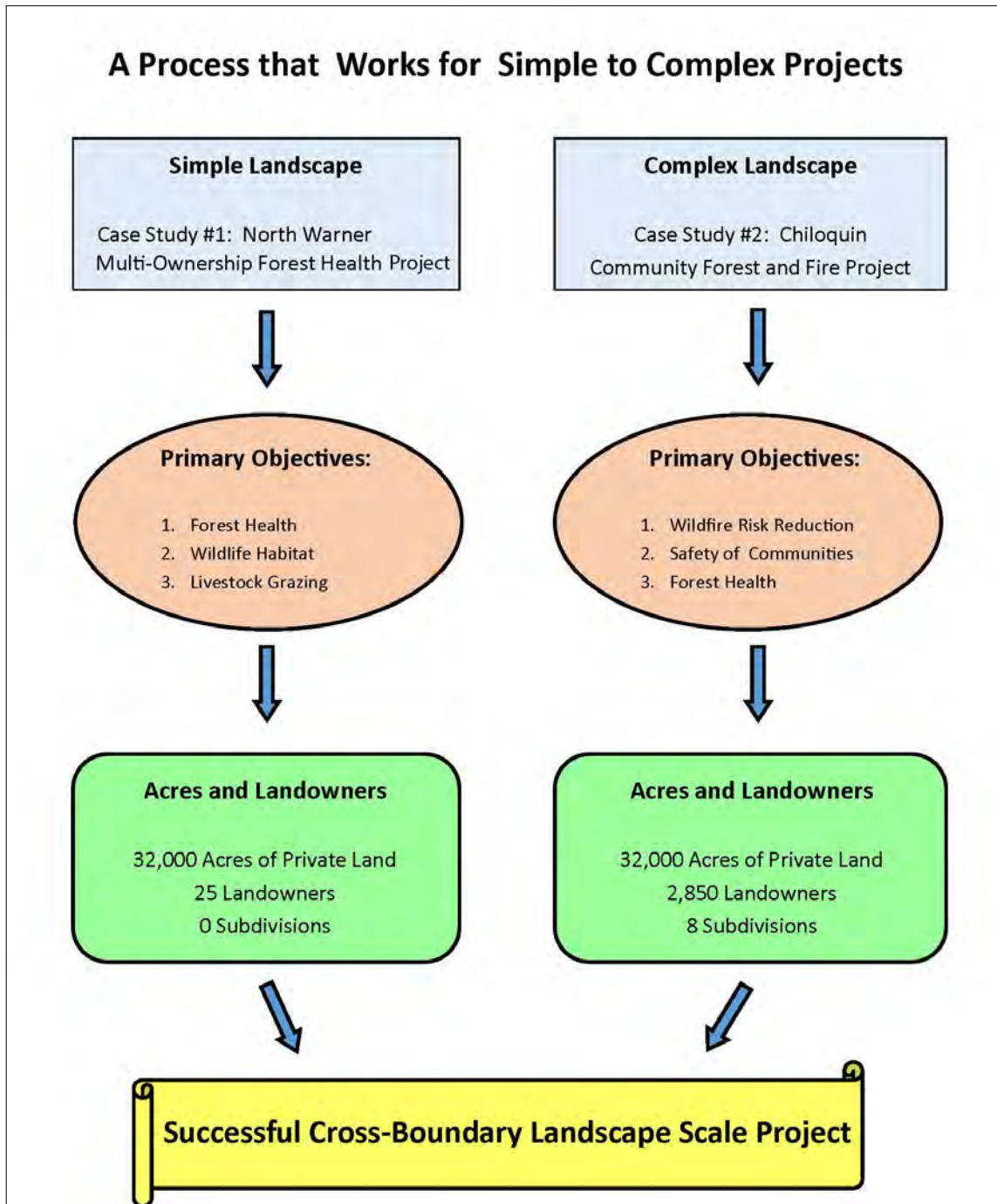


Case studies

The following case studies describe two cross-boundary, landscape-scale projects in Klamath and Lake counties of Oregon. The process has proven to work with simple to complex landscapes.



A process that works for simple to complex landscapes

CASE STUDY 1.

North Warner Multi-ownership Forest Health Project

Overview

The North Warner Landscape covers 150,000 acres and focuses on dry forest restoration. This project is unique due to the extensive stands of old legacy ponderosa pine intermixed with aspen and meadows, with greater sage grouse focal habitat immediately adjacent to the north and east. The landscape is at severe risk of uncharacteristically intense disturbance due to heavy fuel loading and stand densities. Located northeast of Lakeview in Lake County, Oregon, the project is located in four watersheds: Crooked Creek, Honey Creek, Deep Creek, and Thomas Creek. It contains 51,525 acres of USFS land, 32,000 acres of nonindustrial private forest land, 17,865 acres of nonindustrial private forest land, 47,320 acres of nonforested private land, and 1,290 acres of Bureau of Land Management land.

Goals and objectives

The goal of this project is to collaborate across ownership boundaries to implement forest health treatments to create a seamless, healthy forest landscape that is resilient to natural disturbance. The partnership has identified three objectives:

1. Improve forest health
2. Improve wildlife habitat
3. Improve livestock grazing

Methods

1. Identification of landscape

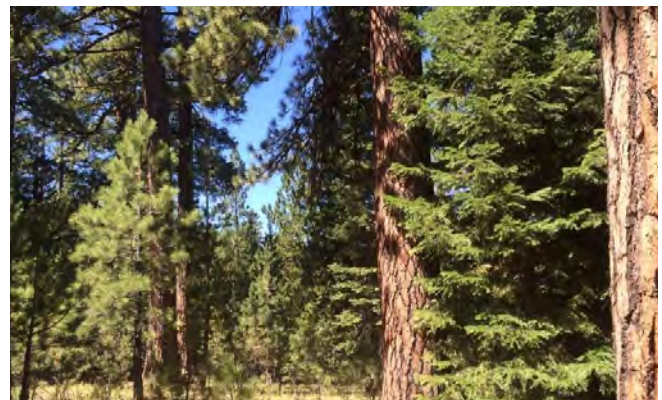
The Fremont-Winema National Forest identified vast landscapes for planning and implementation and prioritized each landscape for restoration based on USFS regional and national priorities, such as the Watershed Condition Framework and Terrestrial Restoration and Conservation Strategy, past management in the Wildland Urban Interface (WUI), current stand structure by plant association, and likelihood of crown fires in

forests. The USFS Crooked Mud Honey Integrated Restoration Project (noted as North Warner on the Landscape Restoration Areas on the Fremont-Winema National Forest in Appendix M, page 109) was the first large landscape restoration project on the Fremont-Winema National Forest. The NEPA decision document was signed in September 2015. This project authorizes forest restoration across 50,000 acres and is surrounded by nonindustrial and industrial private forestland.

To delineate the cross-boundary project area, the Partnership identified all of the forestland located within the subwatersheds that overlap with the USFS Crooked Mud Honey project. The resulting project area is approximately 150,000 acres. Within the nonindustrial private lands, there is about 32,000 acres forested or partially forested land owned by 25 landowners.

2. Landowner outreach and education

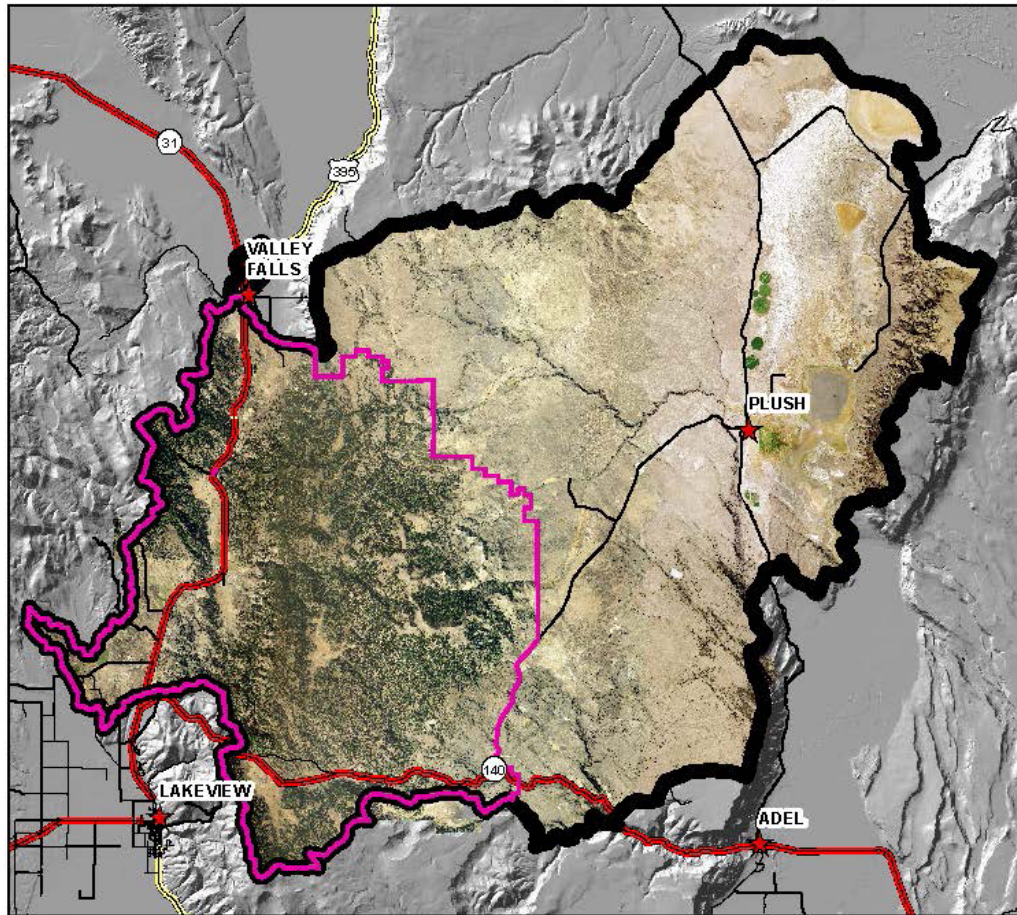
Private landowners in the project area follow state trends in forest ownership that have been identified by researchers Woodward and Cloughesy. Many owners have other occupations, and many have goals and objectives that do not focus on timber production. Most forest landowners in Lake County are cattle ranchers who own a combination of forest and pasture, with more of an expertise in ranching than forestry. The perspective of landowners in Lake County reflects the findings in the report *Western Water Threatened by Wildfire: It's not Just a Public Land Issue*. They want to do what's right for the land and are concerned about forest health, wildlife habitat, fuels reduction,



Old legacy ponderosa pine on USFS land in the North Warner Project

Photo: Amy Markus

North Warner Multi-Ownership Forest Health Project



North Warner Project area

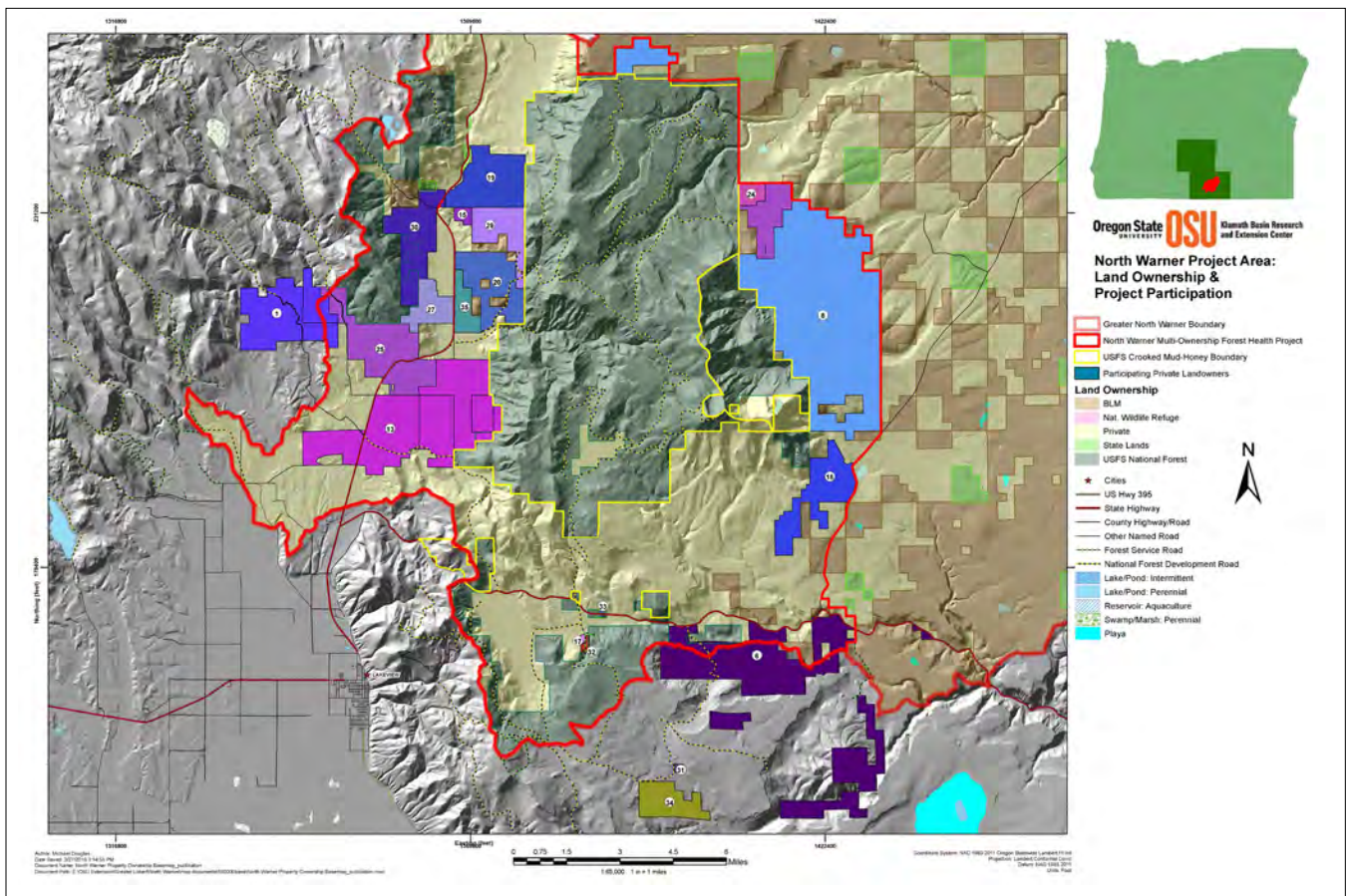
livestock grazing, and safe and efficient fire response and protection. The landowners are motivated to take action on their land; however, many lack a working understanding of forestry and fire science, in spite of wanting to do the right thing.

This landscape is located in a small rural community. There are existing relationships between the 25 landowners and partners. A partner with previous experience working with the landowners made the initial contact, reaching out to landowners by phone. Other outreach and education tools included short, 2-hour workshops on forest health and wildfire, OSU Extension Service Master Woodland Training, and a 4-hour workshop to assist landowners with the development of land management plans. Also, there were extensive one-on-one meetings with each landowner to go over the maps, data, and land management plans, and to identify treatment locations.

3. Private land mapping and rapid assessment

In 2016, Oregon Department of Fish and Wildlife funded \$50,000 to the Lake County Umbrella Watershed Council (LCUWC) to complete the mapping and rapid assessment for 25 private landowners on a total of 32,000 acres that surround the USFS Crooked Mud Honey Integrated Restoration Project. The Partnership developed a protocol for the mapping and natural resource data collection (see Appendix C, page 72) based on the resources within the project area. In addition to the overstory forest condition, additional data collection included fuel loading, understory trees, aspen condition, and noxious weed locations.

For this project, the rapid assessment conducted (to meet ecosystem restoration goals) cost about \$1.25/acre (with approximately 1,000 acres per week for mapping and field assessment).



North Warner Project participating landowners

A matrix was developed to identify both treatment recommendations and priority for restoration of each stand. See Appendix G (page 88) for a sample matrix. Finally, a series of maps were developed for each landowner and the entire landscape. These maps were used to assist with the planning, implementation, and priorities for each landowner and across the entire landscape. See Appendix I (page 90), which provides an example of maps provided to Tom White, a participating landowner in the project area.

4. Support to private landowners

OSU Extension Service offered the established Master Woodland Manager core curriculum. In addition, a land

management plan workshop was held for all participating landowners to assist each landowner in developing a land management plan for each property. Each landowner received a map book with all of the maps for their property at the 1:100,000, 1:15,840, and 1:3600 scale. In advance of the meeting, the partners developed draft prescriptions for each cover type (e.g., ponderosa pine and mixed conifer), recognizing they could be modified based on individual landowner objectives. See Appendix K (page 97), which provides an example of a recommended prescription for ponderosa pine. Also, a binder was provided to each landowner with a variety of resources, as described in Chapter 6 (page 22).

Lesson Learned: A lot of maps and data may be too much detail for private landowners

The map books that were created for private landowners are useful in a variety of ways; however, one set of maps was trying to accomplish too many objectives. Private landowners had a range of forestry knowledge and varying degrees of interest in learning more about forestry topics. Along with the landowners, land management professionals were also using these same maps to create restoration projects. However, land managers are typically more familiar with using different maps to carry out project implementation. After initially working with landowners, an important lesson emerged: Develop two “levels” of map books for partners—one for landowners with less detail and a more comprehensive version for the project forester.

Photo: Amy Markus



Land management plan workshop for private landowners

Lesson learned: Project forester – from planning through implementation

The project forester should be involved throughout the entire process—from planning through implementation and monitoring. Ideally, the project forester assists with the development of mapping and assessment protocols and oversees the rapid assessment. This involvement ensures that the necessary level of information and data are collected to complete both the planning and implementation of the project consistently and efficiently.

5. Grant writing for implementation

The private land mapping and assessment process allowed the Partnership to map and prioritize restoration across 32,000 acres of private land. With the landscape mapping, the Partnership was able to depict the bigger picture strategy for the landscape, identify treatment needs, and develop cost estimates. See Appendix L (page 103) for examples of the results of the private land mapping. This information and mapping allowed for very competitive grants proposals, most of which were selected for funding.

The North Warner Project continues to be successful in leveraging funds for implementation, and the Partnership will continue to write grants for forest management. The implementation funding secured for this project resulted in additional capacity for the Partnership by allowing ODF to hire a forester specifically to manage the North Warner Project.

See Table 2 for a list of grants that were submitted and selected for funding as of September 2018. The

The implementation funding secured for this project resulted in additional capacity for the Partnership by allowing ODF to hire a forester specifically to manage the North Warner Project.

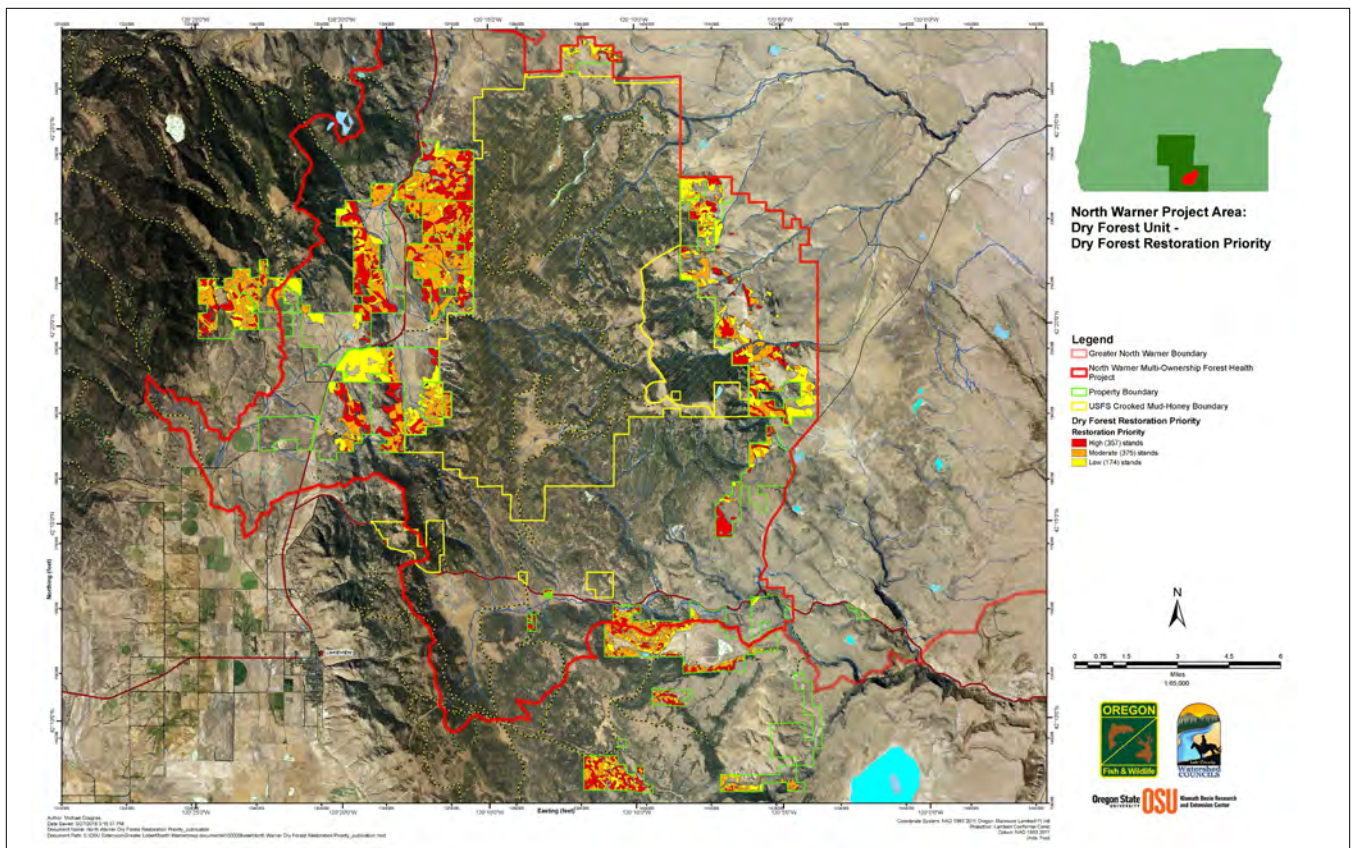
Partnership will continue to use this secured funding to leverage and obtain more funding because additional funds are needed to implement restoration on private and federal land within the project area.

6. Agreements

Agreements were created between agencies to allow for the best-suited partner to accomplish work within the project. NRCS has only one forester in Oregon who has oversight of all forest activities conducted by NRCS at the state level. As a result of this limited capacity, the NRCS district participating in the North Warner Project used the Oregon statewide agreement between ODF and NRCS. This agreement was created to provide NRCS with technical forestry assistance (in the

Table 2. North Warner Multi-ownership Forest Health Project Grant Funding (2017-2018 only)

Funding Source	Private Land		Forest Service	
	2016/2017	2018	2017	2018
Joint Chiefs	\$796,199	\$700,000	\$353,084	\$1,499,750
Title II/RAC	\$42,500		\$50,000	
OWEB	\$537,000	\$537,000		
ODFW Mule Deer Initiative	\$50,000	\$35,000		
FS Sage Grouse Funding	\$125,000	\$50,000		
FS State and Private	\$336,500			
Total	\$3,209,199		\$1,902,834	



North Warner Project restoration priorities

form of ODF staff), while financial compensation was returned to ODF for its personnel time assisting NRCS on forestry-related projects. The ODF employee helped NRCS conduct all the field work necessary for NRCS involvement in this landscape project, which included landowner interaction and creating the silvicultural prescriptions and units. In addition to the statewide agreement between NRCS and ODF, another agreement was created for ODF personnel to provide technical forestry assistance to the LCUWC, as forest activities are typically not the focus of this group. The roles associated with assisting the LCUWC were the same as the role ODF has with NRCS.

In addition to project-specific agreements, the partners used state and federal agreements to accomplish work on the landscape. One of these agreements, the Good Neighbor Authority, allowed ODF to administer and conduct work on federal ground for small tree thinning and slash treatment. The state of Oregon also created a Federal Forest Restoration (FFR) program which was funded through state dollars to assist the USFS with increasing the pace and scale of restoration. Within the North Warner Project, the FFR program helped the USFS in timber presale activities, such as flagging and tagging of sale units and boundaries.

Lesson learned: The importance of land management plans for guiding landowners

Developing a management plan takes time. With very limited resources available to write multiple management plans, the Partnership decided to collectively develop land management plans (meeting the Oregon Forest Management Planning System Guidelines) for each landowner. This was completed by providing each landowner with maps, data, and treatment recommendations from the mapping and assessment. In addition, each member of the Partnership, who had an area of expertise, developed a recommended prescription for each vegetation type, which was also included in the land management plans. With all of this information, most of the land management plan was completed for each landowner.

After completing the draft land management plans, a workshop was hosted to assist each landowner with completing their portion of the plan. The Partnership encouraged and assisted landowners in identifying their own goals and objectives based on their desires for their property. By the end of the workshop, each landowner had a plan that meets the specific requirements of various agencies and entities, and, if they choose to, provides a way for them to become members of the Oregon Tree Farm System.

7. Implementation

In the implementation phase of a landscape-scale project, all the hard work between partners and landowners comes to fruition. For the North Warner Project, this involved getting together with individual landowners to discuss the grants they had access to and to help landowners understand that monies coming from the LCUWC may have slightly different objectives compared with those coming from NRCS. It was important to talk with the landowners about the different grants, explain which agency would administer each award, and identify who would be in the field conducting the work of the granting agency. This discussion was important for the landowners, as many different agencies were working hand in hand to carry out the objectives for the landscape.

Once landowners were clear on which partner they would be working with, and in what capacity, the next step was to determine the landowners' objectives, as referenced in their management plans, and any forest health issues they were aware of. Through discussion with the participating landowners, three main forest health issues emerged as common across the landscape: creating fire resilient stands, decreasing juniper presence (and as a result returning water to their lands), and providing healthy forest habitat and forage for wildlife and livestock. Conifer thinning (reduction in stocking levels of submerchantable material) and juniper cutting treatments were carried out to facilitate these objectives.

Two main grant sources worked to achieve these treatments: Joint Chiefs funding through the NRCS Environmental Incentives Program (EQIP) and Oregon Watershed Enhancement Board funding through LCUWC. In addition, the USFS provided state and private funding to ODF for treatments on private land.

The next step was to get boots on the ground to assess forest health issues. During this phase of implementation, field staff used a combination of maps developed through the private land rapid assessment to address landowner objectives. At this point, it was important to observe forest health as a whole and note where isolated issues were causing degradation as a result of species encroachment or insect or disease presence. When conducting field reconnaissance, it was also important to observe any features present that would help with creating the logistical plan for carrying out treatments; these features typically consisted of roads on the property, skid trails associated with previous harvest activities, streams, and natural stand boundaries. During the field aspect of the project, it was critical to establish monitoring points and collect

Acres Accomplished in the North Warner Project: 2015-2018

	Private	USFS
Total acres treated or in progress 2015-2018	5,082 acres	21,351 acres
Total acres left to treat	12,806 acres	10,190 acres

the necessary data to be monitored before and after the completion of the project.

Once the field reconnaissance was complete, a follow-up meeting with the landowners and granting agencies was scheduled to discuss treatments, acreages, and responsibilities. Once treatment options and units were created, the next step was to discuss who the landowner wanted to hire to complete their project treatment. A list of local contractors was provided at this time. To assist the landowner with this process, the project manager can conduct a bid tour with interested contractors or the landowner can hire a contractor directly. A bid process can provide valuable information regarding contractor experience and an opportunity to select a fair price for the project treatment. Either method is acceptable as long as it meets the needs of the contracting/granting organization. As work was initiated on the treatment units, it was essential to visit the site within one or two days to verify that the silvicultural prescription is being met, that the operator was clear about the expectations, and that the landowner agreed with the prescription and activities being conducted.

After completion of the project, it was time to visit the monitoring points to collect follow-up data. The schedule for posttreatment monitoring occurred at different times, depending on the granting agency; however, this data will be collected at a minimum of three times post-treatment.

8. Ecological, social, and economic benefits

Ecologically, this project has resulted in forest health treatments at a scale commensurate with the challenge of reducing the risk of wildfire and the risk of insect and disease on USFS, private nonindustrial, and private industrial land. On USFS land, in particular, this will reduce the risk of loss of old legacy ponderosa pine and greater sage grouse focal habitat. On private land, this reduces the risk to high-priority land used for timber production, livestock grazing, wildlife habitat,

and aesthetics. Aspen stands will be restored for wildlife habitat, juniper cutting will increase water capacity, and noxious weeds will be treated.

Through this landscape-scale project, thousands of acres of typically nonmerchantable renewable forest products will be cut and piled, with the final action being burning them once they have cured. However, when dealing with the landscape, opportunities may arise to use this typically nonmerchantable material and create jobs to facilitate the completion of this work.

Specifically, within the North Warner project, numerous acres of juniper will be cut. Traditionally, this material would then be piled and burned. Juniper is a very tough wood and, as a result, is underutilized for its potential as a renewable wood product; however, niche markets exist across Oregon to mill juniper and provide products. Juniper trees in Lake County are reported to have a higher degree of desirability among those who sell milled juniper when compared with juniper sourced elsewhere within the state. As a result of better juniper quality in Lake County, opportunities have evolved to market these trees for dimensional lumber use, and create markets and jobs for a traditionally nonmerchantable species. Along with specialty and dimensional lumber, juniper can be used for producing bio-fuel. Biomass facilities convert juniper to electricity or convert it to biochar (a soil additive to aid in water retention in arid and sandy soils).

Along with direct economic benefit from using the products created from a landscape-scale restoration project, new jobs are created to carry out the work across thousands of acres. Within a given area there is typically an equilibrium in place that balances the demand for forestry work with the number of local operators. However, when a landscape-scale project comes online for a given area, there will usually be a need to increase the local workforce to achieve the goals and timelines put in place. This increase in needed manpower provides an additional economic benefit to the community, as more workers will be in the area contributing to the economic viability of the community by purchasing goods and services.

Looking ahead

There are several landowners interested in the use of controlled fire, including pile burning and prescribed fire, so the Partnership is preparing for this opportunity. There are several concepts in progress to advance cross-boundary prescribed fire:

- A pile burning and prescribed fire workshop for private landowners
- Landscape cross-boundary burn plans
- Creation of a South Central Oregon Prescribed Fire Chapter of the Oregon Prescribed Fire Council
- Preparing the necessary agreements between agencies or between agencies and private landowners

“It was very rewarding to be a part of a project where a variety of entities—from federal, state, and local governments to nonprofit organizations to other private landowners—came together to contribute in any way they could to achieve a common vision for accomplishing multiple forest restoration and management objectives on private forest lands. Everyone involved has a connection to the land and desires to see positive forest management across the landscape, benefiting all ownerships and all resources. This project is a win-win for everyone.”

Kellie Carlsen, retired ODF Stewardship Forester



CASE STUDY 2.

Chiloquin Community Forest and Fire Project

Overview

The Chiloquin Community Forest and Fire Project is composed of approximately 32,000 private landowner acres owned by about 2,850 individuals and includes numerous subdivisions and the town of Chiloquin (population 734). The landscape is very diverse, with 60 percent forested land. The entire area is high-risk for wildland fire as identified in the Chiloquin Community and Klamath County Wildfire Protection Plans (CWPPs). Dense stands of ponderosa pine and areas of thick bitterbrush dominate the landscape. Chiloquin was a bustling lumber and railroad center with over 2,000 residents and three sawmills in the 1930s. The closure of the railroad depot, the overlogging of the nearby forests and subsequent decline of the lumber industry, and in 1954, termination of the Klamath Indian Reservation, brought about the community's decline. Today, the community infrastructure and safety of its residents are at extreme risk of potential wildland fire.

Goals and objectives

The goal for this project is to collaborate across ownership boundaries to implement forest health treatments. This cross-boundary approach creates a seamless, healthy, forested landscape that is resilient to natural disturbance while supporting a partnership to implement work across private and public lands. The Partnership has identified three objectives:

1. Wildfire risk reduction
2. Safety of communities
3. Forest health

Methods

1. Identification of landscape

The Fremont-Winema National Forest identified large landscapes for planning and implementation, and prioritized each landscape for restoration based on USFS regional and national priorities (such as the Watershed

Condition Framework and Terrestrial Restoration and Conservation Strategy), past management in the Wildland Urban Interface (WUI), current stand structure by plant association, and likelihood of crown fires in forests. The USFS Lobert and East Hills Integrated Restoration Projects (noted as Lobert and Black Hills on the Fremont-Winema National Forest in Appendix M, page 109) are large-landscape, accelerated-restoration projects on the Fremont-Winema National Forest.

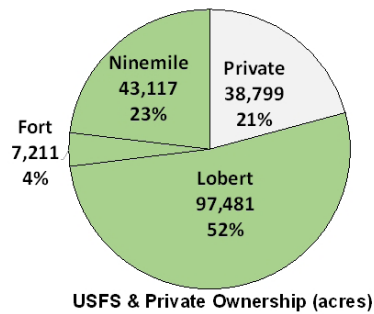
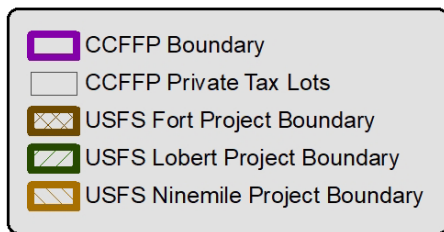
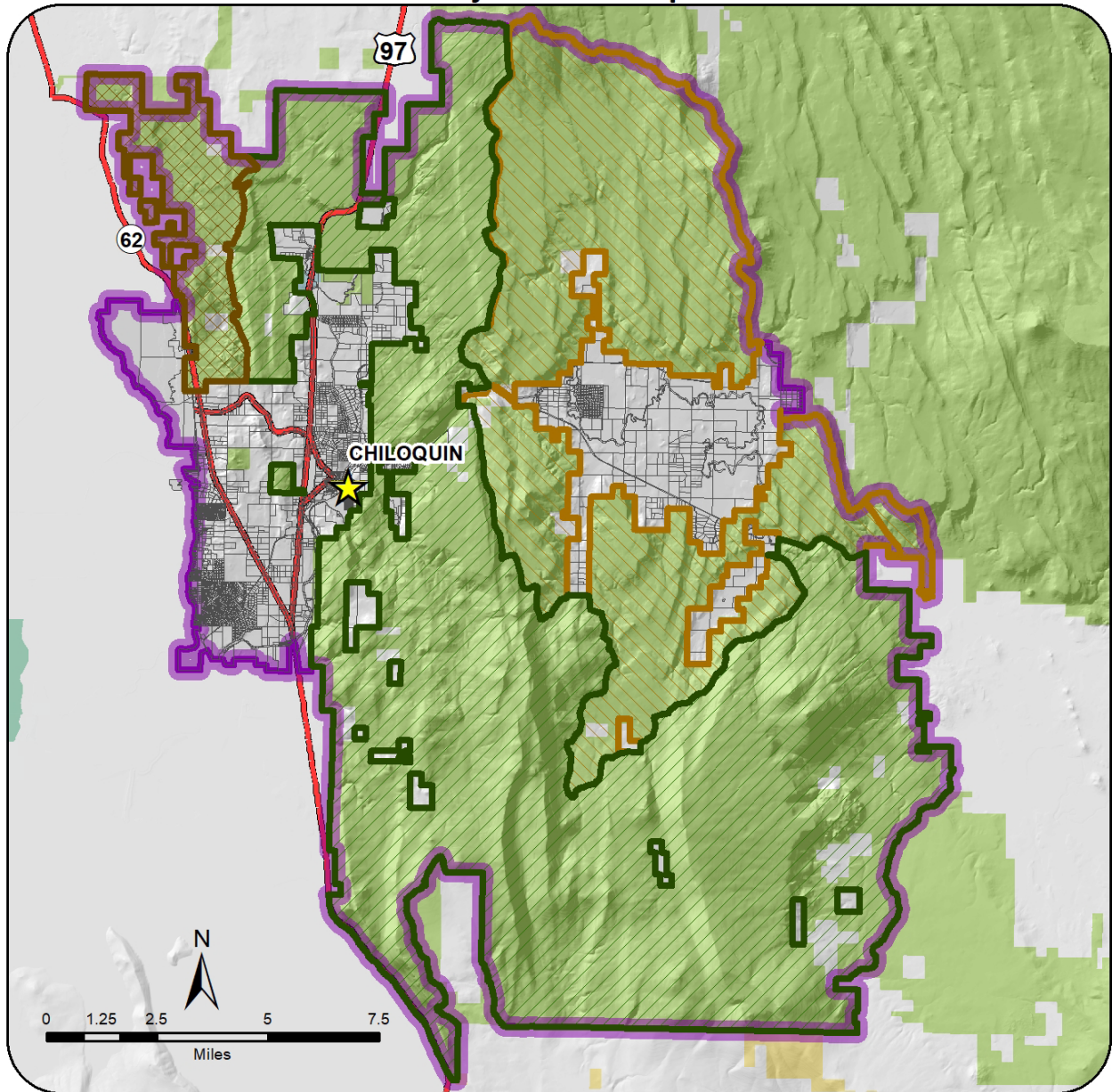
Partners within the KLFHP conducted a risk assessment in February 2016 of all private lands in Klamath and Lake counties to determine which landscape to focus on in the pending NEPA-ready Lobert (100,000 acres) and East Hills (140,000 acres) project areas. A variety of risk rating criteria included: land ownership, broad vegetation classes, fire history, communities at risk identified in the Community Wildfire Protection Plans and the Oregon State Communities at Risk Project, and personal knowledge of the landowners and communities. Based on the risk assessment, two landscapes were selected to the west and east of Chiloquin, totaling approximately 32,000 acres of private land.

2. Landowner outreach and education

Private landowners in the project area follow state trends in forest ownership identified by researchers Woodward and Cloughesy. Many owners have other occupations, one out of four lives outside the local area, and many have goals and objectives that do not focus on timber production. The perspective of landowners in Klamath County also reflects the findings in *Western Water Threatened by Wildfire: It's not Just a Public Land Issue*. Most landowners want to do what's right for the land and are concerned about forest health, wildlife habitat, fuels reduction, livestock grazing, and safe and efficient fire response and protection. Landowners are motivated to take action on their land; however, many lack a working understanding of forestry and fire science, in spite of wanting to do the right thing.

The American Forest Foundation (AFF) (\$17,000) and the Oregon Forest Resources Institute (OFRI) (\$17,000) provided OSU Extension Service grants to organize an education and outreach effort that is concurrent with the private land mapping and assessment.

Chiloquin Community Forest and Fire Project Project Area Map



CCFFP area

The outreach effort was organized by creating an Excel spreadsheet of landowners in the project area based on tax lot records for Klamath County. The database consisted of nearly 4,850 tax lot entries that were extensively cleaned and sorted to: 1) merge parcels with the same ownership; 2) to use one naming convention for the tax lots owned by the same landowner; and 3) make sure the entry is current. This consolidated the number of entries from 4,850 taxlots to a concise list of 2,850 unique landowners, some of whom own multiple taxlots. For project tracking, columns were added to the spreadsheet with headings like “Permission for Inventory” and “Requests Site Visit from a Forester.” Based on county records, the only means of initial contact with landowners was by mail.

From that foundation, landowners were stratified into four categories to allow development and execution of tailored outreach strategies:

- Category 1 - Subdivisions with homeowners association (HOA) or road district (RD)
- Category 2 - Subdivisions without homeowners association (HOA)
- Category 3 - Mid-sized tax lots (<10 acres)
- Category 4 - Larger tax lots (>10 acres)

Category 1 included subdivisions with multiple, small tax lots with a homeowners association or road district, or with a city council and mayor. There were 13 Category 1 subdivisions, including the town of Chiloquin. Project partners contacted the governing board to do a one-on-one meeting to discuss the project and provide information, including project and subdivision maps. When the board had buy-in, they contacted the homeowners through targeted meetings to provide an overview of the project with educational components (1 to 2 hours) and maps of the project and subdivision. Partners followed up with the board to develop a plan for the subdivision.

Category 2 included subdivisions with multiple small tax lots without a homeowners association; there were five Category 2 subdivisions. Outreach began with mailings to all of the landowners following a similar method used by OFRI: an initial mailing, a second mailing, a postcard return, and follow-up personal contact. Mailings included site-specific information gathered on fire risk and forest health, including project and subdivision maps. Partners conducted a 1- to 2-hour workshop tailored to this category, and provided an overview of the project with educational components and maps of the project and subdivision. Partners

looked to develop advocates from within the subdivision who would personally contact their neighbors and help spread the word. Partners worked to gain buy-in from a majority of the landowners and develop a plan for the subdivision.


Category 3 and Category 4 included mid-sized tax lots (1 to 10 acres) owned by local and absentee landowners. Category 4 included larger-sized tax lots (>10 acres) that were often owned by livestock producers or are private industrial land.

Category 3 and Category 4 represents three-fourths of the project acreage, with 269 landowners. With no organizational structure and an abundance of absentee landowners, outreach for Categories 3 and 4 was heavily dependent on personal relationships, supplemented by mailings. Partners with relationships to landowners were asked to make direct contact to explain the project. Mailings were sent to all landowners following OFRI’s method of an initial mailing, secondary mailing, postcard return, and follow-up personal contact. Partners also went door to door and used other strategies, such as contact during implementation activities, phone calls, or other means. Landowners were encouraged to reach out to adjoining neighbors. Education in these categories occurred primarily through site visits with engaged landowners and community meetings about the project.



Landowners were contacted using a variety of tools such as phoning, mailings, workshops, newsletters, webpage, and social media to describe the project, build interest, request landowner information (i.e., contact information), and offer to complete a forest and fire risk mapping and inventory of their property. The Partnership created a variety of outreach materials for this effort, including a trifold brochure, door hangers, and folders of information about the project, forest health, and wildfire preparedness. A fact sheet was created for partners to reference in conversations with interested landowners. The KLFHP website included the Chiloquin Project prominently with contact information for key partners and a notice for community meetings and workshops. The website also included an option to contact the Partnership via email.

3. Private land mapping and assessment, and wildfire response preattack plan

Through a participating agreement between the Fremont-Winema National Forest and OSU Extension Service, \$50,000 was allocated to complete a GIS map and assessment for the vegetation and natural resources, using a protocol similar to the North Warner project (see to Appendix C, page 72). A \$33,058 grant



Chiloquin Community Forest and Fire Project

Community Meeting

Wednesday, August 16th


2:00 - 4:00 pm

Chiloquin Community Center

Have you seen crews working on wooded lots north of town?

It is the beginning of a multi-year collaborative effort to reduce the wildfire risk for our community!

If you own acres within the areas **highlighted** in the map, please come to our community meeting to learn about how we can help you make your property more fire resilient.



Learn more at www.KLFHP.org



WHY MANAGE YOUR FOREST?



By working together we can make our community safer and more beautiful.

*-Mike Cook
Fire Chief, Chiloquin Fire and Rescue*



map_2016_08



The Chiloquin Community Forest and Fire Project is bringing technical and financial support to achieve fire resistance, fire response, forest health, wildlife habitat, and grazing objectives on private land on a landscape scale -- we need your involvement to make a difference for our community!



If you own land within the **Project Area** highlighted in the map, then we'd like to talk with you!

**NO COST
NO OBLIGATION
JUST PEOPLE HELPING PEOPLE**

Give us a call or come to one of our meetings to ask the questions you need answered.

541-883-7131 (OSU KBREC)
or visit
www.KLFHP.org
to learn what we can do for you.

CCFFP workshop flyer (above); front and back sides of door hanger (right)

from OWEB to the Klamath Watershed Partnership enabled additional mapping and assessment for the Wildfire Risk Assessment (see Appendix D, page 75). A matrix and map were developed to identify both treatment recommendations and priority for forest stand restoration. A separate matrix was developed to identify and prioritize fire response needs.

For this project, the rapid assessment conducted to meet ecosystem restoration goals costs approximately \$1.25/acre (around 1,000 acres per week were mapped and assessed). Approximately 6 to 10 homes were assessed per day (which included landowner outreach) for the wildfire risk assessment.

In 2017, the 32,000 acres in the project area were mapped for overstory cover type, density, and age using 1-meter resolution NAIP imagery and field verification. Additional data were also collected in the field on such things as shrub species/height/density and noxious weeds. Prioritization of areas was developed based on vegetation condition and community wildfire risk (e.g., population density, limited ingress/egress, critical telecommunication or transportation infrastructure). The local fire chief and USFS fire staff contributed significantly to the community wildfire risk priority mapping.

This process identified 13,110 acres or 40 percent of the project area as high priority. Based on this prioritization, ODF crews began wildfire risk assessments in the high-priority implementation area in early 2018. These risk assessments provide additional information regarding structures, water sources, and other variables critical to wildfire response, and the data collected are being incorporated into local emergency response mapping software (see to Appendix E, page 79). The crews are accomplishing outreach objectives concurrently; they leave project door-hangers and, when possible, have one-on-one conversations with landowners and provide project folders with additional information. All vegetation data and wildfire risk assessments are georeferenced and linked to the database of outreach contacts described above.

4. Support to private landowners

To date, the project has mailed nearly 6,200 pieces of mail ranging from general Chiloquin Community Forest and Fire Project brochures for the entire project area to subdivision-specific meeting announcement flyers. More than 200 landowners have become engaged through these initial efforts. Five separate community meetings have been held during the last year. More than 150 individuals have had site-specific discussions or field visits from an OSU Extension Service forester and/or ODF forester, making individual site visits with some turning

Tools to success: Beyond the mailing list—managing a contact database for project accountability

It can be a daunting task tracking landowners and associated information within a landscape-scale restoration project. Gone are the days of handwritten ledgers, but don't let the ease of spreadsheets, or even online services, lull you into setting up a database without careful planning. Thinking through your data needs and uses from project initiation to completion will help ensure you develop a useful tool that doesn't require hours of reworking and reformatting later.

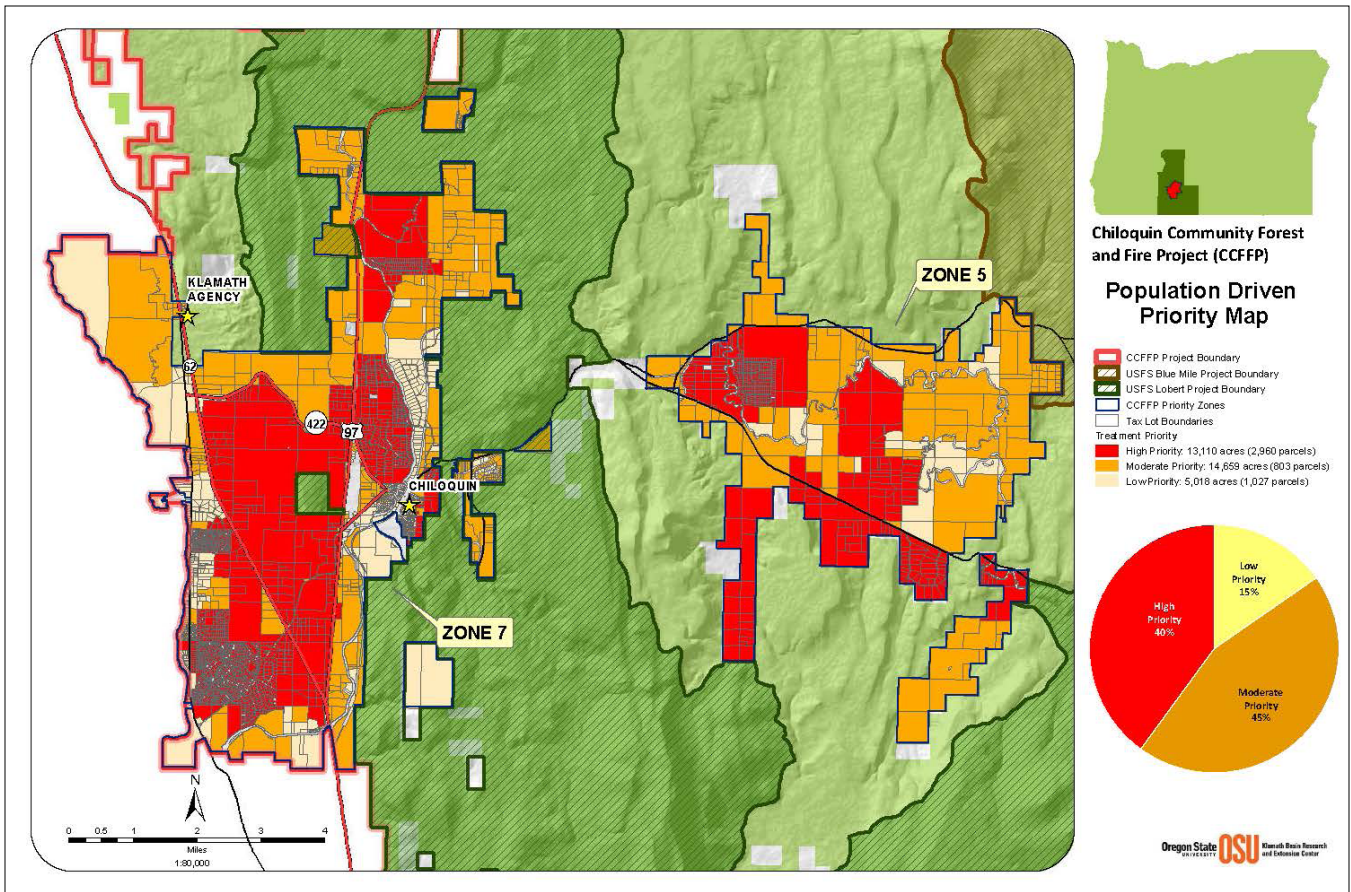
A functional contact database is more than a mailing list—it provides everything from the foundation for stakeholder development to tracking project accomplishments. Its development is a critical component of a landscape-scale project. Whether starting with an existing list, such as tax lot owners, or from scratch, consider that you may need to sort by various attributes, map your data, and create summary tables or charts. A sustainable database is user-friendly and in a platform that can be transferred to or accessed by project partners.

For the Chiloquin Project, Excel provided shareable spreadsheets that integrated with GIS software, pivot tables that sorted and summarized data, and online support that could help even novice users organize and display information. Portions of these spreadsheets were also imported into an online Sharepoint site for workflow tracking. Keep in mind that although some property information is publicly accessible, privacy issues regarding personal information must be respected and reflected in the database. A dynamic contact database will provide efficiency and accountability, which are critical elements for projects using public or grant funds.

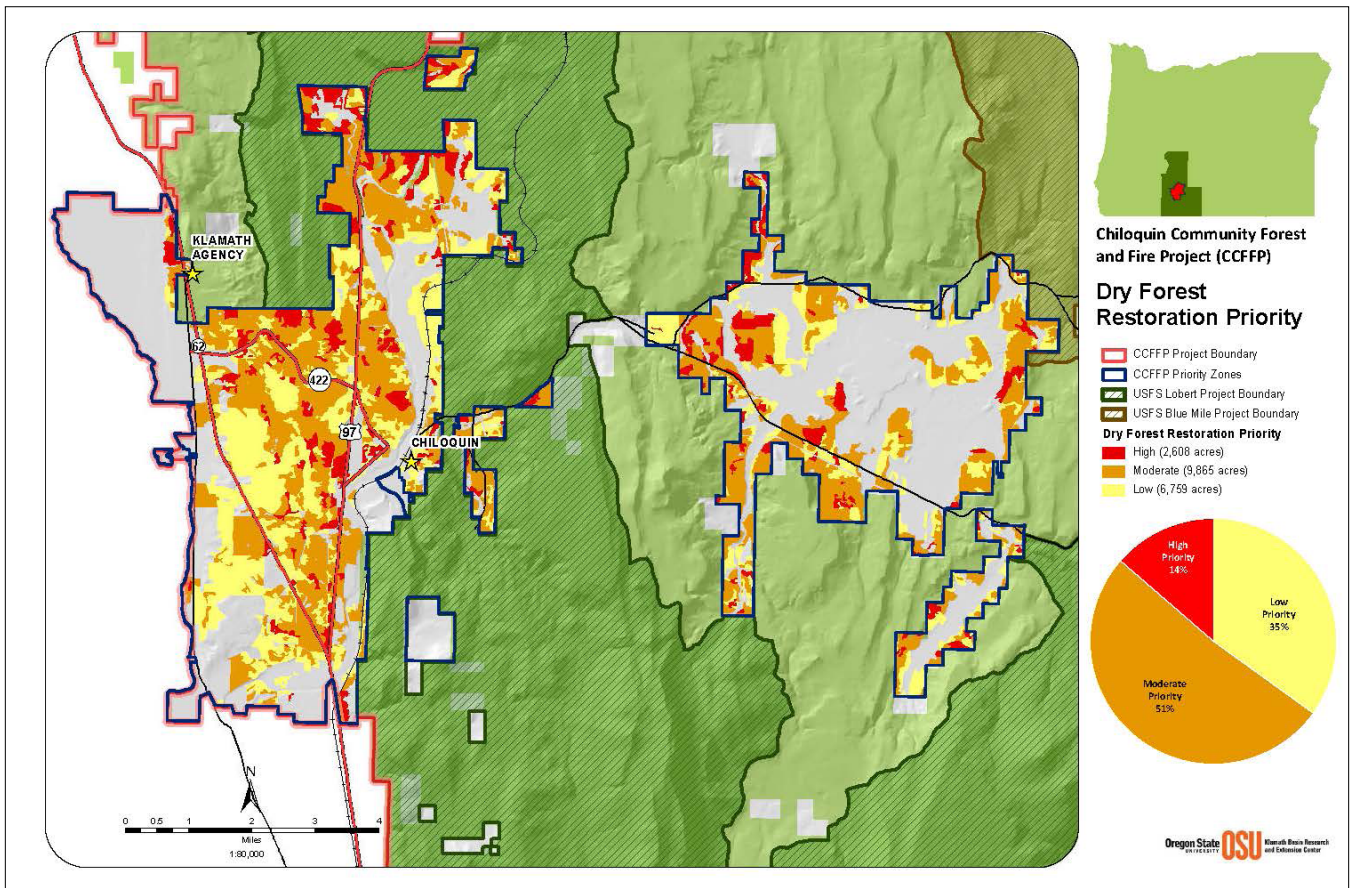
into impromptu forest health and/or fire risk workshops.

Assistance to landowners for forest restoration practices began in summer 2017 with pruning, thinning, and brush clearing in high-priority areas. A 2009 FEMA grant supplied funding. With the additional outreach and mapping that has occurred during the last nine months, treatment maps and forest management plans are being developed on the subdivision scale, where appropriate, and for private parcels where landowners have become engaged.

Project partners assisting landowners included the ODF, Chiloquin Fire and Rescue, NRCS, OSU Extension



Chiloquin Community Forest and Fire Project fire risk priority



Chiloquin Community Forest and Fire Project forest health priority

Photo: Amy Markus



Forest health workshop in Klamath County

Service, USFS, TNC, and the Klamath Watershed Partnership (KWP). Partners have ensured that projects are completed to specifications of the site/subdivision plan, with additional consideration for the sources of the funding (e.g., certification of conservation practices for NRCS-funded projects). Over the next five years, partners will provide ongoing monitoring through spot checks and inspections to ensure prescriptions are being maintained and will provide technical assistance to landowners when needed.

5. Grant writing for implementation

Support to continue outreach and planning activities for the next 24 months may be available from OWEB, OFRI, AFF, and the NFF, in conjunction with substantial in-kind support from project partners. Support for implementation is or will be sought from OWEB, State Fire Assistance WUI Grant(s), NRCS EQIP USFS Joint Chiefs or Supplemental Fuels, National Fish and Wildlife Foundation, and Pre-Disaster FEMA.



Photo: Leigh Ann Vradenburg

Implementation in the Chiloquin Project Area

Looking ahead

As funding is gained for implementation, the Partnership will develop agreements and implement them on private land, similar to the approach used in the North Warner Project (see pages 40–46). As funding is gained for implementation, this will allow for added capacity within the Partnership to oversee the entire project (i.e., ODF forester). There is a backlog of landowners who have requested a site visit and have a desire to manage their property. In this complex landscape with multiple landowners, long-term project oversight and coordination will be extremely important.

A challenge discussed within the Partnership is the long-term maintenance of forest treatments. Prescribed fire as a tool may be limited in some areas due to the structures throughout the landscape and prolific shrub growth. The Partnership will need to be creative with long-term funding and resources for private landowners.

The Partnership is currently developing a wildfire risk mitigation and response preattack plan for the project area, in partnership with state and county emergency management authorities. This planning will further strengthen the fire-adapted communities and the safe and effective wildfire response goals of the Cohesive Strategy.