beginning,” he said. “This includes having participants on the Interdisciplinary Team planning the project with Forest Service specialists. This is the first project of this size in this region to include tribal and community input throughout project development and implementation.” Over 40 participants surrounded maps of the four initial treatment areas at Ti Bar, Patterson, Rodgers Creek, and Donahue Flat, and detailed discussions about how manual, mechanical, and prescribed burn treatments could be implemented without impacting adjacent private lands were recorded for inclusion in project design.

In order to have the social license to implement large scale controlled burns adjacent to private properties, the USFS worked with the Orleans Somes Bar FSC to conduct NEPA for fuels treatments on these adjacent private properties to allow for manual treatments and prescribed burning on private lands where requested prior to work on adjacent public lands. Much of this work has been accomplished already through past work by the OSB FSC since their inception in 2001.

The Happy Camp Integrated Restoration and Community Protection Project is even more ambitious in scope. It aims



WKRP Group on May 2015

to treat over 22,000 acres on the western edge of Happy Camp by implementing manual and mechanical treatments along existing roads and ridges in preparation for large scale controlled burns. This area has not seen significant fires in over a century, but has been the source of small fires that had the potential to greatly impact the community. The planning area is in a location that has high risk of large wildfires but has significant potential for resource benefit from prescribed fire and properly managed unplanned ignitions.

On the Salmon River, another large scale project, the Yellow Jacket Ridge Project, proposes a series of fuelbreaks along Yellow Jacket Ridge where fires have been a frequent visitor in the past decade to prepare for large scale prescribed burns and wildfire suppression when needed. The goal is not to stop wildfires but to create the ability to flexibly manage and utilize fire to restore fire process to the southern edge of the Marble Mountain Wilderness Area. All three of these projects propose linear fuels treatments in preparation for the large scale implementation of prescribed fire as an initial treatment to large landscapes. Critical to the success of this effort is creating an interagency burn team capable of safely implementing large complex burns. Over the past three years, prescribed fire training exchanges in the Klamath and beyond are doing just that.

The 2014 Klamath River TREX demonstrated how diverse groups could come together to safely bring fire back to the Wildland Urban Interface where it has been long absent, and provided an example of how we can create the structure to increase the scope and scale of prescribed burning in rural communities across the West. Utilizing the Incident Command Structure, and adhering to national training standards, federal, tribal, state, NGO, and local partners including private contractors and volunteer fire departments, were able to both learn together and burn together. A recent memorandum of understanding between USFS Region 5 and the Nature Conservancy provides the framework for burning across public and private boundaries to achieve the goals of the National Cohesive Wildland Fire Management Strategy.



Collaborative Prescribed Burn at the Creasy homestead
photo by Konrad Fisher

continued on page 14

The FLN is supported by Promoting Ecosystem Resilience and Fire Adapted Communities Together: Collaborative Engagement, Collective Action and Co-ownership of Fire, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. This institution is an equal opportunity provider.

Key to the success of this event was a highly qualified overhead team that included two Type I and six Type II burn bosses, a lean but dedicated planning team, and mid-level experienced firefighters from Firestorm Wildland Fire Services, Inc. that helped train the 19 participants who completed their basic firefighter II training on the first day of the TREX. Two Forest Service Burn Bosses (RBxIIs) came all the way from Utah's Wasatch Mountains for the opportunity to make progress on their National Wildlife Coordinating Group certification training task books. One of these, James Turner, said "we got more burn boss and trainee assignments in the past 10 days than we have in the last five years on our home unit."

TREX organizers scaled up to create a Type III Incident Management Team to implement the Fall 2015 Klamath River Prescribed Fire TREX, with three separate burn teams spread throughout the WKRP area. Despite extremely dry conditions at the end of a four year drought, they were able to burn even when no one else in the state was burning. Organizers found a sympathetic ear in CAL FIRE Director Ken Pimlott, who was still reeling from one of the state's most costly wildfire seasons to date. Even as the smoke from the Valley Fire was still smoldering, Pimlott supported local CAL FIRE staff issuing burn permits during the burn ban in hopes that Orleans would not become the next Middletown. More than ninety participants burned through the night when cooler, moister conditions moderated the burn effects. They stopped for a day and held their past burns when the weather turned hot and windy again.

Here on the edge of fire season there's a lot of good fire to be had, if we choose as a society to accept the inherent risk of working with fire as a tool for restoring our forests. Only when we burn together will we be able to accept the consequences of the extremely rare "escapes," knowing that in the long run this calculated risk is nothing compared to the uncertainty



Forks of Salmon Elementary School kids learn about fire during the 2015 TREX. *photo by Stormy Staats*

we experience every time the thunder rolls and wildfires start in the summer time. This is a societal change we are talking about. And our culture is not nimble in this department. But there is a convergence of good policy, well defined strategy, and strong leadership from Washington, D.C. to the backwoods of far northern California that holds the promise of redefining how communities across the West relate to fire. And we need you to help make it happen. Here's how:

- Participate in a prescribed fire training exchange event! There are three Prescribed Fire Councils across California that host training events throughout the year.
- Encourage your local Fire Safe Council to get involved in implementing controlled burns.
- Support the Endowment for Eco-Cultural Revitalization, a long term vision for creating sustainable funding for this work: <https://www.gofundme.com/bdjn9ezq>
- Support changes to air quality regulations that prevent the implementation of prescribed burns at a scale that will significantly reduce the effects of future wildfires.

This article originally appeared in the *PULSE*, Planet Drum Foundation's newsletter.

The 4 Rights Campaign

Prescribed Fire is Right 4 the Environment

By Bill Tripp

The 4 Rights Campaign is being spearheaded by the Bureau of Indian Affairs (BIA) Pacific Region. It revolves around prescribed fire being done at the Right Time, with the Right People, in the Right Place, as the Right Choice. It all started within the BIA Prevention Program in response to a few individuals recognizing that the meadows were filling in, what was once wet was now dry, and prescribed burning could help to reverse this trend. Prescribed fire enables a plethora of positive feedback loops, one of which is the mitigation of the negative consequences of unmanaged fire.

The BIA has integrated this campaign as a teaching tool at the California State Fair. Camp Smokey and the Little Red School House are teaching about how Native Americans have used fire for generations and how traditional resource management ties into prescribed fire today. It is truly opening minds to the idea of prescribed fire again.

Tribes are also implementing these principles through partnership activities enacted under authorities such as the Tribal Forest Protection Act, Reserved Treaty Rights Lands

Fund, Department of the Interior Resilient Landscapes Program, and by other interagency/intergovernmental means. Prescribed fire and managed wildland fire are perhaps the two greatest tools we have to provide for balanced ecological function.

Right Time

There are many important temporal considerations for prescribed fire, including time of year, current and expected weather, and time of day. All of these need to come together in the right combination to achieve a successful prescribed burn. For example, burning to promote spring greens as a traditional food source can be achieved by burning before green up in late winter/early spring in California black oak (*Quercus kelloggii*) woodland/savanna. Grasses and oak leaf litter can carry fire into the shade line, where the fire goes out. These winter burns not only provide fresh green grasses and forbs, which have food and fiber value for people and animals, but they can also reduce fuel loading adjacent to communities and help provide a secure place from which to manage wildfires in summer.

Right Place

Not only are fuels, topography, and fuel breaks important considerations, but the benefits to be achieved are also an important place-based factor. It is important to know what the conditions are and what you want to accomplish. Effective fire management/fire use cultures are place-based and integrate the needs of healthy forests, grasslands, streams, plants, animals, and people. People live in fire prone environments. Many of the areas that we now call the wildland-urban interface (WUI) are actually fire-dependent ecosystems.

Right People

Multigenerational burning is an important way to ensure that cultural practices and techniques persist. Family burning done with knowledgeable adults to provide the right supervision is a good practice. Involving local youth helps to instill a sense of place and responsibility in the future residential population of your area. The revitalization and perpetuation of localized Traditional Ecological Knowledge practice and belief systems will be vital to enabling humans to live safely with fire once again.

Prescribed burning in the conditions we face today can be quite complex. Qualifications that meet or exceed federal, tribal, or state standards are needed to ensure the proper chain of command and supervisory span of control are met. There are many reasons for establishing a professional supervisory support structure to your burning practices. Liability, permitting, burn plan approval, and smoke management are all factors that require a more formal structure, especially when performing in-season or cross-boundary burns. Prescribed burning in and adjacent to the WUI should be supported by federal, tribal, state, and NGO land managers in coordination with place-based fire practitioners.

Right Choice

There are many reasons for prescribed/managed fire to be the right choice. Fire is an agent of renewal in fire-prone



A prescribed burn lit during the 2015 Klamath River Prescribed Fire Training Exchange (TREX) is used to maintain a productive huckleberry patch at Butler Flat.

photo by Stormy Staats

environments. Even smoke can be essential to survival for species like salmon or Pacific giant salamander, as it can cast shade and cool water temperatures during fire season. Wildlife need fire-scarred trees for future habitat just as much as they need the freshly sprouted foods that fire provides. People also benefit from the positive feedbacks of fire. Without fire, there would be no basket making in the Pacific region, and subsistence living in extremely rural food deserts would not be possible.

The 4 Rights Campaign is an important communications and engagement tool that can be easily adapted and used in your local community. It provides good guidance on the basic factors needed to successfully conduct small-scale, family-based burning under appropriate conditions, or for large-scale professionally structured burning practices. Different scenarios can be developed for conveying these basic principles to children, adults, private citizens, land managers, or any other fire practitioner. It can be scaled to an individual teaching one's children how and when to start a fire in their wood stove, to the Type 1 Incident Commander overseeing burning operations across jurisdictional boundaries. The campaign is encouraging more people to get engaged in the proper use of fire across all lands to accomplish balanced social, economic, and ecological objectives for generations to come.

Special thanks to Charles Jachens, Soledad Holguin, and Jimmy Nanamkin of the Pacific Region BIA for developing the 4 Rights Campaign.

This blog post was made possible through support provided by the United States Forest Service and The Nature Conservancy to WRTC, under the terms of Cooperative Agreement #FIRE_WRTC_10012014. The content and opinions expressed herein are those of the author and do not necessarily reflect the position or the policy of the USFS, DOI, The Nature Conservancy, or the WRTC and no official endorsement should be inferred.

Oyster Mushrooms to the Rescue

Cleaning Up the Toxic Waste behind the Panamnik Building

by Levon Durr

We are Excited to Announce That Our Soil Has a Clean Bill of Health!

The Mid Klamath Watershed Council (MKWC) purchased the Panamnik Building in 2010 and inherited a toxic legacy just 60 yards from the Klamath River. During the building's grocery store days, diesel and oil from a generator and above-ground fuel storage tank leaked into the soil causing hydrocarbon contamination far above the allowable limits set by law. After careful consideration, MKWC partnered with Levon Durr, the owner of Fungaia Farms, to "remediate" or clean up the site using an innovative and natural technique harnessing the power of Oyster mushrooms!



Breaking Ground at contaminated site.



Initial Inoculation using oyster spawn bags.



Michael Stearns fencing off dug out site.

Why Mushrooms?

Durr's recent report outlines how and why mushrooms are effective cleanup agents: "Mycoremediation, or fungal bioremediation, is the process of using fungi to improve the ecological health of a site by either degrading contaminants or sequestering them for removal. Mycelium (similar to roots) . . . secrete digestive enzymes that have the ability to break hydrocarbon bonds into smaller less toxic molecules. The mycelium can essentially turn the hydrocarbons into carbohydrates. Oyster mushroom, or *Pleurotos ostreatus*, is a white rot fungus that produces digestive enzymes . . . to break down wood. Wood and petroleum based fuels contain similar hydrocarbons, making white rot fungus a great tool for mycoremediation."



Oyster grain spawn growing at Fungaia Farm lab.



Volunteers readying straw for burlap inoculation.

The Treatment Was Conducted as an Experiment from September 2011 to June 2014

The first step was for Fungaia Farms to grow more oyster mushroom grain spawn. An initial test plot showed good results using pasteurized rice straw and burlaps sack inoculated with oyster grain spawn, but given our remote location, transporting the straw was unreasonable. After some adjustments, approximately 50 yards of soil was treated by building long mounds layered with inoculated burlap sacks, wetted rice straw, and covered with black plastic to avoid additional hydrocarbon leaching back in to the soil. The treatment took eleven 300-yard rolls of inoculated burlap, a six person crew, one bobcat, plus additional mushroom spawn. The piles were monitored for signs of colonization of mushrooms into contaminated soil, soil temperature, and hydrocarbon levels. In 2014, the soil showed no obvious signs of contamination and compost tea was added to the piles to increase biologic activity in the soil.

Specific site conditions created challenges, but testing confirmed we met our decontamination goals! Pre-treatment soil samples indicated diesel fuel concentrations as high as 250 mg/kg and motor oil concentrations as high as 6,200 mg/kg. The goal for the project was to reduce these levels to below 50 mg/kg of diesel and below 370 mg/kg of motor oil, levels within acceptable limits set by the state. A representative composite sample at the end of the project showed concentrations of 49 mg/kg of diesel and 47 mg/kg of motor oil, both below target levels!

The full report details the process, challenges, results, and the greater implications of those results for the mycoremediation field and future generations. You can read the full report on the web at: www.mkwc.org



Volunteers rolling out inoculated burlap.



Levon Durr uncovering inoculated straw.

Happy Camp Farmers Market Started!

by Erica Terence

“Sometimes I think I’m nuts,” Happy Camp resident Abby Yeager confessed, referring to her recent initiative to start a bonafide Farmers Market in the small Middle Klamath town she calls home.

But more than 150 attendees at the kickoff market July 14 showed that the idea to create a local outlet for local producers is hardly crazy. “It was a cool vibe. People were there doing yoga last time, and we’ll have live music this time,” Yeager said. “I’m pretty jazzed about it. It’s just a lot of work.”

It’s not the first time local people have tossed around the idea of starting a Farmer’s Market in Happy Camp, a town of almost 1,200 people transitioning away from a timber and mineral extraction-based economy toward greener jobs and institutions. However, past promoters of the idea have been unwilling to jump through the necessary hoops to get vendor certifications from the U.S. Department of Agriculture.

Yeager graduated from Happy Camp High School in 2003 and earned a Masters Degree in business at Chico State University with a Ford Scholarship. Almost 10 years later, she returned, along with her husband, who was born and raised in Happy Camp, and started her own family. “I’m doing this for my kids,” Yeager emphasized.

The Farmers Market is the pilot project for a non-profit group called Hope for Happy Camp. She seems self-conscious about the name, but sure in her purpose. “I don’t think of Happy Camp as a charity case. I just think that as jobs have disappeared nothing bigger has showed up,” Yeager said.



The Farmer’s market is a microcosm of a bigger socio-economic revitalization that Yeager envisions for the town. The market is a good first step for the fledgling group, as it enables local producers to sell to local buyers.

Ultimately, Hope for Happy Camp will also strive to fill other voids in the area, such as child care services and housing improvement. But for now, offering a source of affordable, healthy, local food at the baseball park that borders the elementary school represents a major step in the right direction. The market accepts WIC (Women, Infants, and Children Nutrition Program) Farmers Market checks,

Senior FMNP (Farmers Market Nutrition Program) checks, CalFresh EBT (Electronic Benefit Transfer), and cash. This means that good food will be more accessible to poor and otherwise disadvantaged groups in the community.

Yeager is selling her surplus produce and donating the profit from sales to Hope for Happy Camp, while Marble Mountain Farm also sets up a stand with fresh fruits and veggies. “It’s actually better for their production at a local farm if they harvest twice a week to go to market, so this market helps vendors, too.”

With her background in business, Yeager knows that the success of the market and the Hope for Happy Camp organization hinges on the ability to generate broad excitement and interest in the effort. Once she secures a registered non-profit certification from the IRS, Yeager said she will seek grants to distribute the burdens of organizing and outreach for the market. The MKWC Foodsheds Program is helping to support her efforts.

Many Hands Make Good Food *by Mark DuPont*

Food is a glue that binds people to people, and people to place. It moves from our gardens, forest and rivers to our homes and tables, reminding us of our connections, our responsibilities, and all we have to be thankful for. Since our first efforts in the Foodsheds program we have been consistently inspired by the individuals and groups who have stepped forward to

work together for a healthy food system, strong community and resilient watershed. Over 30 organizations and dozens of community members have joined forces with us to dig garden beds, graft fruit trees, bring fresh food to schools, bring kids into the garden, and sow seeds for an abundant future; without them our accomplishments would not be possible.



PANAMNIK BUILDING

Collaborative Planning of the Panamnik Building *Come Share Your Ideas!*

by Michael Stearns

The Mid Klamath Watershed Council is planning a major remodel of its aging building in downtown Orleans. If funding comes through, a new roof, a covered front walkway, and a new sidewalk are all planned for the summer of 2017. We hope in the long run to open up the rear of the building to river views and remodel the interior to improve the offices and community space with new windows, doors, siding, kitchen, and bathrooms. MKWC plans to make the Panamnik Building an example of an energy efficient modern remodel that serves the river community well. Being sensitive to the riverside site and local culture will guide any changes.

Since MKWC acquired the Panamnik Building, we have made the extra space available for community events. Now we invite

you to collaboratively help MKWC develop plans that address the diverse needs of the building's users.

There will be a public meeting on Tuesday, August 30, at 5:00 p.m. at the Panamnik Building to discuss plans for the building and for community members to share their suggestions.

Even if you can't attend, please share with us your opinions regarding the community's use of the Panamnik Building and how it might improve. Feel free to drop by or send an email to: mail@mkwc.org

Keeping MKWC Up and Running—The Admin Story

by Luna Latimer

I always hesitate to talk about the percentage of MKWC's expenses that go to programming versus administration. The whole conversation implies that programs are good and support infrastructure is bad. While painting the Panamnik Building, putting new floors in the Post Office, or remodeling our public bathrooms are not considered direct programming for MKWC's mission, I think these costs are legit. All of our expenses are necessary for MKWC to be sustainable and effective. A recent report from opinion leaders in the charitable giving world refuted the often-repeated myth that overhead expenses are less than essential and should be kept to a minimum. Nevertheless, "the 'Overhead Myth' persists despite evidence that investments in overhead facilitate better nonprofit performance...Underinvesting in overhead creates a range of negative outcomes which undermine quality and sustainability..." the report states.

That said, MKWC spends only about 16% of its funds on administrative expenses. Amongst other things, that covers all of the administrative personnel to keep MKWC running smoothly; pay the bills, invoice our funders, maintain our offices in Orleans and Happy Camp (including computers, utilities, and office supplies), and pay a whole lot of insurance that is required by all of our grants, agreements, and contracts. It wasn't so long ago that our office supply budget was non-



The Panamnik Building under construction around 1957.

existent and I still feel very grateful every time I open up a drawer and find a pen that works. Here are the numbers that tell the story of our impact best:

16% support infrastructure

84% direct programming

100% of funds support the organization
and the work we do

These numbers are in fact a source of pride for our organization—they show how we are able to make efficient use of our resources to maximize our impact on the ground while maintaining a stable, professional, and fiscally responsible institution.

For more information on *The Overhead Myth*, go to overheadmyth.com

Mid Klamath Watershed Council Board of Directors

Chris Hatton, *President*
Dean Davis, *Vice President*
Molli White, *Treasurer*
Jon Grunbaum, *Secretary*
Mark DuPont, *Board Member*
Jeanerette Jacups-Johnny, *Board Member*
Blythe Reis, *Board Member*
Carol Sharpe, *Board Member*
Michael Stearns, *Board Member*
Myanna Nielsen, *Board Member*

Directors

Will Harling, *Director*
Luna Latimer, *Director*
Charles Wickman, *Fisheries Program Co-Director*
Jillienne Bishop, *Watershed Education Program Director, Fisheries Project Coordinator*
Michael Stearns, *Panamnik Building Program Director*
Nancy Bailey, *Fire and Fuels Program Co-Director, Native Plants Program Co-Director*
Ramona Taylor, *FoodSheds Program Co-Director*
Tanya Chapple, *Invasive Weed Management Program Director, Native Plants Program Co-Director*
Carol Earnest, *Watershed Education Program Director*
Erica Terence, *Outreach and Development Program Director*

Project Coordinators

Chris Root, *Fire and Fuels Coordinator*
Grant Gilkison, *FoodSheds Outreach Coordinator: Orleans*
Jimmy Peterson, *Fisheries Coordinator*
Indigo Mack, *FoodSheds Outreach Coordinator: Happy Camp*
Laura Jaffe-Stender, *Watershed Ed/Foodsheds Coordinator*
Michael Max Hentz, *Fire and Fuels/Fisheries Coordinator*
Mitzi George Wickman, *Fisheries Project Coordinator, GIS Specialist*
Mark DuPont, *FoodSheds Program Coordinator*

Administrators

Amanda M. Rudolph, *Administrative Assistant*
Blythe Reis, *Administrator*
Heather Campbell, *Administrator*
Lesli Laird, *Administrator*
Myanna Nielsen, *Administrator*
Sammi Offield, *Administrator*
Nicole Limatola, *Office Assistant*
Beverly Yip, *Office Assistant*

Field Technicians and Program Assistants

Alan Crockett, *Fisheries Technician*
Alexis Rush, *Fire and Fuels Technician*
Andrew Somers, *Fire and Fuels/Watershed Ed Technician*
Brendan Twieg, *Fire and Fuels Technician*
Brent Boykin, *Fisheries/Fire and Fuels Field Technician*
Charley Reed, *Fisheries Technician*
Dylan Sullivan, *Fire and Fuels Technician*
Eric Nelson, *Fire and Fuels/Plants Technician*
Erin Cadwell, *Fire and Fuels Field Technician, Computer Specialist*
Geena Talley, *Fisheries Technician*
Jason Jackson, *Fisheries Technician*
Joey Polmateer, *Fisheries Technician*
Johnathan Mohr, *Fire and Fuels/Wildlife Technician*
Josh Saxon, *Equipment Operator*
Logan Frantz, *Watershed Education/Invasive Weeds, Fire and Fuels Technician*
Michael Bartley, *Fire and Fuels Technician*
Pamela Mattz, *Office Assistant*
Pam Ward, *Panamnik Building Custodian and Recycling Coordinator*
Priscella Kinney, *Foodsheds Program Assistant*
Rachel Rhinehart, *Fire and Fuels Technician*
Ronnie Reed, *Fire and Fuels/Fisheries*
Rudy Galindo, *Plants/Wildlife/Fire and Fuels Technician*
Skip Lowry, *Fire and Fuels/Plants Technician*
Tony Dennis, *Plants/Wildlife/Fisheries Technician*

2016 Stewardship Interns

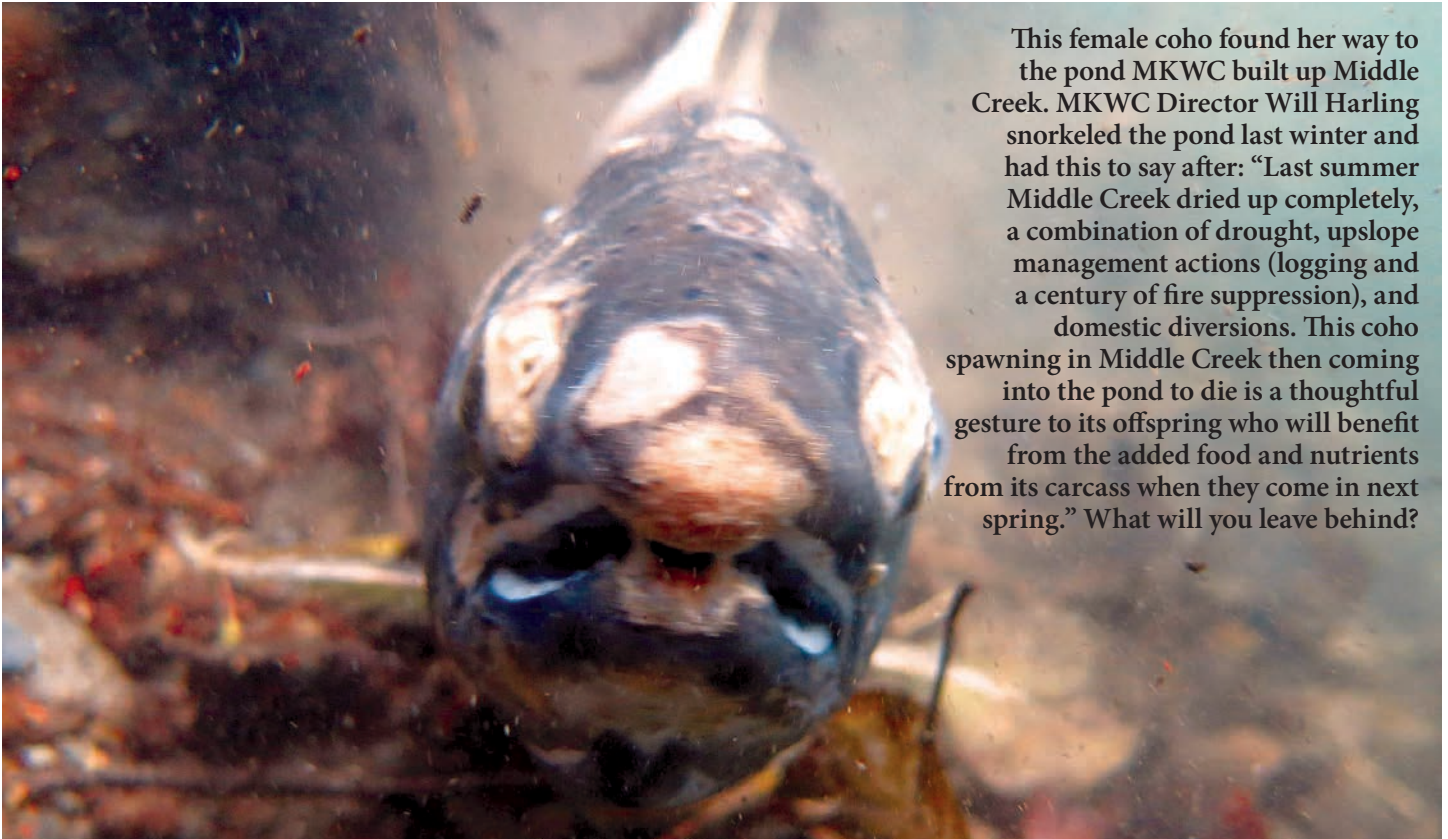
Andrea McLane	Ryan McManus
Autumn Allgier	Ryan Mollier
Emmanuel Cyr	Tashawna Brink
Johnathan Markin	Zaine Huntala

What Will Your Klamath Legacy Be?

Think like a fish. Or a fire. You can help future generations do just that by writing Mid Klamath Watershed Council (MKWC) into your will. Your choice to dedicate some or all of the assets you leave behind to sustain MKWC work will help the organization thrive through thick and thin to restore our watershed together.

Legacy giving can be simple, and it's a way to ensure that your vision for a healthy Klamath River becomes a reality. You can give a specific sum or percentage gift, a residual gift of what remains after other expenses are paid, or a contingent gift in case another beneficiary doesn't survive.

Your financial advisor, attorney, or accountant can walk you through the steps you need to take and help you draft the correct language for your bequest. Humboldt Area Foundation also offers these services for those wishing to plan a gift to North Coast charities. Naming opportunities are available for interested donors. Please contact Erica Terence at MKWC for more information or assistance at erica@mkwc.org or (530)627-3202.



This female coho found her way to the pond MKWC built up Middle Creek. MKWC Director Will Harling snorkeled the pond last winter and had this to say after: "Last summer Middle Creek dried up completely, a combination of drought, upslope management actions (logging and a century of fire suppression), and domestic diversions. This coho spawning in Middle Creek then coming into the pond to die is a thoughtful gesture to its offspring who will benefit from the added food and nutrients from its carcass when they come in next spring." What will you leave behind?

I Want To Support MKWC!

- Support Level:**
- \$25 - Spring
 - \$50 - Creek
 - \$100 - River
 - \$250 - Confluence
 - \$500 - Estuary
 - \$1,500 - Ocean
 - Other: \$ _____

All supporters will receive a tax-deductible receipt and an annual newsletter.

NAME: _____

MAILING ADDRESS: _____

CITY, STATE, ZIP: _____

E-MAIL: _____

PHONE (OPTIONAL): _____

Check any that apply: I want to be anonymous, Please add me to your current events mailing list,

Other _____

Mid Klamath Watershed Council

www.mkwc.org





Mid Klamath Watershed Council

Panamnik Building
38150 Highway 96
PO Box 409
Orleans, CA 95556

PRSRRT STD
ECRWSS
U.S. POSTAGE
PAID
EDDM RETAIL

Local
Postal Customer

What's Inside the MKWC Collaboration Issue

Collaboration in the Mid Klamath

- Big “C” and Little “c” 2
- Collaborative Planning of the Panamnik Building:
Come Share Your Ideas! 21

Fisheries Program

- Collaborating to Create Coho Habitat
at Aikens Creek 10
- MKWC and the Karuk Tribe:
Going Forward with Pond Projects 12

Fuels and Fire Program

- Firewise = Fire-prepared = Fire-resilient = Fire-adapted:
An Active Process 3
- Smokey Bear’s New Message:
Partnering with Reddy, the Squirrel 4
- When Wildfire Comes to Town:
Introducing the Community Liaison Program 5
- Restoring the Balance of Fire in the Klamath
Mountains after a Century of Fire Exclusion 14
- The 4 Rights Campaign:
Prescribed Fire is Right 4 the Environment 16

Wildlife Highlight

- Beavers—Midwives to Juvenile Salmon 8

Announcements

- Klamath River Prescribed Fire Training Exchange Oct
3-Oct 15, 2016 5

Foodsheds Program

- Happy Camp Farmers Market Started! 20
- Many Hands Make Good Food 20

Watershed Education: For the Youth

- MKWC’s Summer Youth Internship 2016 1
- Creating Memorable Field Trips
through Collaboration 9

Plants Program

- Sugar Pine (*Pinus lambertiana*) 6
- Sulfur Cinquefoil (*Potentilla recta*) 7

MKWC

- Oyster Mushrooms to the Rescue 18
- Keeping MKWC Up and Running
—The Admin Story 21
- Who’s Working at MCWC 22
- What Will Your Klamath Legacy Be? 23

Thanks to our Supporters! 100% of What We Do is Powered by You!

