Location: City Hall – Council Chambers
Date: May 23, 2023
Time: 6:00 PM

City Council Meeting Agenda

Mayor Jason Beebe, Council Members Steve Uffelman, Janet Hutchison, Shane Howard, Gail Merritt, Scott Smith, Raymond Law and City Manager Steve Forrester

ATTEND TELEPHONICALLY BY CALLING 346-248-7799 Meeting ID: 947 5839 2608 Passcode: 123456

Call to Order

Flag Salute

Additions to Agenda

Consent Agenda

1. Regular Meeting Brief 4-25-2023
2. PD Property Conversion

Visitors, Appearances and Requests

Council Presentations

Council Business

Staff Reports and Requests

3. City Manager's Report - Steve Forrester
4. Prineville Renewable Energy Project (PREP) Update - Caroline Ervin

Committee Reports

Ordinances

5. Ordinance No. 1284 - Adopting Changes to Prineville Municipal Code Chapter 131 - Jered Reid
6. Ordinance No. 1285 - Adopting Changes to Prineville Municipal Code Chapter 93.59

Resolutions

7. Resolution No. 1555 - A Resolution for Crook County Enterprise Zone Boundary Re-Designation - Kelsey Lucas
8. Resolution No 1556 - Consenting to Crook County Ordinance No 338 Adopting New Chapter to Reduce Incidents of Truancy From Crook County Public Schools - Jered Reid

Visitors, Appearances and Requests

Adjourn

Agenda items maybe added or removed as necessary after publication deadline

CITY OF PRINEVILLE
Regular Meeting Brief
387 NE Third Street – Prineville, OR 97754
541.447.5627 ph 541-447-5628 fax

Full Meeting Recordings Available at:
http://cityofprineville.com/meetings/

City Council Meeting Brief
April 25, 2023

Council Members Present:
Jason Beebe
Shane Howard
Janet Hutchison
Ray Law
Scott Smith
Steve Uffelman

Council Members Absent
Gail Merritt

Additions to the Agenda

Discussion for May 9th Council Meeting under Council Business.

Consent Agenda

1. Regular Meeting Brief 4-11-2023

Councilor Smith made a motion to approve consent agenda as presented. Motion seconded. No discussion on motion. All in favor, motion carried.

Visitors, Appearances and Requests

No one came forward.

Council Presentations

None.

Council Business

2. Enterprise Zone Extension – **Public Hearing** – Kelsey Lucas

Mayor Beebe opened the public hearing portion of the meeting.

Kelsey Lucas – EDCO Prineville Area Director explained that this is basically to hear from other taxing districts regarding the Enterprise Zone and has nothing to add from her presentation at the previous meeting.

Jered Reid, City Attorney provided additional information regarding the four open forums that Ms. Lucas held for the taxing districts to attend and ask questions. Only one forum had anyone attending.

Ms. Lucas added that she did a presentation for the School Board and only comment was payment to bonds. There is a county meeting on May 3rd for public comment as well.

There were no questions from Council.

No one came forward and no written comments were received.

Mayor Beebe closed the public hearing portion of the meeting.

3. **HB 3115 & Possible Ordinance Regulating Camping Within City Limits –** Jered Reid

Jered Reid, City Attorney referred to the memorandum in the packet that provided the legal background information on judicial decisions that have been made and the two house bills regarding public property. It essentially creates a mechanism for plaintiffs and homelessness to file suite. They have been having homelessness focus meetings regarding this.

Mr. Reid continued with the 8th Amendment of the Constitution and other cases such as Robinson v. California and Martin v. Boise and background of those cases. The Martin v. Boise case caused some confusion. Blake v. Grants Pass is in the 9th Circuit Court where they will take a look at it and will have an appeal. A couple of key points came from the Blake v. Grants Pass hearing and the Oregon Supreme Court determined that punishment is punishment.

HB 3115 comes into effect on July 1st, 2023. The objectional reasonable language is very important and is defined to keep warm and dry. HB 3124 also goes into effect on July 1st. It will do such things as increasing notification time period from 24 hours to 72 hours. Chief Seymour has already been working on Lexipol to update the city policy to make sure it is compliant.

Governor Kotek provided funding that will be handled by Central Oregon Intergovernmental Council (COIC) for homelessness.

Mr. Reid explained that we are also looking at our other codes such as parking and RV's and will bring those forward as well.

Mr. Reid went through what cities cannot do and what they may do.

Councilor Hutchison asked if by amending the camping ordinance if it would eliminate any law suits against the city. Mr. Reid said that we can not prevent a lawsuit but can effect whether it is successful.

COIC got $13.9 million for homelessness needs regionally and it needs to be spent relatively quickly and also has a wide range of what it can be used for.

There were no further questions.

Mr. Reid said the ordinances will be coming forward in probably late May which will have an emergency clause.

4. **May 9th City Council Meeting Discussion**

We have determined that we will have a majority of council members absent from the May 9th meeting and will not have a quorum to conduct business and staff is looking for a motion to cancel the May 9th meeting.

Councilor Law made a motion to cancel the May 9th, 2023 Council Meeting. Motion seconded. No discussion on motion. All in favor, motion carried.

Staff Reports and Requests:

5. **City Manager's Report–** Steve Forrester

Casey Kaiser, Public Works Director presented the City Manager's report on behalf of Steve Forrester.

Mr. Kaiser announced that the solar field is operational and is anticipated to offset electrical costs by approximately $100,000. We are successfully metering and earning credits already.

Mr. Kaiser continued with the rest of the Manager's report adding that we are planning to pave the Barnes Butte Recreation Area (BBRA) on May 14th weather permitting, and a reminder that Council has the Priorities Strategy Workshop on June 7th.

Councilor Hutchison added that it was great that we could send a couple of our officers to participate in the ceremonies for fallen Officer Joe Johnson of Nysa.

Committee Reports

Councilor Hutchison provided an Ochoco Forest Collaboration meeting update explaining that they had a full member meeting. They also had a guest speaker that talked about prescribed fires, health and all of the considerations to be made for the prescribed burns. The smoke from prescribed burns also has an effect on wine grapes.

Councilor Smith attended a Central Oregon Area Commission on Transportation (COACT) meeting a couple of weeks ago and the biggest thing on the agenda is that California just passed a carb emissions law which is primarily directed first to government agencies. Oregon will likely follow suit with that. It will put a very difficult financial component on government agencies. Daimler did a presentation that talked about the difference between the cost of a semi chassis costing about $150,000 and if it goes to electric vehicle (EV) will cost about $500,000.

Councilor Smith also attended the Chamber meeting and they are looking at a fall festival likely in September and it sounds very interesting.

Mr. Kaiser added that he is an elected Chamber board member and his term ends June 30th and that the annual chamber dinner is on May 20th.

Mayor Beebe talked about the Finance Committee meeting he just attended and how informative it was.

Councilor Uffelman and Mayor Beebe were able to meet with US Senator Merkley and were able to talk about juniper remediation. Senator Merkley agreed that the remediation led into water. He is also very adamant about pushing for electric vehicles which led to the discussion of the electric vehicle that recently got stuck in the woods and had to be rescued. Senator Merkley will be pushing for EV infrastructure.

There were no other reports.

Ordinances:

None.

Resolutions

6. **Resolution No. 1552 – approving an IGA with the State of Oregon Department of Transportation for Roads Transportation Intersection Updates –** Casey Kaiser

Mr. Kaiser explained that this is a really simple agreement and ODOT likes to have these agreements in place before accessing city property. They want to put some warning signs up with some striping for the safety improvements being made to the intersection.

There were no questions.

Councilor Smith made a motion to approve Resolution No. 1552. Motion seconded. No discussion on motion. All in favor, motion carried.

7. **Resolution No. 1553 – Approving a Personal Services Agreement with Divergent Engineering Services, LLC to Provide Engineering Services Regarding Prineville Water Treatment**

Mr. Kaiser provided a summary of the purpose of this resolution and that detailed conversations regarding these findings were had at the last Council meeting.

Councilor Smith asked that paragraph 1. of the resolution be corrected to read "materials" rather than "martials".

There were no further discussions.

Councilor Hutchison made a motion to approve Resolution No. 1553 with the correction as stated. Motion seconded. Councilor Hutchison wanted to thank Public Works for having a public hearing to see if there was anyone else that had anything to say. No further discussions. All in favor, motion carried.

8. **Resolution No. 1554 – Approving a Personal Services Agreement with Dowl, LLC to Provide Personal Services for Engineering Services Regarding Transportation Design –** Casey Kaiser

Mr. Kaiser provided background information stating that back in 2020, the city decided to move forward on a concept design to determine how much right of way (ROW) would be needed for this project. The initial design has been completed and the ROW acquisition was completed and with final design makes this project shovel ready. There is ARPA money involved for this project and DOWL has committed to having this completed within the timeline needed.

Discussions continued regarding having a signal required and the railroad crossing being incorporated.

No further discussions or questions.

Councilor Howard made a motion to approve Resolution No. 1554. Motion seconded. No discussion on motion. All in favor, motion carried.

Visitors, Appearances and Requests:

No one came forward.

Adjourn

Councilor Smith made a motion to adjourn the meeting. Motion seconded. No discussion on motion. All in favor, motion carried.

Meeting adjourned at 7:00 P.M.

Motions and Outcomes:

Motion:	Outcome	Beebe	Howard	Hutchison	Law	Merritt	Smith	Uffelman
Consent Agenda	PASSED	Y	Y	Y	-	-	Y	Y
Motion to cancel the May 9th, 2023 Council Meeting	PASSED	Y	Y	Y	Y	-	Y	Y
Resolution No. 1552 – approving an IGA with the State of Oregon Department of Transportation for Roads Transportation Intersection Updates	PASSED	Y	Y	Y	Y	-	Y	Y
Resolution No. 1553 – Approving a Personal Services Agreement with Divergent Engineering Services, LLC to Provide Engineering Services Regarding Prineville Water Treatment (as corrected)	PASSED	Y	Y	Y	Y	-	Y	Y
Resolution No. 1554 – Approving a Personal Services Agreement with Dowl, LLC to Provide Personal Services for Engineering Services Regarding Transportation Design	PASSED	Y	Y	Y	Y	-	Y	Y
Adjourn Meeting	PASSED	Y	Y	Y	Y	-	Y	Y

Public Records Disclosure

Under the Oregon public records law, all meeting information, agenda packets, ordinances, resolutions, audio and meeting briefs are available at the following URL: https://www.cityofprineville.com/meetings .

Prineville Police Department

1251 NE ELM STREET ◆ PRINEVILLE, OREGON 97754

Amy Van Donk, Evidence
Phone: (541)447-4168 FAX: (541) 447-8619
avandonk@prinevillepd.org Web Site: www.cityofprineville.com

May 17, 2023

City Council,

The Prineville Police Department has the following firearms secured in its possession. I have itemized the firearms that were forfeited per court order and unclaimed found property.

I am requesting City Council approve the transfer of these firearms to Bullseye Firearms for store credit for Prineville Police Department utilization by Sergeant Gray, Rangemaster.

Case #

13000983 Jennings J22 .22LR
Item #1 Serial/ 302911
Forfeit per Court Order

19000686 Harrington & Richardson Revolver
Item #5 Serial/416132
Found property

19000686 Iver Johnson Arms .32 revolver
Item #6 Serial/25320
Found property

19000686 unknown brand .32 revolver
Item #7 Serial/10825
Found Property

19000686 Harrington & Richardson Arms .32
Item #8 Serial/366122
Found property

21001210 Ruger Air Hawk Elite II Air Rifle
Item #2 Forfeit per Court Order

22000357 Remington 783 7mm bolt action rifle
Item #1 Serial/RA33047A
Held for safekeeping. Certified letter sent to owner, no response.

22001515 New England 22 rifle with scope
Item #1 Serial/NN285511
Surrendered by owner and held for 90 days.

22001515 FMJ single shot 45 pistol in box
Item #2 Serial/A00058324
Surrendered by owner and held for 90 days.

2300326 Glock 17 Gen 4
Serial/YRL938

The following cash items shall be turned over to Bullseye Firearms for store credit.

13000119 $69.61 cash and coins
No information on owner. Advertised, no claims made.

18001480 One dollar bill
Found property. Advertised, no claims made.

19000628 $20 bill
Found. Advertised, no claims made.

19000675 $20 bill and $10 bill
Found. Advertised, no claims made.

19001554 One dollar bill
Found. Advertised, no claims made.

19001759 $90.16 cash and coins
Multiple phone calls, message left. No response from next of kin.

19001821 $6.00 in cash
Found. Advertised, no claims made.

Thank you,

Amy Van Donk
Evidence Tech

City Manager Update to Council

May 23, 2023

Public Safety / Dispatch

Dispatch is hiring a new supervisor today after the extensive hiring process. Everything else is going good for dispatch.

Officer Jeff Coffman is coming up on his retirement in June. More details to follow on recognizing Jeff's outstanding 36-year career with the city. Summer event applications such as the Crooked River Round Up Stampede party and rodeo are starting to come in for the logistics review.

Public Works

The 5K loop at Barnes Butte Recreation Area (BBRA) paving project is complete and people are already walking and biking it. PW will be coordinating with the Railroad crew for an upcoming crossing project. The Dunhan Street waterline project has been completed. A float control went down at the WWTP on Friday. The WWTP crew along with Smith Rock Electric worked late Friday night and again Saturday morning to get it repaired and back up and running.

Rail Road

The Rail Road is remaining very busy and is looking at a significant project tamping and aligning tracks. McKay Creek Bridge will be getting some upgrades done to accommodate the heavier McCall Oil cars. There is a big trucking company that is looking at establishing a reload center in Oregon and will be visiting Prineville in June.

Meadow Lakes Golf

Golf course revenues continue to be strong and will help with some of the much needed projects on the radar for the parking lot, cart paths rehabilitation and club house maintenance. The course is looking fantastic and ready for all of the summer time activity.

Airport

The paving project is coming up for the airport. Bids for the T hangar building are due next week with hopes of having it completed by fall. The Forest Service is doing some training in preparation for the fire season and is stationing extra aircraft in Prineville that is usually at the Redmond airport. Wheels and Wings is coming up on June 11th from 1:00 PM to 5:00 PM which is being presented by Wild Ride Brewing. There will be a car & plane show, vendors, music and kids games.

Planning

The zone change for the old hospital is moving along and will likely go before Council in June. The apartments on Madras Highway are moving ahead with financing. The industrial land subdivision is underway. Re-striping of Highway 126 & O'Neil Highway will be taking place soon.

Human Resources

With Darla's upcoming retirement, recruitment began to fill her position. After interviewing several candidates our own Karee Miller shined and has accepted the position beginning July 1st. Corina Ego has agreed to assume Karee's position for payroll specialist. Congratulations to both ladies!

Eight candidates have been invited to the interview process for the vacant public works utility worker position and recruitment is also underway for Planning and PD.

Information Technology

The IT team has completed the upgrades for the public works system. They are also busy with spring site work and working on Fire Department vehicle upgrades.

Finance

The Budget Committee had a capital improvement project update from staff and received the budget for the first budget meeting coming up on May 22nd. Council will be looking to adopt the budget on June 13th.

City Recorder/Risk Management – No Update

City Legal – No Update

EDCO

EDCO has been busy facilitating the Center on Rural Innovation (CORI) community assessment of Prineville. EDCO provided an overview of this program to Council several months ago and is possible from a Meta funding match to participate. There have been many meetings between the city, the county, EDCO, and local businesses through this process. In the end we will have a complete assessment of Prineville's strengths and needs to continue fostering a positive economic environment.

Public Relations

The city quarterly newsletter was released last week and we should have the results of how many people engaged with it soon.

Mayor/Council

Just a reminder, the Priorities Strategy Workshop has been successfully scheduled for June 7 at 5:00 P.M.

Other

In state legislation, the enterprise zone bills continue to be of concern with the proposed amendments and proposals to scale it back and to change the term before renewal at the state level again.

The state's revenue forecast has been released and is much more than what was estimated even as recently as March. Now its time for the Ways & Means Committee to start drafting budgets for state agencies, choosing from policy bills that have a cost associated with them and evaluating billions of dollars in requests for local projects.

Prineville Renewable Energy Project (PREP)

Environmental & Economic Impact Analysis

Completed for:

CITY OF PRINEVILLE OREGON

Completed by:

THE BECK GROUP & Highland ECONOMICS

February 2022

TABLE OF CONTENTS

CHAPTER 1 – EXECUTIVE SUMMARY

1.1 INTRODUCTION & STUDY APPROACH

The City of Prineville (City) has a reputation for being a national leader in environmental protection and conservation with a commitment to investing in the long-term sustainability of the community. This is evidenced by multiple complex and award-winning projects under its belt, such as the Crooked River Wetlands and Aquifer Storage and Recovery (ASR) project. Similarly, to reduce wildfire risk and address western juniper infestation, the City is pursuing development of the Prineville Renewable Energy Project (PREP), a 24.9 MW biomass power plant to be located in Prineville.

In November of 2021, the City completed an engineering and design study that included a fuel supply assessment. The biomass power plant modeled in the study is designed to consume 191,000 bone dry tons of biomass fuel annually and produce more than 209,000 megawatt hours of power annually. The study concluded that enough biomass exists in the region to fuel the power plant and that the project was feasible.

To provide an objective third-party examination of the project's environmental and economic impacts in the region, the City commissioned this study. Accordingly, this study's objective is to quantify, to the extent possible, PREP's environmental and economic impacts. The key environmental factors examined include: air quality, water availability, landfill use, forest health/productivity, and wildfire risk.

The general approach compares the preceding environmental characteristics under two scenarios: 1) WITHOUT PREP, and 2) WITH PREP. The region of study for this analysis is the four counties where the plant's fuel is predominantly expected to be sourced: Crook, Jefferson, Deschutes, and Wheeler Counties. Chapter 2 provides an analysis of environmental conditions in a WITHOUT PREP scenario while Chapter 3 provides an assessment of the same environmental conditions in a WITH PREP scenario. Chapter 4 assesses the economic impact of the differing environmental conditions in the two scenarios. Finally, Chapter 5 provides a high-level assessment of technologies currently developing for capturing carbon from the atmosphere and permanently sequestering it back into the earth.

1.2 SUMMARY OF FINDINGS

This analysis found that developing a 24.9 MW biomass powerplant in Prineville could be expected to:

- Improve air quality due to less open-pile burning and lower risk of wildfire.
- Increase the availability of water by 2,650 to 44,000 acre-feet annually due to thinning about 1,900 acres of juniper woodlands per year.
- Divert about 10,000 bone dry tons of woody biomass material from nearby landfills per year.
- Reduce the risk of forest wildfire in the four-county region around Prineville by an estimated equivalent of 280 to 840 fewer acres burning annually.
- Increase the health and productivity of forests in the four-county region in terms of annual growth, benefiting wildlife and forest landowners.
- Provide local economic development benefits in the form of 54 to 67 new jobs at the PREP facility and supporting forestry and transportation sectors.
- Increase firm power generation in the region and reduce regional transmission import constraints.
- Decrease economic losses from wildfire in the region, including those associated with damage to infrastructure, losses to tourism and recreation, aesthetics, and air quality.

1.2.1 Environmental and Economic Benefits

The PREP would provide multiple environmental and economic benefits as summarized in **Table 1.1**. In sum, these environmental and economic benefits are expected to have an annual value of approximately $21.7 million to $70.1 million. Note the italicized sections of the table are all a subset of reduced wildfire risk.

Table 1.1 – Summary of Quantified Environmental Effects of PREP and Associated Economic Value

Type of Benefit	**Annual Environmental Benefit**	**Approximate Annual Economic Value (2022$, Millions)**
Air Quality	Reduced emissions from avoided burning of logging slash due to burning of biomass in PREP. Estimated cumulative reduction of 4,400 to 6,535 tons per year of various pollutants. Reduction in adverse health effects, particularly for communities disproportionately vulnerable to air pollution such as the young, elderly, and those suffering from respiratory diseases.	$14.2 to $44.1
Juniper Water Use	Reduction in water use due to juniper removal: 2,650 AF in Year 1, rising to 44,000 AF in Year 20 reduced water usage, net water savings of 683 million gallons annually due to treatment of -dominated area. Reduced water demand for junipers is assumed to benefit groundwater-dependent ecosystems, instream flows, and/or human consumptive uses.	$1.7 to $3.4
Landfill (Wood Waste Diverted to PREP)	Divert 10,000 tons from Deschutes County landfill, providing cost savings related o yard debris grinding/transport.	$0.4
Merchantable Timber	136 additional million board feet increase annually in merchantable timber.	$0.01
Reduced Wildfire Risk	Decreased intensity/severity of wildfire on forests acres receiving thinning treatments, equivalent to ~280 to 840 fewer acres burned per year.	$5.4 to $22.2
Wildfire Fighting	*Reduced firefighting efforts on ~280 to 840 acres.*	*$0.8 to $1.1*
Air Quality	*Reduction of 600 to 1,800 tons of NO_x, CO, VOC, PM from reduced biomass combustion from ~280 to 840 acres.*	*$2.0 to $13.2*
Aesthetics/Visibility	*0.1 to 0.2 days per year high visibility improvement.*	*$0.1 to $0.3*
Infrastructure	*Likely Neutral or Positive, depending on location of fire.*	*Likely Neutral or Positive*
Recreation	*Avoided recreation losses to recreators on ~4200 acres (840 acres for 5 years).*	*$0 to $.1*
Wildlife	*Likely Neutral or Positive, depending on the species.*	*Likely Neutral or Positive*
Carbon	*Reduced emission of 12,000 to 35,000 metric tons of CO2e, reducing adverse effects of climate change.*	*$2.5 to $7.5*
Total		**$21.7 to $70.1**

As the preceding table illustrates, the main benefits are associated with reduced air pollution due to combustion under controlled conditions instead of open-pile burning of logging slash at logging or forest health treatment sites, as the study assumes would occur WITHOUT PREP. Air pollution is reduced in the WITH PREP scenario because combustion is more complete and the emissions control equipment used at the boiler greatly reduces air pollutant emissions relative to open-pile burning.

Other benefits derive from expected reduced wildfire intensity on forest areas thinned to provide fuel for the PREP facility. In contrast, other renewable energy facilities, such as wind or solar, would not provide these values or environmental benefits, since other forms of renewable energy would not be expected to affect (or would have minimal expected effects on) forest health, wildfire risk, air quality, or water supply.

The PREP facility would also be expected to benefit area water supply, the value of merchantable timber, and diversion of wood waste from landfills. More detail about key environmental benefits, and the associated economic value, are as follows:

- The facility would eliminate the open-pile burning of an estimated 49,200 bone dry tons of logging slash, which translates into a reduction in the emission of 4,400 tons[1] per year of air quality pollutants (i.e., NO_X, CO, VOC, and PM). Also, in a WITH PREP scenario where no sawmill is nearby to provide mill residuals as fuel, the tons of air pollutant emissions avoided from open-pile burning of logging slash is even greater, at more than 11,200 tons per year (see Section 3.5 for additional details). This decreased air pollution would provide health benefits estimated at $14.2 million to $44.1 million annually. This benefit would disproportionately benefit those most vulnerable to air pollution: the very young, the elderly, and those suffering from respiratory diseases. Further, compared to the rest of the state, the four-county region has a higher proportion of individuals living in poverty (14.6% in Crook County and approximately 20% in the other study area counties, compared to 14.1% across the state), and Jefferson County also has a higher proportion of Hispanic and non-white populations (20% versus statewide average of 14%). Reductions in health hazards, such as those anticipated from PREP, would likely disproportionately benefit these environmental justice populations as they are less likely to have high-quality HVAC systems that filter polluted air, are more likely to have employment in outdoor occupations such as agriculture, forestry, construction, or landscaping, and are more likely to have health conditions negatively impacted by wildfire smoke.
- The facility would allow treatment of an estimated 7,250 acres of land per year that is dominated by juniper trees, which translates into an estimated net annual savings of 683 million gallons of water (after accounting for water usage at the PREP facility), valued at $1.7 million to $3.4 million annually. This analysis assumes that reduced water demand on juniper lands increases instream flows, groundwater-dependent ecosystems, or human consumptive uses. See section 3.3 for additional details.
- The PREP facility would divert approximately 10,000 tons of wood waste from regional landfills annually since the material would instead be combusted at the power plant. Note the analysis only considered clean wood waste; wood waste treated with paint, preservative chemicals, etc. were not included. The estimated annual benefit to landfills is approximately $0.4 million.

[1] Following standard convention, this report quantifies air quality pollutant tons in 'short' tons, equivalent to 2,000 pounds. Also following standard convention, however, greenhouse gas emissions are quantified in metric tons of carbon dioxide equivalent, equivalent to 2,204.6 pounds. Throughout the report the term 'tons' refers to short tons, except where otherwise noted as metric tons when referring to carbon dioxide equivalent emissions.

- The PREP facility would allow for more forest management treatments that are expected to reduce the intensity of wildfire in the four-county region; this reduction in intensity is expected to be roughly equivalent to 280 to 840 fewer acres burned annually by wildfire. Reductions in wildfire intensity and severity offer many benefits including reduced smoke air pollution, improved aesthetics/visibility from reduced smoke, and costs avoided relating to wildfire suppression, infrastructure damage, carbon emissions, recreation and tourism.
    - The estimated air quality benefit of 280 to 840 fewer acres[2] being burned each year is a reduction of between 600 and 1,800 tons of air pollutant emissions annually (NO_X, CO, VOC, and PM) – see Section 3.4 for additional details. The health benefit of these avoided emissions is estimated to range from $2.0 million to $13.2 million.
    - The estimated reduction in greenhouse gas emissions from reduced biomass combustion in wildfire is 12,000 to 35,000 metric tons of carbon dioxide equivalent, valued at $2.5 million to $7.5 million annually.
    - Other benefits of reduced wildfire intensity are more challenging to quantify, but a conservative estimate is that other benefits associated with avoided wildfire costs and damages (including avoided fire suppression costs, avoided losses in recreation opportunities, and avoided visibility effects from smoke from the equivalent of approximately 280 to 840 fewer acres burning each year) would be in the range of $0.9 million to $1.5 million annually.

While it is clear that PREP provides some key environmental benefits, it is important to note that quantifying these benefits is challenging and uncertain. As such, all environmental effects and economic values should be interpreted as approximate estimates that provide an indication of the expected magnitude of benefits. In particular, projecting changes in wildfire risk and intensity due to forest treatments is highly uncertain; projecting economic values associated with that change in risk is even more uncertain. However, forest treatments are expected to reduce wildfire intensity, and this reduced intensity is expected to provide social and economic values. This analysis attempts to provide a rough approximation of the magnitude of those types of benefits.

Finally, regarding climate change effects of PREP, this analysis did not do a full carbon accounting of carbon or greenhouse gas-related effects; it focused solely on reductions associated with reduced wildfire emissions that are projected in relation to forest treatments related to PREP. It did not include carbon or air quality effects related to forest treatments or trucking of materials to the PREP facility, as these are expected to be minor in comparison to releases from the burning of forest materials. Given the range of values presented in the study, we expect that the true value (after factoring in these other effects) would likely fall within the range of estimates presented in the study.

[2] Each acre thinned is expected to result in lower fire intensity for approximately 20 years if wildfire were to occur on the treated acres. Accounting for the number of treatment acres, the number of acres at high risk of burning, and the average annual number of acres burned, we estimate that there would be approximately 1,120 acres with reduced fire intensity on an annual average basis due to the forest thinning. While the treatments may not reduce the average annual acres burned by wildfire in the four-county region, we assume that the thinning treatments will reduce the intensity of the fire on the treated acres by 25% to 75%. For this analysis regarding benefits of reduced wildfire on air quality and other environmental effects, we assume that reduction in fire intensity can be translated into reduced 'acre equivalents' burning. For example, an intensity reduction of 50% on two acres is assumed to be equivalent to reduction in all the forest burning on 1 "acre-equivalent". It follows then that the equivalent acres of fire reduction caused by the presence of the PREP facility is 280 acres to 840 acres per year (1,120 treated acres/burned per year x 25% to 75% fire intensity reduction on burned acres). For environmental benefits analysis, we assume that 100% of the biomass on these "acre-equivalents" is burned.

1.2.2 Economic Development Benefits

In comparison to other renewable energy facilities, the operation of PREP will provide local economic development benefits. First, more than three quarters of PREP's operating costs are for fuel, hourly wages, and salaries and benefits for local jobs at the PREP facility and for forest sector jobs to gather and transport the fuel for PREP, as presented in **Table 1.2**. Additional jobs and income may be indirectly supported in other sectors that provide supplies to the facility (or to other suppliers) and that sell goods and services to employees whose income is related to PREP.

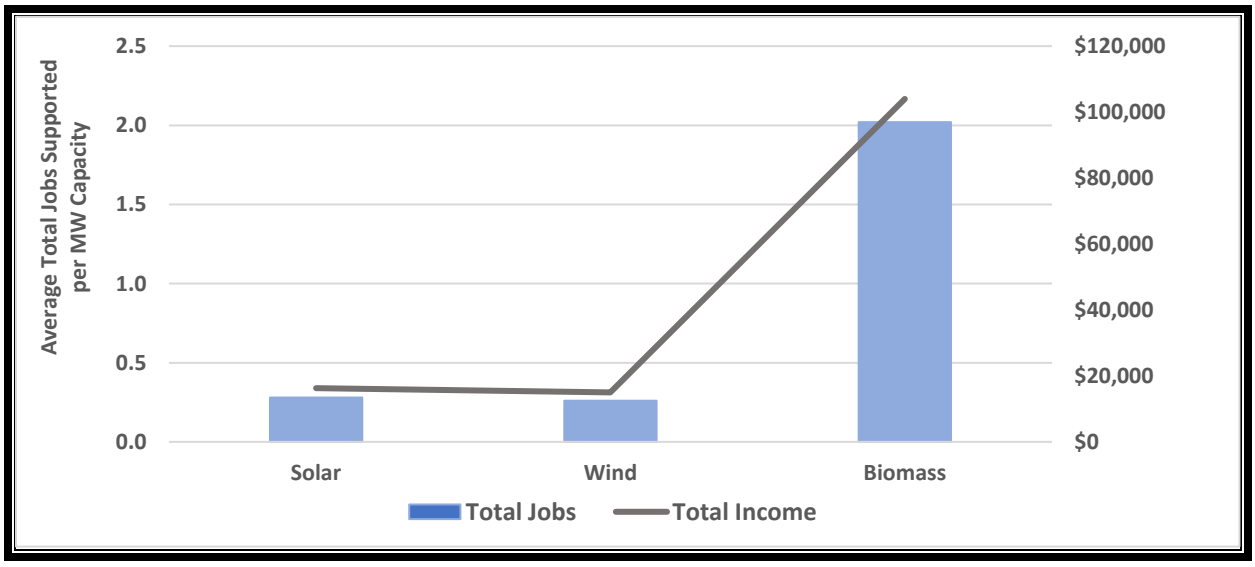
Table 1.2 – Operations Employment and Income Supported by PREP: Key Sectors Only

Sector	Employment		Compensation	
	Low	High	Low	High
PREP Facility	10	15	$990,000*	$990,000*
Biomass Fuel Trucking	24	28	$1,500,000	$1,750,000
Fuel Gathering/Processing	20	24	$1,250,000	$1,500,000
Total	**54**	**67**	**$3,740,000**	**$4,240,000**

* Per the engineering report completed as part of the PREP feasibility study. Compensation was estimated, but the associated number of jobs was not reported.

For a comparison to other renewable energy facilities, in **Figure 1.1** we present data from the National Renewable Energy Laboratory that compares the local employment and income supported by a biomass plant to those of wind and solar facilities. As shown in the figure, for every MW of generation, biomass supports approximately seven times greater total income and employment (including direct employment/income at the energy facility and indirect/induced jobs supported in other sectors due to facility-related spending) than wind or solar facilities tend to support. Note that these are averages, and not necessarily the increased employment and income that the PREP facility would support relative to wind and solar power facilities.

Figure 1.1 – Average Total Employment and Income Supported per MW: Biomass Compared to Solar and Wind



By reducing wildfire and improving air quality, PREP also has the potential to support (or prevent the loss of) economic development. Wildfire can impact economic development by destroying resources and infrastructure, reducing tourism, and motivating people to live away from fire-damaged or fire-prone areas. For example, a 2021 survey conducted by the real estate brokerage firm Redfin found that natural disasters and extreme temperatures factored into the decision of almost half of Americans who planned to move in the next year (Rodriguez, 2021). Anecdotal accounts suggest that wildfire is a primary reason why some people move away from Western states, including Oregon and California, as well as a reason why some people choose not to move into these areas (Rodriguez, 2021; Allen, 2022; Hurdle, 2022; Lahr, 2020). Fewer people in these areas means fewer workers, fewer business owners, and fewer customers, all of which can hinder economic development.

Regarding wildfire impacts on tourism, a study of the 2017 wildfire season effects on the Oregon tourism economy estimated that the 1.2 million acres burned across the state that year resulted in $60.7 million in lost visitor spending and $18.8 million in lost earnings in 2017.[3] On average, each acre burned translated to nearly $16 in reduced earnings in the year of the fire. During the 2020 wildfire season, Central Oregon also experienced a significant drop in tourism, with businesses adversely affected by the loss in revenue (Maher, 2022). In a recent article on how longer and fiercer wildfires are hurting areas reliant on tourism, the Bend Chamber of Commerce was cited as saying that "Living in Bend in 2020 was a like a summer that didn't happen" (Maher, 2022). Wildfire can clearly reduce tourism; as such, reducing the prevalence of wildfire through initiatives such as PREP has the potential to support tourism and associated economic development.

Finally, PREP could provide potential economic development benefits by adding to the region's power supply, and helping to alleviate transmission constraints that limit Central Oregon's ability to attract new industry. A 2017 Bonneville Power Administration (BPA) analysis noted: "In order to increase overall capability to serve load in central Oregon, both main grid and local area infrastructure require reinforcement". The 2017 BPA analysis identified options that could increase main grid capability and local area capability; one of the options was to increase local firm generation within the Redmond Import area. As noted by BPA, "…firm generation has the effect of offsetting main grid and local impacts from load within the area". This is in contrast to wind and solar power generation options, which are intermittent and generate lower levels of electricity during peak winter demand periods and extreme weather events. The benefit of PREP in increasing local power supplies is not quantified economically in this report, but does provide improved overall power reliability and supply in the region while easing the existing transmission constraints.

[3] The original values in 2017 were adjusted to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022). Study available at: https://industry.traveloregon.com/wp-content/uploads/2018/07/TO-2017-Wildfires-Impact-Report-Final.pdf

CHAPTER 2 – WITHOUT PREP ANALYSIS

This report chapter provides an analysis of environmental characteristics for the WITHOUT PREP scenario. Each of the following subsections is a specific environmental condition considered as part of the study.

2.1 FOREST HEALTH

Forest health is defined as creating forest conditions that directly satisfy human needs. Note, however, the definition is dependent on humans defining what those needs are. From an ecological perspective, forest health is defined as resilience, recurrence, persistence, and biophysical processes which lead to sustainable ecological conditions. For the purposes of this study, the focus is on forest health as it relates to the forest's ability to satisfy human needs.

The indicators of forest health for this study include: change in forest area over time, volume of merchantable standing trees per unit of forest area, total aboveground live biomass per unit of forest area, tree growth, and the total number of live trees per unit of forest area. The data measuring these indicators was gathered from the US Forest Service's Forest Inventory and Analysis (FIA) database. FIA is a nationwide program established in the 1930s whose mission is to collect, analyze, and report information about the status and trends of America's forests. This is accomplished by periodically revisiting permanently located forest inventory plots to gather data on forest type, site attributes, tree species, tree sizes, and overall tree condition. There is one plot for every 6,000 acres of forest land in the US, or about 325,000 plots scattered throughout the nation's forests. The plots are located on both publicly and privately owned land. The data for each indicator is described in each of the following subsections.

The FIA database defines two types of forest area including *Timberland* and *Forestland*. Timberland is forested land capable of producing more than 20 cubic feet of wood fiber/acre/year and that is not legally withdrawn from timber production. Examples of withdrawn areas are Wilderness, Roadless, National Park, etc. Forestland is defined as land stocked with at least 10% tree cover, but which cannot grow trees at a rate greater than 20 cubic feet/acre/year, and which is not currently developed for a non-forest use. Note that throughout the report, a variety of tables report statistics for timberland and forestland. Importantly, timberland is a subset of forestland; the totals for the two categories thus cannot be added together.

The FIA database can be queried to include/exclude data from different time periods. For this analysis, data from two time periods were selected including 2019, the most recently available data, and 2010. Changes between the two periods indicate a trend direction for each given forest health condition indicator.

2.1.1 Forest Acres

Table 2.1 illustrates the change in forested acres by owner type between 2010 and 2019 among Crook, Deschutes, Jefferson, and Wheeler Counties. As the data illustrates, there is a total of 3.5 million acres of forestland and there was a net increase in acreage of about 17,400 acres in 2019 versus 2010. Recall that timberland is a subset of forestland and as the data in the table shows, about 1.9 million acres or 55% of the forestland is timberland – land capable of growing significant volumes of timber and land that hasn't been reserved from timber production. The balance of about 1.6 million acres is the less productive forestland designation, which in the four-county region typically refers to juniper woodlands. Also, as perspective, the combined total land area of the four counties is just over 6.1 million acres. Thus, the 3.5 million acres of forestland covers nearly 57% of all land in the four-county region. However, the more productive timberland portion of forestland accounts for roughly 30% of the total land area in the four counties.

Table 2.1 – Change in Forest Area on Forestland and Timberland between 2010 and 2019 by Landowner Type in Crook, Deschutes, Jefferson, and Wheeler Counties (acres)

2010	National Forest	Other Federal	State & Local	Private	Total
Forestland	1,602,192	615,614	25,415	1,261,242	3,504,462
Timberland	1,240,268	48,784	0	633,651	1,922,702
2019	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	1,611,431	519,822	49,644	1,259,952	3,440,849
Timberland	1,256,223	55,865	2,474	689,131	2,003,693
Difference	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	9,239	-95,792	24,229	-1,290	-63,613
Timberland	15,955	7,081	2,474	55,480	80,991

Figure 2.1A provides a visualization of the extent of forestland and timberland in the four-county area. While not an exact match, the green areas essentially represent the combined forestland and timberland areas as determined from FIA data in the preceding table. As previously stated, the forestland (with timberland as a subset) comprises about 57% of all land in the four-county region. The figure is from the Oregon Wildfire Risk Explorer website (accessed at https://tools.oregonexplorer.info).

Figure 2.1A – Current Vegetative Cover in Four-County Area

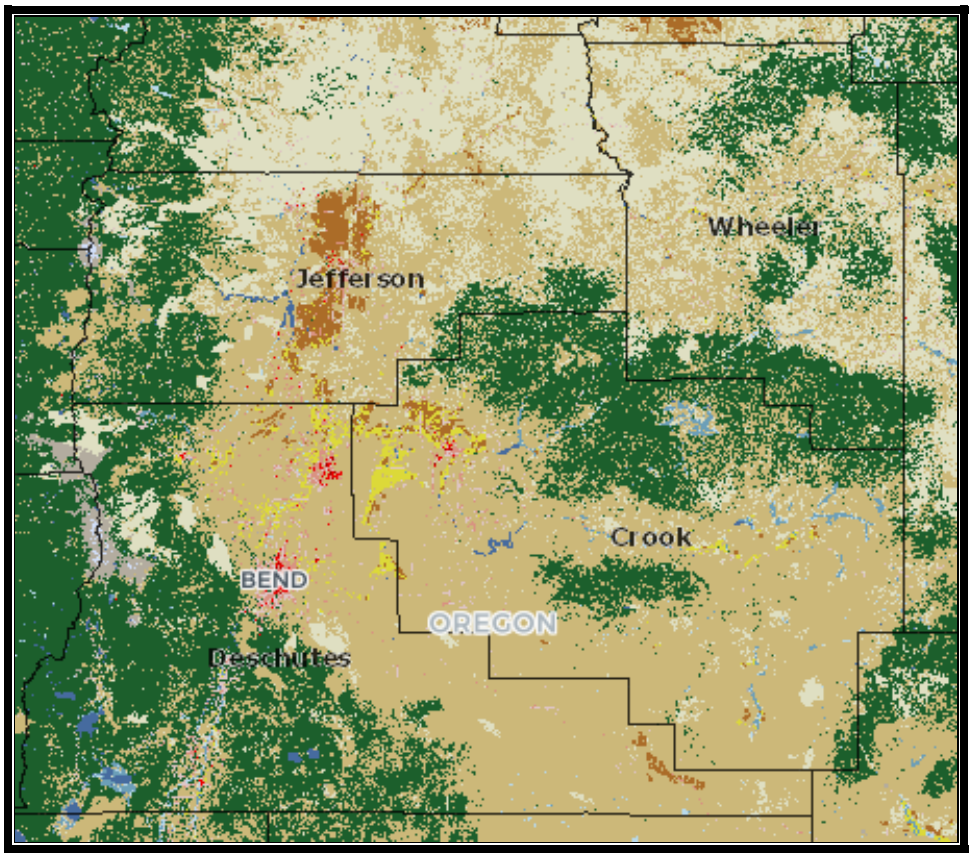
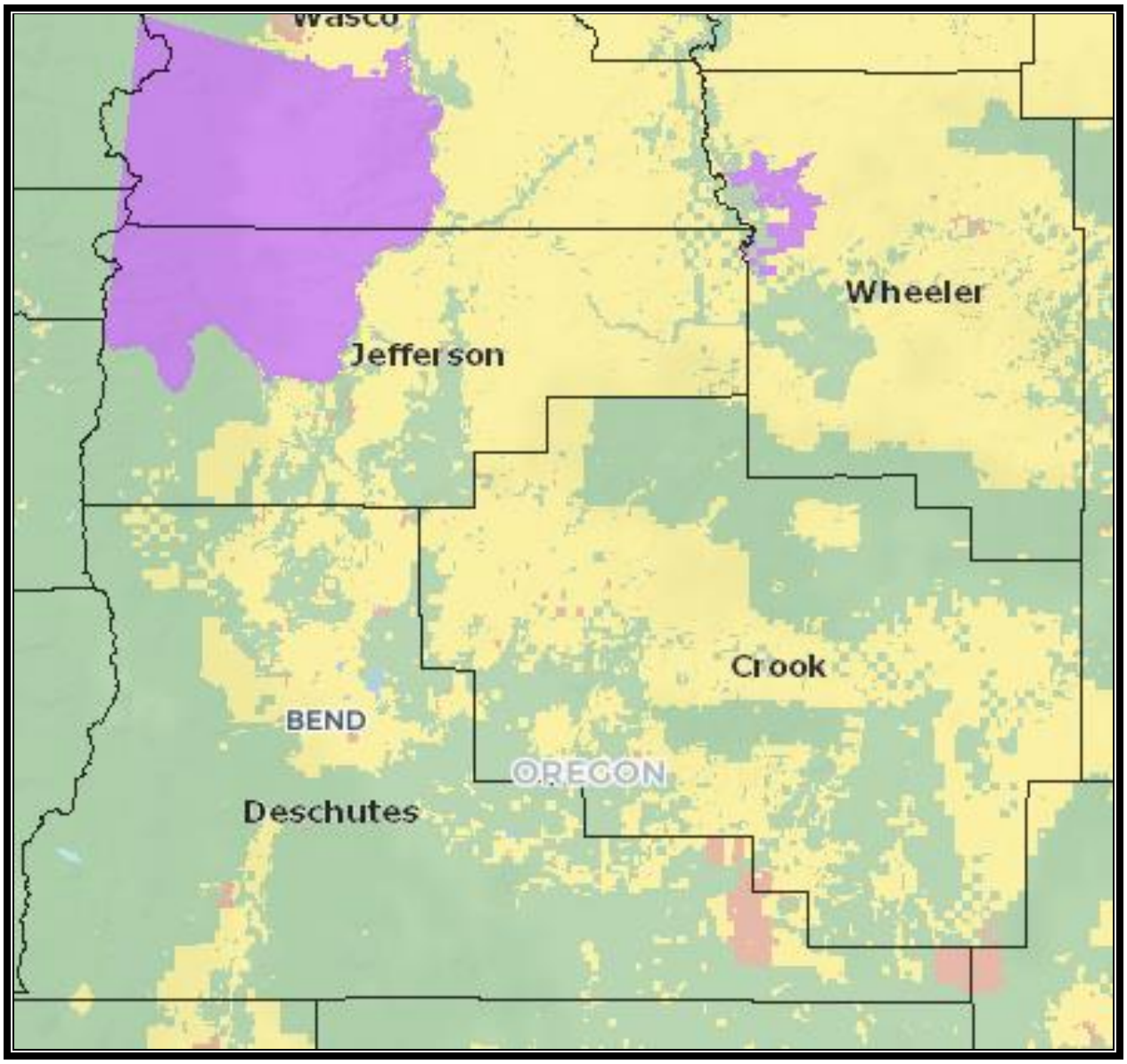


Figure 2.1B illustrates where the major ownership falls within the four-county region (regardless of land use type). As the figure shows, major portions of the land base in the four-county region are under federal ownership. Note that the purple tribally owned lands in the figure are counted as private lands in the FIA database.

Figure 2.1B – Ownership Map Within the Four-County Region



2.1.2 Volume of Merchantable Standing Trees

Table 2.2 illustrates change in merchantable volume of standing trees on forestland and timberland from 2010 to 2019 in the four counties. As shown, there are about 306 million more cubic feet of merchantable standing trees among the region's forests in 2019 than there were in 2010. The majority of the increase (264 million cubic feet) occurred on the timberland portion of the forested land base. Merchantable volume refers only to the portion of the trees that are suitable for conversion to products such as lumber, veneer, pulpwood, etc. The change in volume is a 7% increase, or an average of 0.7% per year.

Table 2.2 – Change in Merchantable Volume on Forestland and Timberland between 2010 and 2019 by Landowner Type in Crook, Deschutes, Jefferson, and Wheeler Counties (cubic feet in millions)

2010	National Forest	Other Federal	State & Local	Private	Total
Forestland	3,213	179	4	846	4,242
Timberland	2,510	62	0	716	3,289
2019	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	3,413	169	16	950	4,548
Timberland	2,666	66	8	813	3,553
Difference	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	200	-10	12	104	306
Timberland	155	4	8	97	264

2.1.3 Total Aboveground Live Biomass

Table 2.3 illustrates changes in the total aboveground live biomass on forestland and timberland between 2010 and 2019. The data shows that in total in 2019 there were about 86 million bone dry tons[4] of biomass on forestland in the four-county region compared to 79 million in 2010, an increase of about 7 million bone dry tons. It also shows that about 60% of the increase was on national forest land, with virtually all of the rest of the increase on private lands. This data includes all portions of trees (e.g., limbs, tops, crooked sections, etc.). Thus, unlike the data in the preceding table, it is not limited to only the merchantable portion of trees. Nevertheless, the data are similar in terms of directional trends and the magnitude of the changes (i.e., 9% increase from 2010 to 2019).

Table 2.3 – Change in Aboveground Biomass on Forestland and Timberland between 2010 and 2019 by Landowner Type in Crook, Deschutes, Jefferson, and Wheeler Counties (Bone Dry Tons in 1,000s)

2010	National Forest	Other Federal	State & Local	Private	Total
Forestland	59,387	3,680	100	16,023	79,190
Timberland	46,205	1,150	0	13,298	60,652
2019	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	63,926	3,596	338	18,622	86,482
Timberland	49,724	1,316	151	15,670	66,861
Difference	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	4,539	-84	239	2,599	7,293
Timberland	3,519	166	151	2,373	6,209

[4] A Bone Dry Ton (BDT) is a common measurement in forestry. It is the weight of a given volume of material after accounting for the portion of the material's weight that is moisture. For example, if a given volume of wood weighs 4,000 pounds, but 50% of the weight is water, then the material is be equal to 1 bone dry ton.

2.1.4 Number of Live Trees

Table 2.4 shows how the number of live trees has changed on forestland and timberland in the four-county region between 2010 and 2019. The data shows that in 2019 there are about 134 million more standing trees in the four-county region than there were in 2010. Given a total of about 3.5 million acres of forested land in the four-county area, this equates on average to about an additional 41 trees per acre.

Table 2.4 – Change in Number of Live Trees on Forestland and Timberland between 2010 and 2019 by Landowner Type in Crook, Deschutes, Jefferson, and Wheeler Counties (count of trees in millions)

2010	National Forest	Other Federal	State & Local	Private	Total
Forestland	541	48	3	213	806
Timberland	435	13	0	147	594
2019	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	585	64	5	286	940
Timberland	469	28	0	199	697
Difference	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	44	16	2	73	134
Timberland	34	15	0	53	102

2.1.5 Tree Growth

Table 2.5 illustrates how the net annual tree growth volume has changed over time. As shown in the table, total annual net growth is about 655 thousand bone dry tons per year in 2019 compared to 653 thousand in 2010. Thus, growth is essentially stable overall. However, closer examination of the table shows that for the timberland portion of the forests, net annual growth in 2019 is lower by about 51,200 bone dry tons per year compared to 2017 (as denoted by the -51,240 in the lower rightmost cell of the table). This is due to higher levels of natural mortality driven by higher levels of insects, disease, drought, and wildfire. Finally, the data shows that in the four-county region, annual growth of forestland is just under 0.8% of the above ground biomass (655,306 BDT of net growth per year divided by 86.4 million bone dry tons of live merchantable standing biomass). On timberlands net growth per year is 1% (674,433 BDT of net growth per year divided by 66.9 million bone dry tons of live merchantable standing biomass).

Table 2.5 – Change in Net Annual Growth of Live Trees on Forestland and Timberland between 2017 and 2019 by Landowner Type in Crook, Deschutes, Jefferson, and Wheeler Counties (bone dry tons)

2017	National Forest	Other Federal	State & Local	Private	Total
Forestland	323,802	36,776	6,470	286,796	653,844
Timberland	445,237	18,523	4,720	257,193	725,674
2019	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	359,531	33,643	4,722	257,409	655,306
Timberland	423,378	16,059	3,259	231,737	674,433
Difference	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	35,729	-3,132	-1,748	-29,387	1,462
Timberland	-21,859	-2,464	-1,462	-25,456	-51,240

2.2 HISTORICAL LEVEL OF FOREST MANAGEMENT ACTIVITY

As illustrated by **Table 2.6** the level of forest management activity, as inferred from annual timber harvest volumes, has been on a steady decline in the four-county region considered in the PREP analysis. The data[5] in the table shows the total annual timber harvest volume in board feet (Scribner) for each county and for the period 2002 to 2020. It has dropped from an average of 76,251 million board feet from 2002 to 2006 to an average of 48,000 million board feet from 2016 to 2020. Note, however, that all the decrease is in Deschutes, Jefferson, and Wheeler Counties. Timber harvests in Crook County have slightly increased in recent years, on average. Still, the overall trend in the four-county region is that timber harvests are declining at a rate of about 1.9 million board feet per year during the period 2002 to 2020.

Table 2.6 – Annual Timber Harvest Volume in Four-County PREP Region between 2002 and 2020 (Board Feet in Thousands, Scribner Log Scale)

Year	Crook	Deschutes	Jefferson	Wheeler	Total
2002	8,088	43,066	32,207	17,742	**101,103**
2003	1,528	25,232	21,540	17,369	**65,669**
2004	2,931	35,306	33,268	7,921	**79,426**
2005	1,485	28,295	36,656	6,368	**72,804**
2006	10,479	24,956	13,809	13,011	**62,255**
2007	13,733	22,464	10,130	10,668	**56,995**
2008	4,659	36,080	12,959	4,206	**57,904**
2009	5,723	14,675	16,746	3,829	**40,973**
2010	3,239	19,339	8,338	1,244	**32,160**
2011	12,185	22,851	9,511	1,500	**46,047**
2012	10,435	20,192	1,670	5,899	**38,196**
2013	4,401	23,486	19,983	6,344	**54,214**
2014	9,252	27,488	10,111	4,706	**51,557**
2015	12,324	9,706	16,090	5,103	**43,223**
2016	3,573	26,988	16,000	5,727	**52,288**
2017	10,460	29,603	225	6,682	**46,970**
2018	5,757	37,029	1,430	6,948	**51,164**
2019	13,084	24,555	3,530	5,371	**46,540**
2020	8,775	28,547	517	5,201	**43,040**

[5] Bureau of Business and Economic Research at University of Montana, Forest Industry Research Program. Accessed at: http://www.bber.umt.edu/FIR/Default.asp

Table 2.7 illustrates the same data, but with annual harvests organized by landowner type. As the data shows, harvest volumes have fallen across all landowner types with the exception of the US Forest Service. This finding is counter to most other landowner timber harvest patterns in the US West, where the US Forest Service harvest volumes have typically declined since the early 1990s while harvests among other landowner types have held steady or increased. A key driving factor in declining harvest levels among other landowner types is the loss of markets for sawtimber in the region. For example, the Warm Springs Tribe shut down their sawmill in Warm Springs, OR in 2016. Similarly, the DR Johnson company closed a sawmill in Prairie City in 2008. That sawmill, however, restarted in the summer of 2022.

Table 2.7 – Annual Timber Harvest Volume in Four-County PREP Region by Landowner Type between 2002 and 2020 (Board Feet in Thousands, Scribner Log Scale)

Year	Industry	Non-Industrial Private	State	USFS	Other Public	Total
2002	30,111	39,602	0	30,878	512	**101,103**
2003	4,498	30,798	3	30,370	0	**65,669**
2004	13,390	32,248	5	33,783	0	**79,426**
2005	11,100	8,482	3	53,219	0	**72,804**
2006	18,055	16,806	2	27,392	0	**62,255**
2007	22,284	10,686	0	24,009	16	**56,995**
2008	11,319	12,960	0	33,115	510	**57,904**
2009	4,362	15,531	0	20,540	540	**40,973**
2010	5,760	8,692	0	17,391	317	**32,160**
2011	8,218	9,251	0	28,578	0	**46,047**
2012	4,525	3,420	0	30,134	117	**38,196**
2013	6,355	20,957	0	26,843	59	**54,214**
2014	10,142	15,114	0	26,279	22	**51,557**
2015	471	21,246	0	21,506	0	**43,223**
2016	5,399	17,274	11	29,604	0	**52,288**
2017	11,255	269	0	35,446	0	**46,970**
2018	6,852	1,686	0	42,626	0	**51,164**
2019	6,434	327	0	39,779	0	**46,540**
2020	3,823	583	0	38,634	0	**43,040**

Recall from Table 2.1 that the US Forest Service managed lands in the four-county area account for about 50% of all timberland and forestland acres in the region. Thus, the management plans and actions of the US Forest Service are a significant determinant of the overall level of harvest activity in the region. Accordingly, US Forest Service staff were interviewed as part of the study about future timber harvest plans. The timber contracting staff indicated that in the near term (next 2 to 4 years), timber harvests will decline in the Ochoco and Deschutes National Forests. This is because both forests are slowing down timber sale preparation activity for a period of a few years. However, there is currently a 1-year backlog of timber sales planned, prepared, and ready to sell. There is also a 3-year backlog of timber sales with completed environmental analysis and planning, but which have yet to reach the final stages of being ready to sell. In the future, the Ochoco National Forest will sell about 12 million board feet of timber annually and the Deschutes will sell about 25 to 30 million board feet annually.

Also, the timber sale contracting staff said that if a biomass power plant were present, it would allow for increased utilization of fiber from most timber sales. In other words, on many current timber sales, utilization of non-saw log size material is optional. Current utilization standards are that sawlogs are defined as all pieces larger than 6" in diameter at the small end of the log and at least 16' long for ponderosa pine and 8' long for all other species. Thus, material 6" and smaller could be utilized at the PREP facility if it were to be developed. The staff said the utilization standard would likely change, but that it would involve a process of first determining the costs associated with increased utilization relative to the price the power plant can afford to pay for fuel.

2.3 WILDFIRE RISK

Western US forests have evolved with the regular occurrence of wildfire. However, beginning in the mid-1980s the area burned in seasonally dry forests of Western North America began a steady rise. Modeling suggests the trend will continue in a warming climate as protracted warmer and drier conditions will drive lower fuel moisture and longer fire seasons. The result will be increasing frequency and extent of fires compared to the twentieth century.[6]

2.3.1 Historical Wildfire Levels in Four-County Area

As shown in **Figure 2.2**, over the period 2000 to 2021 there is an increasing trend in the area burned in wildfire in the four-county region (Crook, Deschutes, Jefferson, and Wheeler). It shows that based on the 20-year history for which wildfire data were available, the number of acres burned increased by an average of 818 acres per year. Also shown is that in the last 10 years there have been more frequent high-acreage fires. The data in the figure are from the Northwest Interagency Coordination Center large fire interactive web map.[7].

It should be noted, however, that the data used to build the model are limited to only 20 years. A data set with longer history would perhaps show different results. Also as illustrated by the figure, there is a lot of variability in the number of acres burned from year to year as seasonal weather patterns affect fuel moisture conditions, which in turn affect the extent and severity of wildfire in a given year. Still, the data are consistent with peer-reviewed academic research, which suggests that wildfire is increasing. The same research concludes that while the occurrence of wildfire is largely driven by climate conditions, forest managers can decrease fire intensity and severity and improve forest resilience to fir insects and drought

[6] Hessburg, Paul F., et al., Wildfire and Climate Change Adaptation of Western North American Forests: A Case for Intentional Management. Accessed at: https://esajournals.onlinelibrary.wiley.com/doi/10.1002/eap.2432

[7] Northwest Interagency Coordination Center large fire interactive web map. Accessed at: https://gacc.nifc.gov/nwcc/information/firemap.aspx

by implementing forest fuel treatments in a spatially strategic manner that reduces forest undergrowth fuel and decreases forest tree density, thereby increasing the health of remaining standing trees.

Figure 2.2 – Annual Acres Burned by Wildfire in Four-County PREP Region

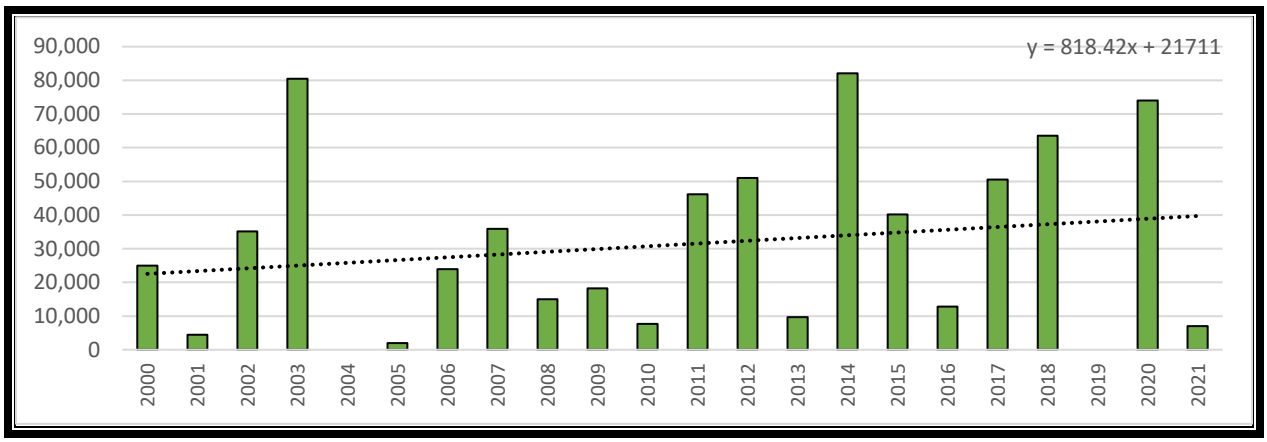


Figure 2.3 provides a graphic illustration of preceding data. It shows the four-county area considered in the PREP analysis with the area of wildfires that occurred between 2000 and 2021 highlighted in orange. During the period there were a total of 93 wildfires greater than 300 acres in size. The fires burned across a total of 684,701 acres. Note, however, that in several cases wildfire burned on the same acres more than once, but in a different year. Thus, the total area of wildfire burned includes some double counting of acres.

Figure 2.3 – Map of Area Burned by Wildfire (Orange Shaded Areas) in Crook, Deschutes, Jefferson, and Wheeler Counties from 2000 to 2021

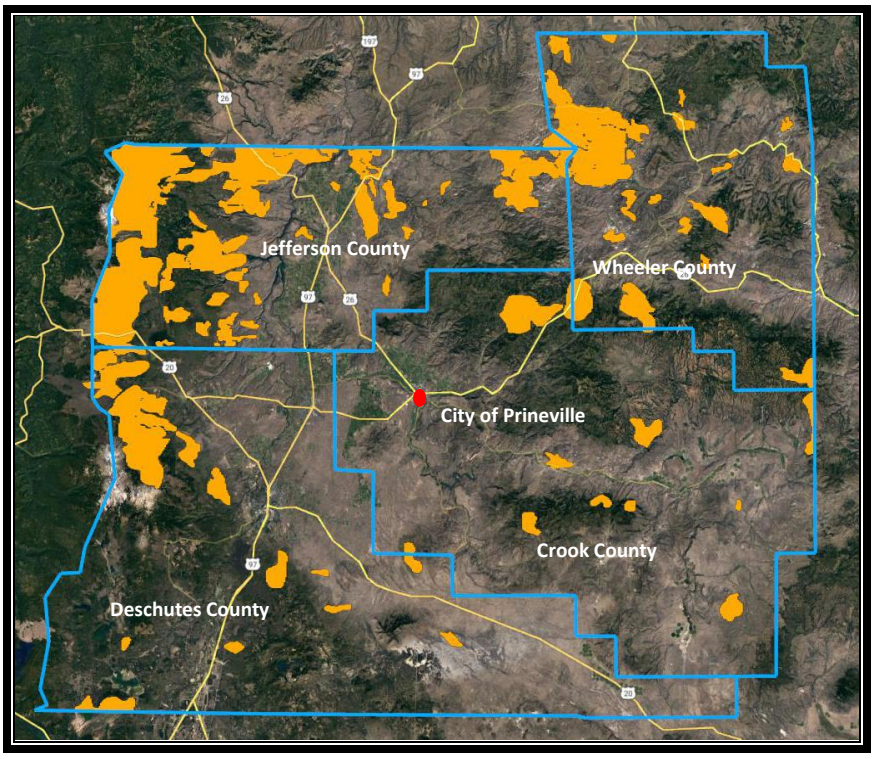


Table 2.8 further summarizes the number of fires and total acres burned by wildfire in the four-county area between 2000 and 2021. As the data in the table illustrates, Jefferson County has been by far the county

with the most area burned by wildfire during the period between 2020 and 2021. It has also been the county with the greatest number of fires, mainly because several of the fires that occurred there were extremely large, including the 2020 Lionshead Fire that burned a total of 204,588 acres including 65,500 in Jefferson County. Similarly, the 2003 Booth fire consumed a total of 90,734 acres, of which about 65,800 were in Jefferson County.

Table 2.8 – Number of Wildfires and Acres Burned by County Between 2000 and 2021

County	Number of Fires	Acres
Crook	10	48,989
Deschutes	16	116,735
Jefferson	42	362,831
Wheeler	25	156,146
Total	**93**	**684,701**

2.3.2 Future Wildfire Occurrence in the Four-County Area

Predicting the when, where, and severity of wildfires remains a "…daunting challenge to the field of risk and hazard science."[8] Nevertheless, the Oregon Department of Forestry, the Oregon State Institute for Natural Resources, and the US Forest Service have all combined to develop the Oregon Wildfire Risk Explorer (www.oregonexplorer.info). It is a web-based mapping tool that allows users to better understand wildfire history and wildfire risk. **Figure 2.4** illustrates wildfire probability in the four-county region as assessed by the Oregon Wildfire Risk Explorer. As the figure illustrates, the areas generally north and east of Prineville are judged to be at the highest risk of wildfire. Note that the darker orange areas are highest risk, with an estimated Very High chance of wildfire with probability ranging between 1 in 25 to 1 in 50 (probability of a wildfire greater than 250 acres in size burning in a given location in a given year). The lighter orange color is rated as High to Very High wildfire risk, with a probability ranging between 1 in 50 and 1 in 100. The yellow areas are rated High risk of wildfire with probability ranging between 1 in 100 and 1 in 500.

[8] Alan Ager, et al. Predicting Paradise: Modeling Future Wildfire Disasters in the Western US. Science of the Total Environment. Accessed at: https://www.fs.fed.us/rm/pubs_journals/2021/rmrs_2021_ager_a002.pdf

Figure 2.4 – Wildfire Probability Map in Four County Region (Source: Oregon Wildfire Risk Explorer)

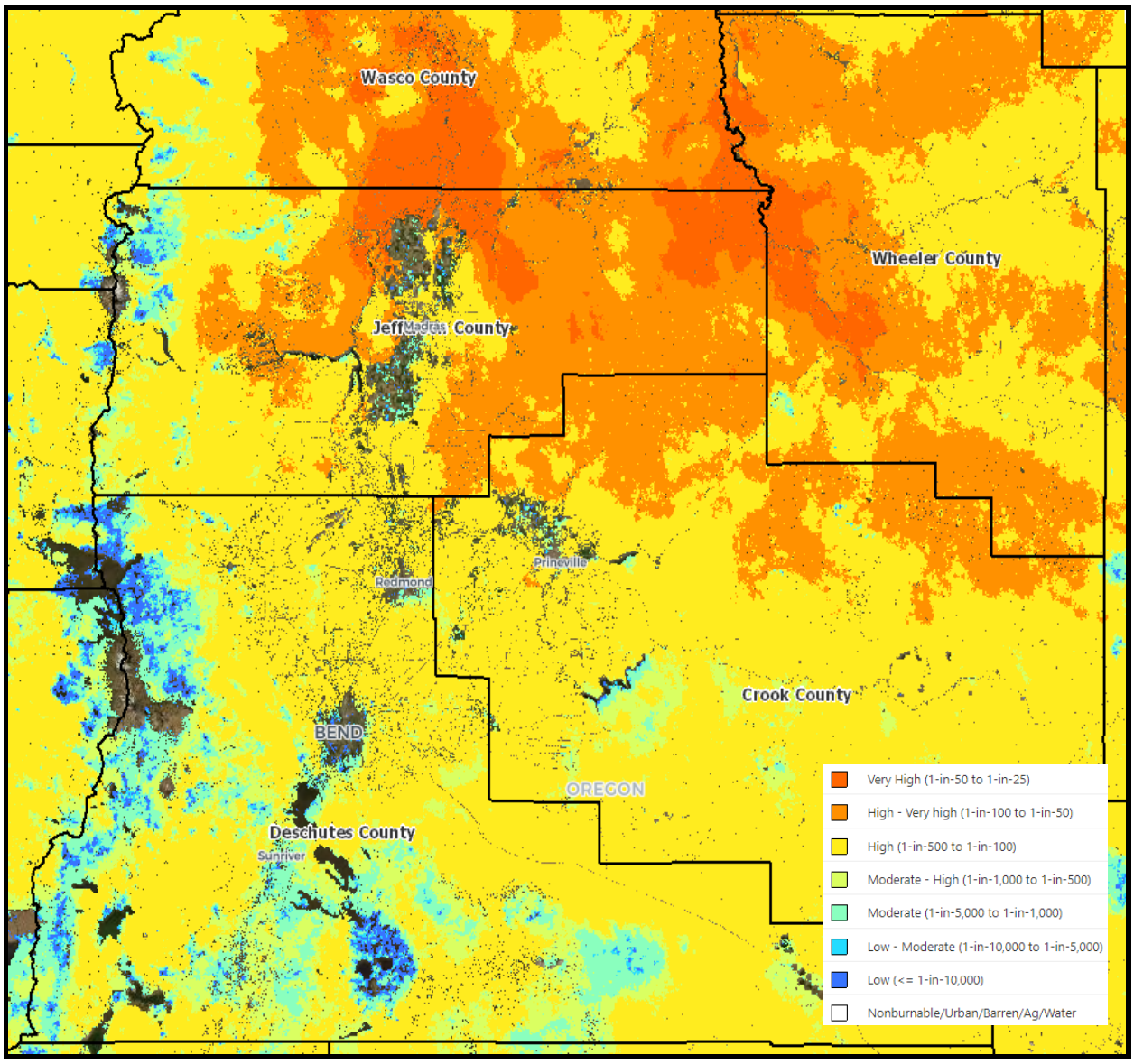


Table 2.9 provides an approximate quantification of the extent of area in each wildfire risk category in the four-county area. The data shows that across the entire four-county area, less than 20% of the land is rated in a category lower than High Risk. Conversely only about 3% of all land in the four-county area is rated in the Very High risk category.

Table 2.9 – Wildfire Risk by County and Risk Category in the Four County Area (Acres)

Acre Basis					
County	**High**	**High to Very High**	**Very High**	**Other**	**Total**
Crook	1,500,000	265,000	0	141,600	1,906,600
Deschutes	1,350,000	0	0	581,500	1,931,500
Jefferson	340,000	435,000	115,000	243,400	1,133,400
Wheeler	445,000	436,000	65,000	151,600	1,097,600
	3,635,000	1,136,000	180,000	1,118,100	6,069,100
Percentage Basis					
County	**High**	**High to Very High**	**Very High**	**Other**	**Total**
Crook	79%	14%	0%	7%	100%
Deschutes	70%	0%	0%	30%	100%
Jefferson	30%	38%	10%	21%	100%
Wheeler	41%	40%	6%	14%	100%
All (Volume Weighted)	60%	19%	3%	18%	100%

2.4 AIR QUALITY

There are two aspects of air quality to be considered as part of the analysis. Each is described in the following sections.

2.4.1 Wildfire-Related Air Quality

Fine particulate matter suspended in the atmosphere is a form of air pollution, which causes the air to be hazy when levels are high. Fine particulates are referred to as PM 2.5, measuring as a count of particles in air that are ≤2.5 microns in diameter. As a point of reference, 2.5 microns is about 30 times narrower than the diameter of a human hair. Short-term exposure to air with high PM 2.5 levels can cause symptoms such as eye, nose, and throat irritation, lung irritation, coughing, runny nose, and shortness of breath. Long-term exposure can affect lung function and worsen medical conditions such as asthma and heart disease.

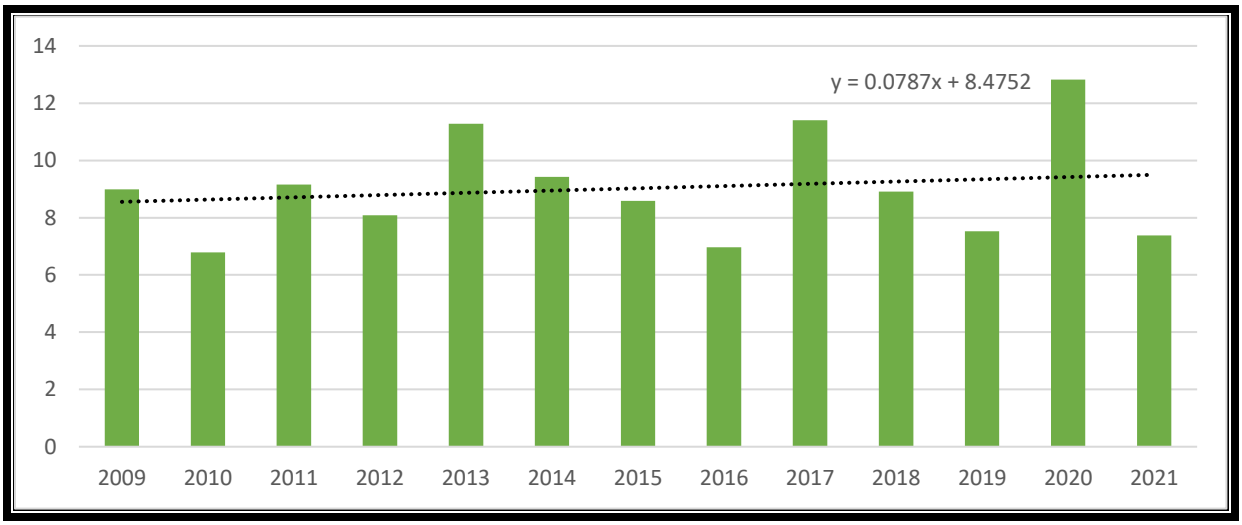
The standard for measuring PM 2.5 is the number of micrograms per cubic meter of air. A microgram equals to one millionth of a gram; there are 450 grams in a pound, thus a microgram is a very small unit of weight.

In the US, the standard for what is considered safe PM 2.5 air quality is an annual average of 12 micrograms per cubic meter or less. The causes of PM 2.5 pollution are varied but include vehicle exhausts, the combustion of various fuels such as wood and coal, forest fires, etc. PM 2.5 levels elevate during events such as wildfire and when there is little wind to aid in mixing air.

Figure 2.5 illustrates the average annual PM 2.5 level measured at Prineville. As the values show, PM 2.5 levels have generally averaged less than the US standard of 12 micrograms per cubic meter (the level below which is considered healthy with no risk to exposure). However, in 2020 the PM 2.5 measurement averaged 13 micrograms per cubic meter. This is almost certainly a direct result of large amounts of wildfire activity in the region in that year. However, another factor affecting PM 2.5 in the Prineville region is weather patterns in the wintertime, when inversions prevent air from moving in and out of the Prineville region. When inversions exist, particulates from wood stoves are almost certainly a key factor in raising PM 2.5 levels during the winter months.

It should also be noted that while the trendline and associated equation displayed on the chart show that over time PM 2.5 levels are rising, the data set only includes 13 years. A longer historical data set might show different trends. Also, as the data shows, there is a large amount of variability in the average annual PM 2.5 level from year to year. Thus, for example, the high levels in 2020 could be having an undue influence on the trendline.

Figure 2.5 – Annual Average PM 2.5 Values (micrograms/cubic meter) in Prineville, Oregon from 2009 to 2021)

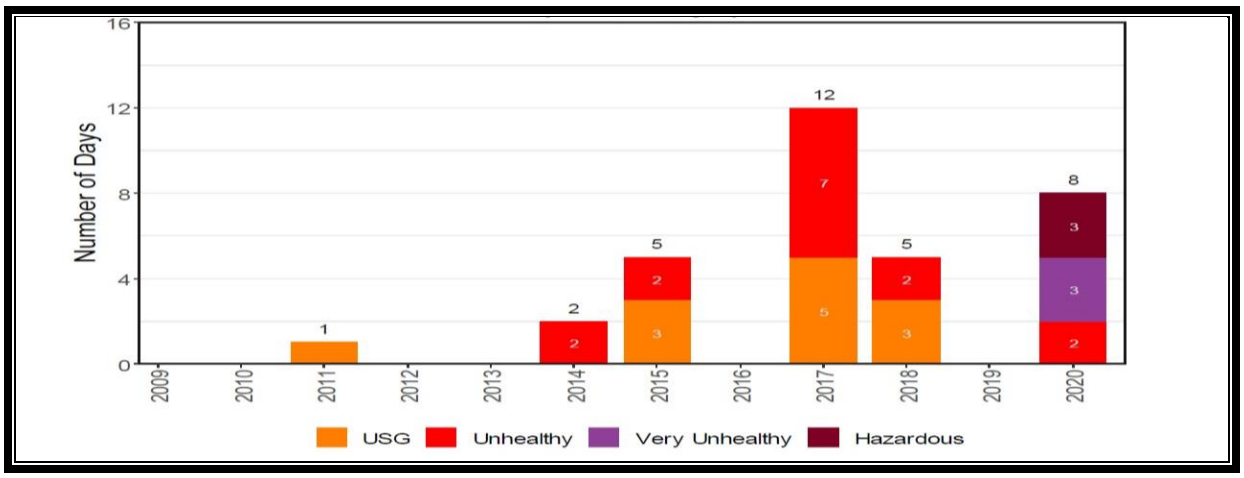


As previously described, a variety of factors could be affecting the PM 2.5 measurements at Prineville for the 2009 to 2022 period shown in the preceding table. However, according to a study[9] published by the Oregon Department of Environmental Quality, smoke from wildfire is causing increases in Air Quality Index values that are Unhealthy for Sensitive Groups (USG). Examples of these trends from that study include data from Eastern Oregon (Bend), which reveal that from 1987 to 2014, Bend had only 3 days where air quality was deemed unhealthy for sensitive groups, or an average of 0.11 days/year. However, from 2015 to 2021, Bend's total increased to 20 unhealthy days, 6 very unhealthy days, and 7 hazardous days, or an average of 5.5 days/year of air quality at unhealthy or worse levels. That is a fiftyfold increase in the number

[9] Wildfire Smoke Trends and Air Quality Index. June 2022. Oregon Department of Environmental Quality. Accessed at: https://www.oregon.gov/deq/wildfires/Documents/WildfireSmokeTrendsReport.pdf

of poor air quality days compared to the 1987 to 2014 period. More specific to the region for this study, **Figure 2.6** illustrates the upward trend in the number of days per year in Prineville where air quality is deemed unsafe for sensitive groups or worse. Like the Bend area, the number of unhealthy or worse air quality days has increased significantly in recent years in Prineville.

Figure 2.6 – Prineville Wildfire Smoke by Air Quality Index Category
(Number of Days for Each Air Quality Category)



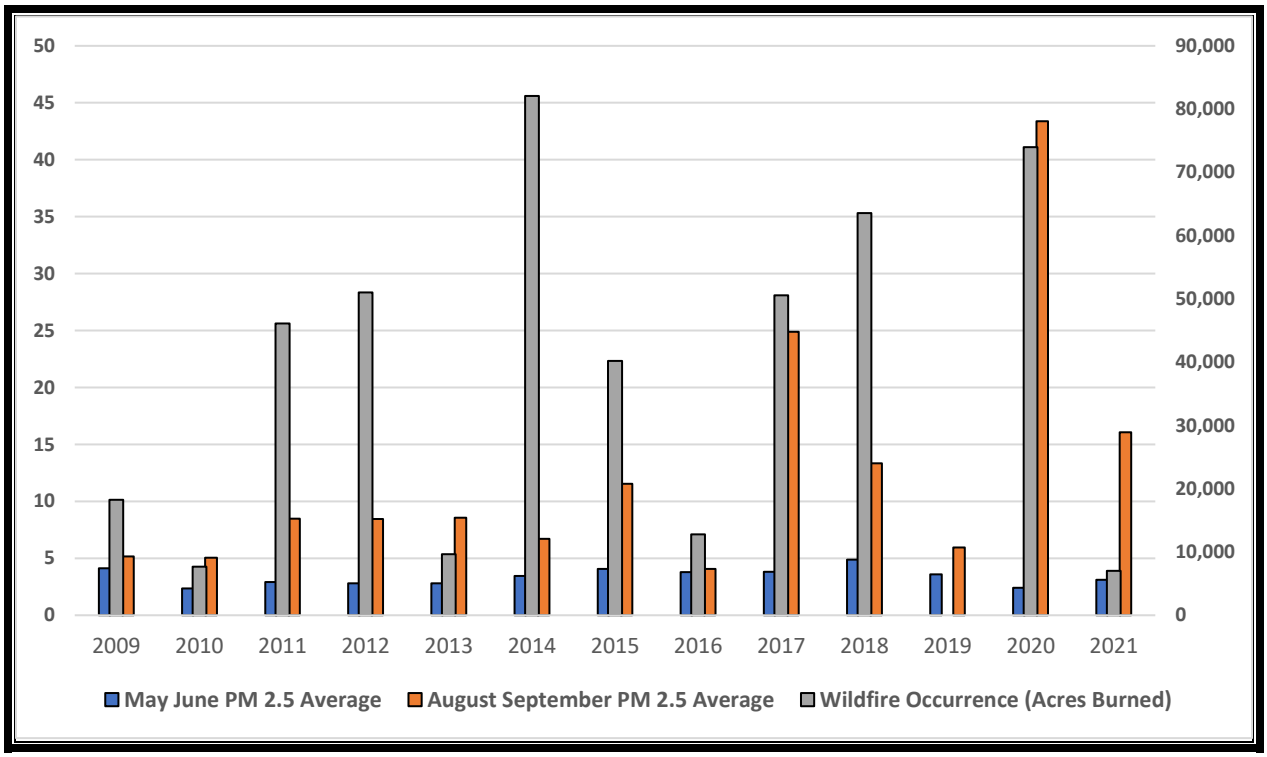
Note that the data in the preceding table shows the number of days per year that are deemed unsafe for groups at health risk from low air quality, or worse. The ratings are per the following air quality index (**Figure 2.7**), which is from the same Oregon Department of Environmental Quality Report.

Figure 2.7 – PM 2.5 Air Quality Index, Breakpoints, and Potential Health Effects

AQI Category and Color	AQI value	PM2.5 ($\mu g/m^3$) 24-hr Aver.	Air Quality and Health
Good	0 to 50	0.0 to 12.0	Air quality is satisfactory. Air pollution poses little or no health risk.
Moderate	51 to 100	12.1 to 35.4	Air quality is acceptable; however, there may be a moderate health concern for a very small number of people. Respiratory symptoms are possible in people unusually sensitive to air pollution. Heart or lung disease (such as asthma) symptoms may be aggravated in people with cardiopulmonary disease and older adults. These groups should consider *reducing prolonged* or *heavy* outdoor exertion.
Unhealthy for Sensitive Groups	101 to 150	35.5 to 55.4	Members of sensitive groups may experience health effects. People with heart or lung disease may experience increased symptoms and premature mortality; older adults, pregnant women and children, are also among the groups most at risk of respiratory symptoms. These groups should *reduce prolonged* or *heavy* outdoor exertion. The general public is not likely to be affected.
Unhealthy	151 to 200	55.5 to 150.4	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects. These groups should *avoid prolonged* or *heavy* exertion: People with heart or lung disease, children, pregnant women and older adults. Everyone else should reduce prolonged or heavy exertion.
Very Unhealthy	201 to 300	150.5 to 250.4	Health alert: everyone may experience more serious health effects. These groups should *avoid all* physical activity outdoors: People with heart or lung disease, children, pregnant women and older adults. Everyone else should avoid prolonged or heavy exertion.
Hazardous	>300	>250.5	Health warnings of emergency conditions. The entire population is more likely to be affected. See EPA AIRNow "Extremely High Levels of PM2.5: Steps to Reduce Your Exposure" when PM2.5 levels are "Hazardous" or above on the AQI.

Given the data in the preceding figure, PM 2.5 measures in Prineville were also analyzed in a different way, as shown in **Figure 2.8** which compares the average PM 2.5 levels in May and June, typically the lowest months, to August and September, typically the months with higher PM 2.5 concentrations during years with occurrence of wildfire. Thus, also plotted in the figure is the number of acres of wildfire that burned in each year in the four-county region. The data show a relatively strong correlation between the number of acres burned in a given year and high PM 2.5 levels in August and September.

Figure 2.8 – Comparison of PM 2.5 levels at Prineville in May/June to August/September (left axis) and the Number of Acres Burned in Wildfire Each Year in the Four-County Area



2.4.2 Open-Pile Logging Slash Burning Impacts on Air Quality

Logging slash is the debris left on the ground in a forest after logging operations. It typically consists of tree limbs, treetops where the diameter is too small for utilization as a sawlog or pulpwood, and otherwise unmerchantable tree stems. Oregon's Forest Practices Act sets out administrative rules about how logging slash must be treated: this treatment protects any remaining trees in the forest, prepares it for regeneration of new seedlings, and reduces the threats of wildfire, insects, and disease. Options for slash treatment include lopping and scattering the slash, chipping/grinding the slash and removing it from the harvest site, and open-pile burning of slash piles. The following paragraphs provide an analysis of the fate of logging slash in a scenario in which the PREP facility exists.

First, it is important to establish the annual amount of logging slash generated. As illustrated in Table 2.6, annual timber harvests in the four-county region have averaged 44.7 million board feet (Scribner) during the period 2012 to 2021. However, BECK estimates that the presence of the PREP facility and the recent reopening of DR Johnson's Prairie City sawmill will increase future average annual harvests in the four-county region by 10 million board feet (Scribner) annually. Thus, for the purpose of this analysis it is assumed that annual harvest in the four-county region will be 54.7 million board feet (Scribner).

Per the supply study completed as part of the PREP facility planning, it was estimated that an average of 0.9 bone dry tons of logging slash are generated per MBF of sawtimber harvested. In other words, for every thousand board feet of logs produced, there are an associated 0.9 bone dry tons of limbs, tops, and cull sections of the trees harvested to produce the sawtimber. This means that each year in the four-county area an estimated 49,200 bone dry tons of logging slash are generated (54.7 MMBF of sawtimber harvested/year times 0.9 BDT of logging slash per MBF).

Also, per forest products industry professionals familiar with logging practices in the region, virtually all logging slash is burned in slash piles. This is because typically after a tree is felled, the whole tree (i.e., limbs and top still intact) is skidded to a landing area. At the landing, a delimber or processor removes the limbs and top to convert the tree stem into a log. Thus, the logging slash accumulates at a landing area and the landowners (or logging contractors) return in the fall/winter to burn the logging slash piles. Burning is less costly than chipping the material or lopping and scattering it back across the harvest unit.

Also, per a report[10] issued by the Washington Department of Natural Resources, open-pile burning of logging slash generates air pollutants at the rates shown in **Table 2.10.** As the data in the table indicates, an estimated 92 tons[11] of nitrogen oxides (NO_x), 3,813 tons of carbon monoxide (CO), 246 tons of Volatile Organic Compounds (VOCs), and 400 tons of Particulate Matter are emitted annually from open-pile burning of slash. Key assumptions in the calculations are that all 49,200 bone dry tons of logging slash are open-pile burned each year and that this material contains an average of 12.5 MMBTU per ton.

Table 2.10 – Emissions from Slash Pile Burning in Oregon

Pollutant	Emission Rate (Pounds/MMBTU)	Annual Emissions (Short Tons)
NO_X	0.3	92
CO	12.4	3,813
VOC	0.8	246
PM	1.3	400

2.5 WATER RESOURCES

As described by the Oregon Department of Agriculture's Crooked River Agricultural Water Quality Management Area Plan[12], water availability and quality have been constantly evolving since the mid-1800s, when European settlement began in the four-county region. Livestock grazing, agricultural irrigation, removal of frequent low-intensity fire from the landscape (which affected vegetation composition), and channelization of creeks and rivers to reduce flooding have all impacted water quality and quantity. Thus, there is a long and complicated history of water use, quality, and quantity.

Examining all aspects of the water-related issues is beyond the scope of this study. However, the significant increase in the number of juniper trees across Eastern Oregon landscapes over the last 100 plus years is a water-related element of significance to the PREP project. This is because juniper trees use significant amounts of groundwater and intercept significant amounts of rainwater. The PREP facility could combust

[10] Forest Biomass and Air Emissions. Washington Department of Natural Resources. Accessed at: https://www.dnr.wa.gov/Publications/em_forest_biomass_and_air_emissions_factsheet_8.pdf

[11] Air pollutant "tons" refers to a US short ton or 2,000 pounds.

[12] Crooked River Agricultural Water Quality Management Area Plan. Oregon Department of Agriculture. February 2021. Accessed at: https://www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/CrookedRiverAWQMAreaPlan.pdf

juniper trees removed from the landscape. Therefore, the following section provides an analysis of juniper and its impact on water supply. The value of water is analyzed in Chapter 4.

2.5.1 Increasing Juniper

Juniper, a tree native species to the region, has dramatically increased its presence across the landscapes of the Inland West largely due to less frequent wildfire. The trend is also true in the four-county region examined in this study. For example, according to data from the US Forest Service's Forest Inventory and Analysis database, the number of juniper trees in the four-county region experienced a net increase of 15% from 2010 to 2019 as shown in **Table 2.11**. Expressed a different way, the total number of juniper trees estimated in the region increased to 141 million in 2019 from 122 million in 2010. Another trend apparent in the data is that majority of the increase has occurred on private lands.

Table 2.11 – Change in Number of Live Juniper Trees on Forestland and Timberland between 2010 and 2019 by Landowner Type in Four-County Region (count of trees in millions)

2010	National Forest	Other Federal	State & Local	Private	Total
Forestland	15	38	3	66	122
Timberland	8	3	0	12	23
2019	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	14	39	5	83	141
Timberland	7	4	0	15	25
Difference	**National Forest**	**Other Federal**	**State & Local**	**Private**	**Total**
Forestland	(1)	1	2	17	19
Timberland	(0)	1	0	2	3

Similarly, **Table 2.12** displays data showing the increase in juniper acreage (i.e., areas where juniper is the dominant tree species present) between 1936 and 1999 in the four-county region.[13] As the data in the table shows, juniper acreage increased by about 64% between 1936 and 1999.

Table 2.12 – Increase in Juniper Acreage in the Four-County Region Between 1936 and 1999 (acres in thousands)

	1999 Total Detailed Breakout								1999 Total	1936 Total	Increase
	National Forest		Other Federal		State & Local		Private				
County	Timber Land	Forest Land	Timber Land	Forest Land	Timber Land	Forest Land	Timber Land	Forest Land			
Crook	42	2	287	107	32	0	424	242	1,136	509	627
Deschutes	0	0	176	88	16	32	32	13	357	329	28
Jefferson	112	1	32	0	0	0	218	142	505	63	442
Wheeler	6	2	96	16	0	0	238	151	509	50	459
Total	160	5	591	211	48	32	912	548	2,507	951	1,556

[13] The Western Juniper Resource of Eastern Oregon. PNW-RB-249. October 2005. https://www.fs.usda.gov/pnw/pubs/pnw_rb249.pdf

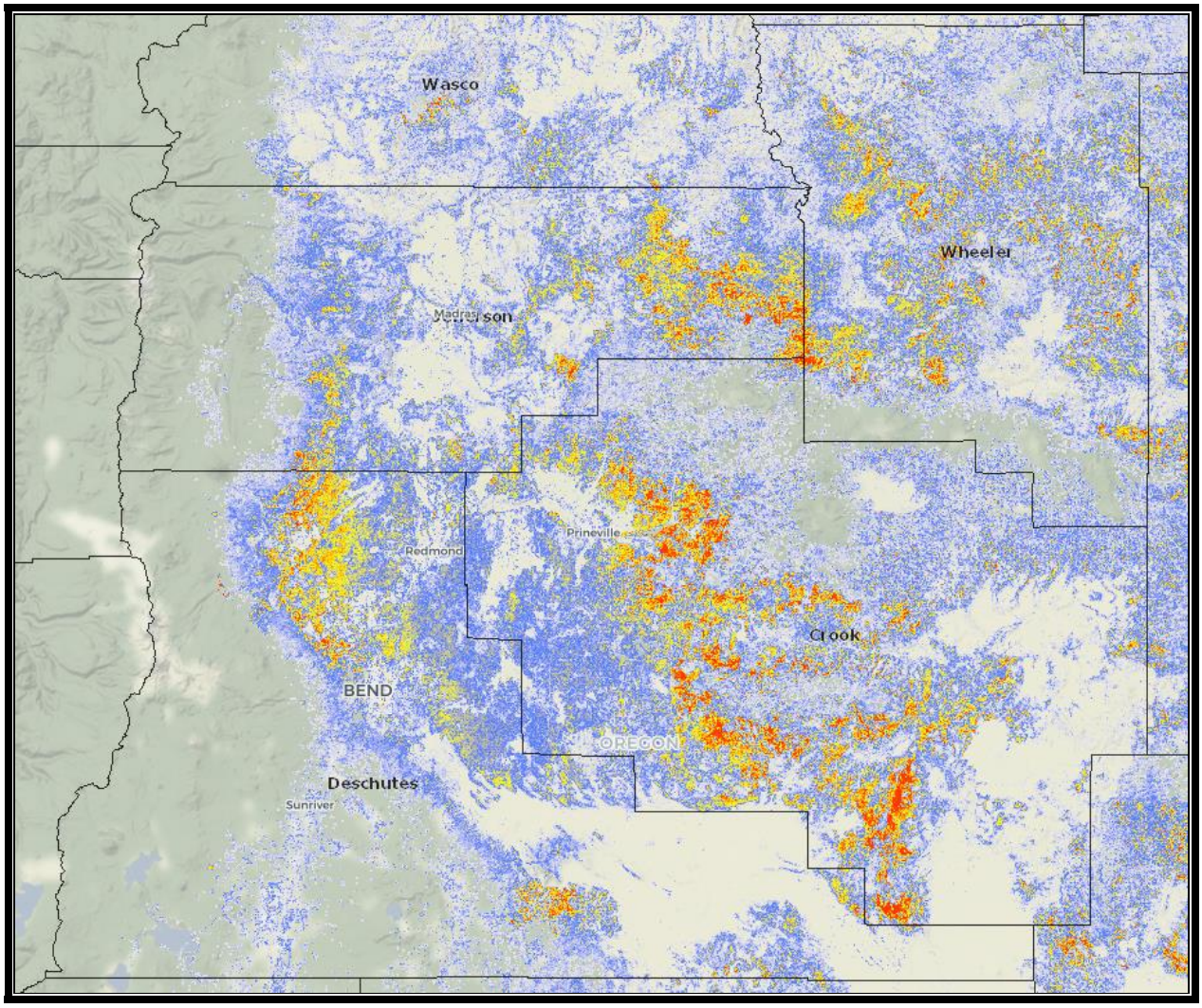
Another means of assessing juniper volume is to consider the amount of biomass per acre. Accordingly, data from the same USFS publication about juniper in Eastern Oregon was used to develop the data shown in **Table 2.13**. It shows that, on average, juniper totals about 1.9 bone dry tons of biomass per acre in Eastern Oregon. Note that because of the way the data was gathered in the USFS report, the volume per acre estimates shown in the table are averages for all 14 Eastern Oregon counties and is therefore not specific to the four-county region. Still, the broader averages are judged to be representative of the four-county region. Also note that volumes range from a low of less than 1 bone dry ton per acre to more than 8 bone dry tons per acre. Only about 10% of the juniper acres across the whole region are productive enough to produce 8 bone dry tons per acre.

Table 2.13 – Average Juniper Volume per Acre in Eastern Oregon by Landowner Type and by Timberland and Forestland in 1999

	National Forest		Other Federal		State & Local		Private		Timber Land Total	Forest Land Total	Grand Total
	Timber Land	Forest Land	Timber Land	Forest Land	Timber Land	Forest Land	Timber Land	Forest Land			
Total Acres (in 1,000s)	377	33	1,534	1,196	95	141	1,556	1,869	3,562	3,239	6,801
Total BDT Juniper Biomass (in 1,000s)	1578	120	5,113	199	357	47	4763	421	11,811	787	12,598
BDT/Acre	4.2	3.6	3.3	0.2	3.8	0.3	3.1	0.2	3.3	0.2	1.9

Finally, regarding the extent of juniper, **Figure 2.9** illustrates the range of juniper in the four-county region. The areas shaded red have the highest juniper densities, followed by orange and yellow areas also containing juniper at lower densities. The purple-colored areas are also dominated by juniper but have lower-density juniper forest cover than the red, orange, and yellow areas. As the figure shows, juniper is widespread throughout the four-county area. Sections of very high-density juniper forest are found in all four of the counties, but Crook County has the largest area and the densest area of juniper cover.

Figure 2.9 – Extent of Juniper Acreage in the Four County Region[14]



2.5.2 Juniper Water Usage

Research has shown that juniper water usage varies dramatically based on the key factors of tree size, time of year, and level of annual precipitation. Thus, creating a model of juniper usage is highly dependent on the level of those three variables. For example, a recent study completed in the Camp Creek watershed near Prineville, Oregon found that mature juniper trees, which are estimated to average 18" in diameter at breast height, consumed on average 4,347 gallons of water per year. In contrast, much smaller saplings, which average only about 1" in diameter at breast height, consume only 75 gallons of water per year on average. The study[15] results are shown in **Table 2.14.**

[14] The Western Juniper Resource of Eastern Oregon. PNW-RB-249. October 2005. Accessed at: https://www.fs.usda.gov/pnw/pubs/pnw_rb249.pdf

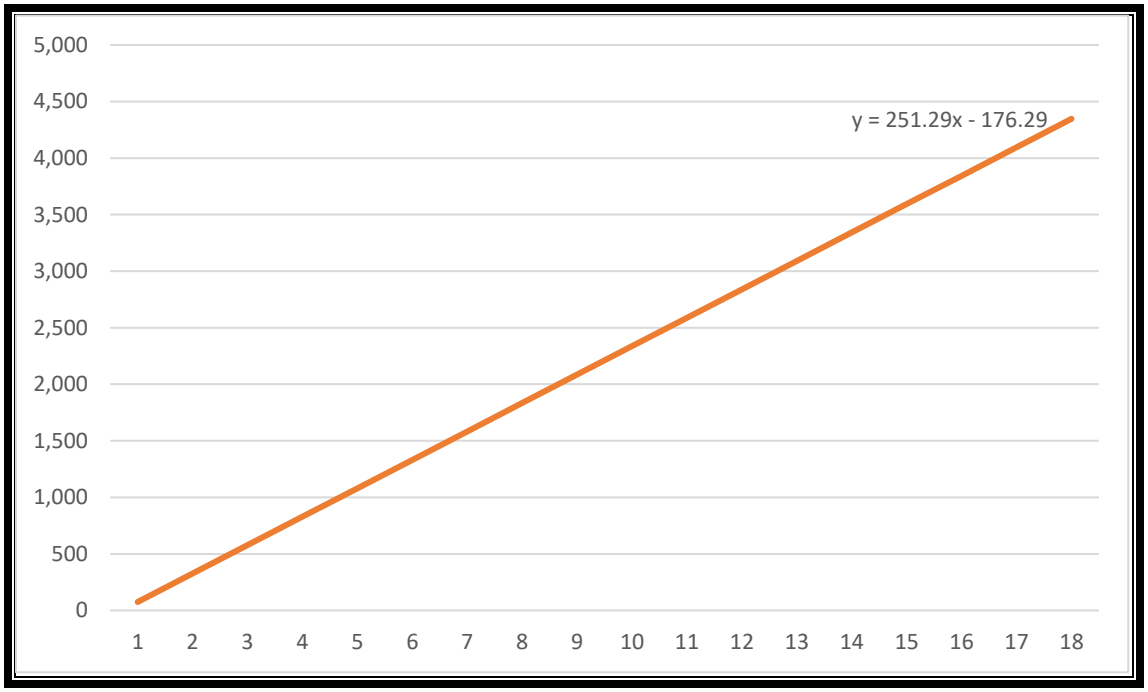
[15] Water Use by Mature and Sapling Western Juniper Trees. Ricardo Mat-Gonzalez, et al, Rangeland Ecology & Management. 74 (2021) 110-113.

Table 2.14 – Water Usage Among Differing Size Juniper Trees at Three Sites in Eastern Oregon

	Trees/Acre		
	Mature	**Saplings**	**Total**
Site 1	132	85	217
Site 2	131	127	258
Site 3	150	109	258
Average	**138**	**107**	**245**
	Gallons of Water Used/Acre/Year		
Site 1	575,567	6,415	569,152
Site 2	570,221	9,559	560,662
Site 3	651,268	8,190	643,078
Average	**599,019**	**8,055**	**590,964**
	Gallons of Water Used Per Tree Per Year		
Site 1	4,348	75	2,618
Site 2	4,347	75	2,174
Site 3	4,348	75	2,490
Average	**4,347**	**75**	**2,417**

For the purposes of this study, it was assumed that there is a constant, linear relationship between juniper tree diameter and water usage as shown in **Figure 2.10**. As the equation on the chart shows, each inch increase in tree diameter is associated with an approximate 250 gallon per year increase in water consumption.

Figure 2.10 – Estimated Annual Water Consumption (Gallons/Year on Vertical Axis) Versus Tree Diameter (Tree Diameter in Inches at Breast Height on Horizontal Axis)



Also, for the purposes of this study it was assumed that the distribution of juniper tree size per acre in the four-county area is represented by the values in **Table 2.15** below. As the top portion of the table illustrates, on average there are about 131 trees per acre in lands classified as juniper timberlands and 22.5 trees per acre on lands classified as juniper forestlands in Eastern Oregon. The second section down in the table shows the estimated average annual water usage per tree by tree diameter. These values are estimated from Figure 2.10. The third section down in the table shows the results of multiplying the average number of trees per acre for each diameter grouping by the estimated average annual water usage for each diameter grouping. As the results show, timberland juniper areas consume an average of 96,500 gallons of water per acre per year and forestland juniper areas consume an estimated 10,500 gallons of water per acre per year. Finally, the bottom portion of the table shows an adjustment to the annual per-acre water consumption of juniper forests. The adjustment accounts for precipitation that is intercepted from reaching the ground because of the presence of tree canopy cover. The adjustment assumes that on average across all juniper forest types, the canopy cover averages 40%[16] and that canopy cover is directly correlated to interception rate (i.e., 40% canopy cover = 40% rainfall interception rate).[17] As the results indicate, it is estimated that each acre of juniper timberland consumes (or intercepts) an average of nearly 161,000 gallons of water annually and each acre of juniper forestland consumes (or intercepts) about 17,500 gallons of water annually.

Table 2.15 – Average Trees Per Acre for Juniper Forests for Forestland and Timberland Forest Types and Associated Estimated Annual Average Water Usage (Gallons/Year)

Forest Type	Tree Diameter Category (Trees/Acre)													Total
	Seed-lings	1" to 2.9"	3" to 4.0"	5" to 6.9"	7" to 8.9"	9" to 10.9"	11" to 12.0"	13" to 14.9"	15" to 16.9"	17" to 18.9"	19" to 20.9"	21" to 28.9"	29+"	
Timberland	69.1	13.3	10.2	11.7	9.0	7.3	3.4	2.4	1.6	1.0	0.7	0.9	0.3	**131.1**
Forestland	15.2	2.0	1.3	1.1	0.8	1.0	0.3	0.3	0.1	0.1	0.0	0.1	0.0	**22.5**
	Estimated Average Annual Water Usage Per Tree (Gallons/Tree/Year)													
Timberland	10	326	703	1,206	1,708	2,211	2,714	3,216	3,719	4,221	4,750	5,800	7,500	
Forestland	10	326	703	1,206	1,708	2,211	2,714	3,216	3,719	4,221	4,750	5,800	7,500	
	Estimated Average Annual Water Usage Per Acre (Gallons/Acre/Year)													
Timberland	691	4,328	7,174	14,157	15,434	16,201	9,357	7,716	6,048	4,359	3,295	5,338	2,460	**96,558**
Forestland	152	660	923	1,308	1,338	2,283	818	989	427	601	197	772	54	**10,523**
	Adjustment for Rainfall Intercepted by Tree Canopy													
Timberland	**Gallons/Acre/Year**													**160,930**
Forestland	**Gallons/Acre/Year**													**17,539**

[16] The Western Juniper Resource of Eastern Oregon. PNW-RB-249. October 2005. Accessed at: https://www.fs.usda.gov/pnw/pubs/pnw_rb249.pdf

[17] Personal communication. Tim Deboodt. Oregon State University Extension Service (retired). June 7, 2022.

Given the data shown in the preceding table, it is also possible to estimate total juniper annual water usage in the four-county region. The top portion of **Table 2.16** shows the current estimated acres of juniper woodlands in the four-county area. As the data shows, there is an estimated total of 2.783 million acres. Note the value is estimated from the 1999 Eastern Oregon study[18] and assuming that juniper forested area increased at a rate of 0.5% per year from 1999 to 2021. The middle portion of the table contains the estimated average annual water consumption per acre for each juniper forest type as calculated in the preceding table. The bottom portion of the table is a calculation of total annual water consumption in juniper forests in the four-county area given the estimated acres of juniper and the estimated average annual consumption per acre. As the results indicate, in the four-county area it is estimated that juniper forests consume an average of 447 billion gallons of water annually.

Table 2.16 – Estimated Juniper Forestland and Timberland Annual Water Consumption in the Four-County Area (Gallons per Year in 1,000s)

Acres of Juniper in Each County (Acres in 1,000s)			
County	**Timberland**	**Forestland**	**Total**
Crook	872	390	1,261
Deschutes	249	148	396
Jefferson	402	158	560
Wheeler	378	188	565
Total	**1,900**	**883**	**2,783**
Average Annual Juniper Forest Water Usage Rate (Gallons/Acre/Year)			
Crook	160,930	17,539	
Deschutes	160,930	17,539	
Jefferson	160,930	17,539	
Wheeler	160,930	17,539	
Estimated Total Average Water Usage in Juniper Forests (Gallons/Year in 1,000s)			
Crook	140,279,192	62,723,562	203,002,754
Deschutes	40,028,712	23,767,048	63,795,760
Jefferson	64,689,258	25,375,344	90,064,602
Wheeler	60,757,866	30,200,234	90,958,100
Total	**305,755,028**	**142,066,188**	**447,821,215**

2.6 LANDFILL USAGE

The Crook County Landfill disposes of approximately 20,000 tons of wood construction and demolition waste annually in its unlined cell.[19] The landfill charges a tipping fee of $40 per ton for this material. Since the material is placed in an unlined cell, which costs little to create or maintain, the tipping fee is a source of revenue for the landfill.

In contrast, the Knott Landfill in Deschutes County reports receiving about 18,000 annual tons of material removed from fire prevention treatment projects. However, this material is diverted from the landfill since the facility is projected to run out of space by 2029. Instead, the material is allowed to accumulate for several months, then a grinder processes it into smaller material for transportation to the landfill. The Deschutes County Landfill reports that the cost for grinding and transporting that material is about $425,000 per year.[20]

[18] The Western Juniper Resource of Eastern Oregon. PNW-RB-249. October 2005. Accessed at: https://www.fs.usda.gov/pnw/pubs/pnw_rb249.pdf

[19] Personal Communication. Jeff Merwin, Crook County Landfill Manager. September 29, 2022.

[20] Personal Communication. Chad Centola, Director Deschutes County Department of Solid Waste. October 28, 2022.

CHAPTER 3 – WITH PREP ANALYSIS

As previously described, the main objective of this study is to assess the environmental impacts of the proposed PREP biomass power plant. The assessment is based on measuring a variety of environmental conditions in a scenario where there is no biomass power plant (i.e., WITHOUT PREP as assessed in Chapter 2) and then estimating those environmental conditions in a scenario where there is a biomass power plant (WITH PREP as assessed in this chapter). The differences in the environmental factors in the two scenarios are interpreted as the impact of the PREP. Additionally, this study provides an assessment of the economic impact of the changes in environmental conditions arising from the PREP (see Chapter 4).

3.1 PREP OPERATING PARAMETERS

The City of Prineville commissioned a feasibility and fuel supply study for the proposed PREP. The study found that there is adequate fuel available and that the project is feasible if the plant is sized at 24.9 MW of power production capacity. Given these findings, **Table 3.1** below summarizes the PREP's key operating parameters that help inform the WITH PREP scenario.

Table 3.1 – Summary of WITH PREP Power Plant Operating Parameters

Metric	Value	Units	Remarks
Plant Scale	24.9	MW	Facility "name plate" power generating capacity
Capacity Factor	96	% uptime	Percent of time the plant is operating
Operating schedule	8,410	Hours/year	Hours/year plant will operate
Gross Power Output	209,214	MWH/Year	Units of electricity produced/year
Station Load	2.2	MW	9% of gross output is station load
Annual Fuel Consumption	191,000	BDT/Year	Volume of wood fuel consumed per year
Employees	8	People	Direct employees

As the data in the table shows, the plant will have a power generating capacity of 24.9 MW. It will operate an average of 8,410 hours per year, which translates into annual production of 209,214 megawatt hours. Additionally, the equipment in the plant consumes 9% of the power generated (i.e., station load). However, the feasibility study's financial analysis assumes that plant's station load is purchased from an external power provider (e.g., BPA, or Pacific Power). Per the feasibility study, the plant will directly employ 8 people. Finally, given the preceding parameters, the plant will consume 191,000 bone dry tons of biomass fiber annually.

Specific to biomass fuel, the supply study identified six potential fuel sources including:

- Sawmill Residuals including bark, sawdust, planer shavings, and chips)
- Logging Slash including limbs, tops, and otherwise unmerchantable logging residuals
- Forest Fuels Reduction includes fiber from whole tree chipping of small diameter trees
- Wood Recycling Centers including biomass collected at municipal drop-off locations
- Landscape Supply including fiber such as bark/mulch gathered at landscape supply operations

- Orchard Supply includes fiber gathered from replacing older orchard trees with new/younger crops

The PREP feasibility study does not specify the proportion of fuel that will be supplied from each source. However, a biomass supply study completed for the PREP provided an estimate for the proportion of fuel that would come from different sources under two scenarios, including a Without Sawmill Supply Case and a With Sawmill Case. Notably, at the time the biomass supply study was completed in August 2021 there were no existing nearby sawmills. However, a sawmill has since reopened in Prairie City, Oregon, which is located roughly 130 miles east of Prineville. Additionally, Neiman Enterprises operates a sawmill in Gilchrist, Oregon which is roughly 80 miles southwest of Prineville. Given these circumstances, the fuel supply scenarios estimated in the PREP biomass supply study were slightly modified based on the project team's judgment about likely supply sources. The results are shown in **Table 3.2**.

Table 3.2 – Proportion of PREP Fuel Among Potential Supply Sources Per PREP Supply Study

	Without Sawmill Scenario		With Sawmill Scenario	
Fuel Source	**Proportion in Without Sawmill Scenario**	**BDT/Year**	**Proportion in With Sawmill Scenario**	**BDT/Year**
Logging Slash	65%	124,000	30%	57,000
Juniper Removals	15%	29,000	15%	29,000
Fuel Reduction	10%	19,000	10%	19,000
Sawmill Residuals	5%	10,000	40%	76,000
Urban Wood Waste	5%	10,000	5%	10,000
Total	100%	191,000	100%	191,000

As the data in the table shows, in the Without Sawmill Scenario the project is heavily reliant on fuel sourced directly from forests, with 85% of the supply consisting of logging slash, juniper removals, and fuel reduction projects. Conversely, in the With Sawmill Scenario, only 55% of the supply comes directly from the forest with the balance coming from sawmill residuals and urban wood waste. Both the Without Sawmill Scenario and the With Sawmill Scenario are given consideration in the following analysis of selected environmental conditions in a WITH PREP scenario.

3.2 PREP FACILITY ECONOMIC IMPACT FACTORS

The PREP facility will increase economic activity in the Prineville region, both during construction and while operational. The plant's design and construction has an estimated cost of $145.5 million as categorized in **Table 3.3**. The potential economic impacts of these expenditures on the Prineville region is discussed in Section 4.6.

Table 3.3 – Estimated Capital Cost of PREP Facility ($ in millions)

Capital Cost Item	Capital Cost ($ in millions)
Design and Supply of Boiler & Auxiliaries	48.7
Construction (Equipment, Mechanical)	69.6
Land Purchase	3.2
Project Development	1.6
Private Transmission	5.0
Construction Interest	9.6
Incidental & Contingency	7.8
Total	**145.5**

Another factor affecting PREP's economic impact on the Prineville Region is the facility's annual revenues and operating costs, which are summarized in **Table 3.4**. The economic impacts of these annualized revenues and operating costs on the Prineville region are discussed in Section 4.6. Note that the values shown in the table are from the second year of operation, which is when the plant would be projected to achieve full operational capacity. Thus, it reflects the impact of an assumed 2% per year escalation factor on all costs and revenues. Also note that regarding the power sales revenue, the plant's feasibility was modeled prior to the passage of the Inflation Reduction Act, which contained significant provisions for aiding biomass power. Thus, the power sales value shown in the table would likely be lower if the power plant is developed.

Table 3.4 – PREP Facility Estimated Annual Operating Revenues and Costs

Revenue/Cost	Type	Rate ($)	Units	Annual Total $
Power Sales Revenue	Revenue	122.40	$/MWH	25,607,797
Biomass Fuel	Cost	52.48	$/BDT	10,032,234
Labor & Benefits	Cost	4.71	$/MWH	986,366
Chemicals & Consumables	Cost	2.63	$/MWH	549,984
Maintenance	Cost	3.00	$/MWH	627,811
Utilities	Cost	5.39	$/MWH	1,127,678
Ash Handling	Cost	1.29	$/MWH	270,878
All other	Cost	1.25	$/MWH	261,982
Insurance	Cost	1.46	$/MWH	306,114
Legal & Accounting	Cost	0.49	$/MWH	102,000
Total Operating Cost		*** 68.18**	**$/MWH**	*** 14,265,047**

* Total is only sum of annual operating costs. Annual revenue from power sales is not included in the total.

Regarding the biomass fuel consumed at the PREP facility, **Table 3.5** provides additional detail about the various sources of fuel and economic impacts. As the first and second columns on the left side of the table illustrate, there is a Without Sawmill scenario and a With Sawmill scenario. For each scenario, the annual

total volume of fuel is included. In the third column from the left is the average bone dry tons of fuel per truckload given assumed average moisture content of each fuel (i.e., 40% for logging slash, juniper and fuel reduction fuels, 50% for sawmill residuals, and 20% for urban wood waste). The fourth column from the left is a calculation of the number of truckloads needed/year for each fuel type, which is calculated by dividing the total BDT/Year by the BDT/truckload. The fifth column from the left is the estimated number of round trips per day each truck can make when hauling fuel. The sixth column from the left is how many days per year hauling is open. Note the analysis accounts for the number of days per week the facility is open to receiving material. It also accounts for periods during the year when trucks have limited ability to haul due to weather and when roads are closed to heavy trucks in the spring while the thawing frost leaves them susceptible to damage. Finally, the last column on the right is the estimated number of trucks and drivers needed to deliver the total annual volume of fuel required at the PREP facility. Note the values in the last column are calculated by dividing the total amount of truckloads/year for each fuel type by the capacity of each truck (roundtrips/day x days/year). The calculated values have been rounded up to the nearest whole number of drivers. As the results indicate, the PREP facility would create between 24 and 28 full-time truck driver jobs for transporting fuel from the various supply sources to the PREP facility.

Table 3.5 – PREP Facility Trucking Jobs Created

Without Sawmill	Total BDT / Year	BDT / Truckload	Truckloads / Year	Average Roundtrips / Day	Days / Year	Trucks/Drivers Needed
Logging Slash	124,000	15.00	8,267	2.5	250	14
Juniper Removals	29,000	15.00	1,933	2.5	250	4
Fuel Reduction	19,000	15.00	1,267	2.5	250	3
Sawmill Residuals	10,000	12.50	800	2	250	2
Urban Wood Waste	10,000	20.00	500	2	250	1
Total	**191,000**		12,767			**24**
With Sawmill	**Total BDT / Year**	**BDT / Truckload**	**Truckloads / Year**	**Average Roundtrips / Day**	**Days / Year**	**Trucks/Drivers Needed**
Logging Slash	57,000	15.00	3,800	2.2	250	7
Juniper Removals	29,000	15.00	1,933	2.5	250	4
Fuel Reduction	19,000	15.00	1,267	2.5	250	3
Sawmill Residuals	76,000	12.50	6,080	2	250	13
Urban Wood Waste	10,000	20.00	500	2	250	1
Total	**191,000**		13,580			**28**

The PREP facility would also create in-woods jobs associated with fuel gathering and processing. Accordingly, **Table 3.6** provides an estimate of the number of in-woods jobs created for carrying out those activities. As the table illustrates, between 20 and 24 jobs would be created for gathering and processing fuel depending on the scenario. Note a “side” is a term used to refer to a work crew. The BDT Produced per Side per Year and the number of Jobs per Side are estimated from similar operations in the Pacific Northwest. There are fewer in-woods jobs in the Without Sawmill scenario because more of the fuel for the PREP facility would come from the sawmill instead of in the woods, requiring fewer workers.

Table 3.6 – In-Woods Jobs Created by PREP

Without Sawmill	Total BDT / Year	BDT Produced / Side / Year	Sides Needed	Jobs / Side	Total Jobs
Logging Slash	124,000	40,000	3	3	9
Juniper Removals	29,000	15,000	2	5	10
Fuel Reduction	19,000	20,000	1	5	5
Total			**6**		**24**
With Sawmill	**BDT/Year**	**BDT Produced / Side / Year**	**Sides Needed**	**Jobs / Side**	**Total Jobs**
Logging Slash	57,000	40,000	1.5	3	5
Juniper Removals	29,000	15,000	2	5	10
Fuel Reduction	19,000	20,000	1	5	5
Total			**4.5**		**20**

3.3 WATER RESOURCES

As described in Section 3.1, the PREP facility is projected to consume annually 29,000 bone dry tons of fuel that arise from thinning juniper woodlands. This circumstance is true for both the With and Without sawmill scenarios. According to the fiber supply assessment completed for the PREP project, the volume of juniper fuel per acre treated averages 8 BDT for private lands and 3 BDT for public lands in Central Oregon. Additionally, the same study found that as many as 13,000 acres of juniper lands could be treated per year in the supply area. The preceding figures indicate that as much as 112,250 bone dry tons of juniper fuel could be available annually. Thus, the assumption of 29,000 BDT/year is well within the capacity of the supply area to produce fuel for the PREP facility.

For the purposes of this study, it was assumed the juniper treatments would yield an average of 4 bone dry tons per acre, which is slightly conservative given the volume per acre estimates in the PREP project's fuel supply study, but slightly higher than the average volume per acre estimated in the juniper water usage studies already described in Chapter 2. Given the average volume per acre assumption (4 BDT/acre) and the assumption that the plant will consume an average of 29,000 BDT of juniper fuel/year, it is estimated that the PREP project will contribute to the treatment of 7,250 acres per year.

Also, based on the information in Table 2.14 in Chapter 2, water consumption per acre in juniper forests ranges between about 17,000 gallons per year in juniper woodlands and nearly 161,000 gallons per year in juniper forestlands. Given the higher density of juniper in the forestland acres, it was assumed that 80% of the annual treatments are on forestland acres and 20% on woodland acres. Focusing on the more densely stocked woodlands not only provides higher volumes to the PREP facility, but also treats the lands most in need of density reduction. Given this assumption it is estimated that, on average, each juniper acre treated consumes 132,250 gallons of water per year (160,930 x 0.8 + 17,539 x 0.2).

Another assumption necessary in the analysis is estimating the proportion of the standing juniper volume removed during treatments. Given the long-term juniper encroachment observed across the entire PREP supply area, it was assumed that 100% of the juniper would be removed. This means that if each acre of juniper treated consumes 132,250 gallons of water per year, and all juniper trees are removed, then an estimated 119,000 gallons of water per year are instead free to replenish aquifers and streams (132,500 gallons per year x 0.9 safety factor to account for water consumed by remaining sage and other plants).

Finally, saving an average of 119,000 gallons of water per acre and treating 7,250 acres per year translates into the PREP facility freeing up an estimated 893,000,000 gallons of water annually.

It is also important to note that the PREP facility will use water for a variety of purposes. Perhaps the most obvious is that water is boiled to produce steam, which passes through a turbine to generate power and then is condensed back to liquid form, and the process repeats. Per the PREP project engineer, the total amount of water cycling through the process is about 23,500 gallons per minute. Fortunately, the process is mostly a closed loop where the water is continuously recycled through the same process. Some water, however, needs to be added into the system to make up for various losses. These include evaporation from the cooling tower system, water droplet drift, cooling tower blowdown (prevents mineral buildup in the water), ash wetting, and other miscellaneous losses.

Table 3.7 summarizes the water loss in the system. Note the total of the water lost is called "make-up" water since it is the amount of water that must be added back into the system to make up for the amount that is lost. As the data in the table indicates, the PREP facility would require a water input of 400 gallons per minute to replenish various water losses in the boiler turbine/generator system. It is also important to note that the 400 gallon per minute water loss estimate is based on a system that uses conventional water-based cooling towers. Water usage can be significantly reduced using air-cooled systems. However, doing so comes with the penalty of higher capital cost and less efficient power production. An air-cooled system was not modeled in the feasibility study.

Table 3.7 – Summary of Make-Up Water Requirements at the PREP Facility

Type of Water Loss	Amount Lost (Gallons Per Minute)
Cooling Tower Evaporation	282
Water Droplet Drift (from cooling tower)	19
Cooling Tower Blowdown	38
Other Uses (ash wetting, selective non-catalytic reduction, deaerator vent, etc.)	30
Loss in Thermal Extraction Process	18
Boiler Blowdown	13
Total	**400**

Given the PREP facility's need for 400 gallons of water per minute, the annual water usage of the plant is calculated to be 210 million gallons per year. While 210 million gallons of water usage per year is significant, it is roughly 23% of the water that is estimated to be "saved" each year by thinning juniper trees in the four-county supply area. In other words, the presence of the PREP facility is estimated to save about 3.25 times more water than it will consume. The economic value of this net water conservation in the Prineville region is analyzed in Section 4.2.

3.4 LANDFILL USAGE

In both the With Sawmill and Without Sawmill scenarios, the PREP facility is projected to consume 10,000 bone dry tons of urban wood waste/year. Per discussion with the Deschutes County Landfill managers, that amount is approximately equal to the amount of wood waste they could divert from their incoming material, which currently costs them about $425,000 per year to process.

3.5 AIR QUALITY

There are several air quality aspects associated with the PREP facility. Each is addressed in the following subsections.

3.5.1 Open-Pile Logging Slash Burning Versus Controlled Boiler Combustion

As described in Section 2.4.2, open-pile burning of 49,200 bone dry tons of logging slash causes the emission of a combined total of about 4,500 tons of air pollutants into the atmosphere each year in the four-county area. In the WITH PREP scenario, that same amount of logging slash material would be combusted. However, instead of the combustion happening in open, uncontrolled conditions, in the WITH PREP scenario the logging slash is combusted in the controlled conditions of a boiler, which is designed to maximize combustion. Per the engineering report completed as part of the PREP feasibility study, the 24.9 MW powerplant is projected to emit the volume of pollutants shown in **Table 3.8** (second column from the right). The column on the far right in the table shows the annual reduction in air pollutants because of burning logging slash in controlled conditions versus open-pile burning. As the results indicate, in the WITH PREP scenario emissions of air pollutants are reduced by 97%. A key assumption in the analysis (per the PREP facility feasibility study engineer) is that the boiler will fire at a rate of 390 MMBTU/hour.

Table 3.8 – WITH PREP Facility - Logging Slash Emissions

Pollutant	WITHOUT PREP Annual Emissions (Tons)	PREP Facility Emission Rate (Pounds/MMBTU)	WITH PREP Annual Emissions* (Tons)	Difference in WITH vs. WITHOUT PREP (Tons of Annual Reduction)
NO_X	92	0.136	60	32
CO	3,813	0.145	64	3,749
VOC	246	0.0384	17	229
PM	400	0.027	12	388
Total	**4,551**		**152**	**4,399**

* Emissions represent only the proportion of total combustion that is logging slash (i.e., about 25%).

Additionally, in a Without Sawmill scenario, the PREP facility is estimated to consume a total of 124,000 BDT/year of logging slash. This means that more than 74,800 bone dry tons of logging slash per year would come to the PREP facility from outside the four-county region (124,000 total minus 49,200 from the four-county region). WITHOUT PREP, the fate of that additional logging slash material is open-pile burning. Therefore, it is appropriate to estimate the emissions reductions in a Without Sawmill scenario across a broader region. The results are displayed in **Table 3.9**, which shows that emissions decrease by more than 11,200 tons per year by combusting the additional 74,800 bone dry tons of logging slash in the controlled conditions of the PREP boiler under a Without Sawmill scenario. Note as described in Chapter 4, this phase of analysis does not account for carbon emissions associated with the diesel combusted to transport the fuel to the PREP facility.

Table 3.9 – Without Sawmill - Logging Slash Emissions

Pollutant	WITHOUT SAWMILL Annual Emissions - based on 124,000 BDT/Year of logging slash (Tons)	PREP Facility Emission Rate (Pounds/MMBTU)	WITH PREP Annual Emissions (Tons)	Difference in WITH vs. WITHOUT PREP (Tons of Annual Reduction)
NO_X	233	0.136	105	128
CO	9610	0.145	112	9498
VOC	620	0.0384	30	590
PM	1008	0.027	21	987
Total	**11,470**		**268**	**11,203**

3.5.2 Wildfire Impacts on Air Quality

Another aspect of air quality associated with the PREP project is that a total of 48,000 BDT per year of the fuel is projected to be sourced from either juniper thinning (29,000 BDT/year) or forest thinning projects (19,000 BDT/year). Both types of activities reduce the likelihood of wildfire by reducing the amount of fuel on the landscape. As previously described, the thinning will occur on an average of 8,900 acres per year. Thus, over a 20-year period a total of 178,000 acres of land will have been treated.

Per table 2.9 in Chapter 2, there are an estimated total of 4.951 million acres of high to very high wildfire risk in the four-county area. This, in turn, means that over a 20-year period, a total of 3.9% of the highest at-risk acres will have been treated (178,000 divided by 4,951,000). Each acre thinned is expected to provide fire reduction benefits for approximately 20 years. While the treatments may not reduce the average annual acres burned by wildfire in the four-county region (31,112 acres/year), it is judged that the thinning treatments will reduce the intensity of the fire on the treated acres by 25% to 75%.[21] For use in this analysis regarding benefits of reduced wildfire on air quality and other environmental effects, we assume that reduction in fire intensity can be translated into reduced 'acre equivalents' burning; so for example, an intensity reduction of 50% on two acres is assumed to be equivalent to reduction in all the forest burning on 1 acre-equivalent. It follows then that the equivalent acres of fire reduction caused by the presence of the PREP facility is 280 acres to 840 acres per year (3.9% of at-risk acres treated x 31,112 acres/burned per year x 25% to 75% fire intensity reduction on burned acres).[22]

Table 3.10 provides an estimate of wildfire-related air pollutant emissions avoided, assuming that an estimated 280 to 840 acre equivalents of wildfire will not occur due to the presence of the PREP facility. Note the estimate of 280 acre equivalents is considered the Base Case, but the columns to the right show the impacts assuming the thinning treatments are more effective at reducing fire intensity (i.e., 50% = 560 acre equivalents per year and 75% = 840 acre equivalents per year). Aside from the acre equivalents per

[21] This is based on several sources in the literature indicating that mechanical treatments may not reduce total area burned but reduce the level of intensity of wildfire.

[22] We believe this is a reasonable approach as the vast majority of wildfire-related economic benefits are related to combustion of forest materials (i.e., air quality and carbon benefits), and the fire intensity should be directly related to the amount of material combusted and the associated air quality and carbon benefits.

year reduction in wildfire intensity, another key assumption in the analysis is that on average, the standing timber volume in the four-county area is 23.1 BDT/acre per USFS FIA data. This means that a total of 6,500 BDT of biomass combustion is avoided (280 acre equivalents x 23.1 BDT/acre). Also note the same assumptions were used in this analysis as were used for preceding logging slash analysis (i.e., the BTUs per ton of wood fiber combusted and emissions rates in pounds per million BTUs are all the same). This in turn translates into less air pollutants emitted because of the PREP facility by the amounts shown in the table. The economic impacts of air quality benefits of reduced wildfire on the Prineville region are analyzed in Section 4.6.2.

Table 3.10 – Wildfire-Related Annual Air Pollutant Emissions Avoided by Presence of PREP Facility

Air Pollutant	Emission Rate (Pounds per MMBTU)	Annual Emissions Avoided @ 25% Intensity Reduction (Tons)	Annual Emissions Avoided @ 50% Intensity Reduction (Tons)	Annual Emissions Avoided @ 75% Intensity Reduction (Tons)
NO_X	0.30	12	24	36
CO	12.4	501	1,003	1,504
VOC	0.80	32	65	97
PM	1.30	53	105	158
Total		598	1,197	1,795

3.6 CARBON IMPACTS OF WILDFIRE AVOIDED

As described in the preceding section, the presence of the PREP facility is judged to reduce wildfire risk by an estimated 280 equivalent acres per year (or 560 and 840 acre-equivalents per year at differing levels of fire intensity reduction). **Table 3.11** illustrates the estimated carbon dioxide emissions of wildfire avoided at the three different fire reduction intensity levels. Key assumptions in the analysis are: an average of 23.1 BDT of biomass per acre in the four-county region, that 50% of the weight of the biomass is carbon, and that tons of carbon convert to carbon dioxide equivalents at a rate of 3.67 CO_2e/ton of carbon. PREP would also result in *increased* carbon dioxide emissions related to trucking of logging slash and operation of mechanical thinning equipment; a very rough approximation of these emissions indicates that they may be in the range of approximately 4,500 tons of CO_2e annually. Note that due to uncertainty in this estimate and its small value relative to the large range in CO_2e from reduced wildfire risk, we do not directly compute subtract the equipment emissions from the values shown in Table 3.11.

Table 3.11 – Annual Tons of Carbon Dioxide Equivalent Avoided by Presence of PREP

Carbon Dioxide Equivalent Emissions Avoided @ 25% Intensity Reduction (CO_2e Tons)	Carbon Dioxide Equivalent Emissions Avoided @ 50% Intensity Reduction (CO_2e Tons)	Carbon Dioxide Equivalent Emissions Avoided @ 75% Intensity Reduction (CO_2e Tons)
11,869	23,738	35,606

3.7 FOREST HEALTH

This section focuses on forest health effects of PREP, live biomass and number of live trees, and merchantable timber volume. Note that changes in the amount of carbon stored as standing timber in regional forests was not included in the analysis since recent analysis has shown that forest carbon storage has had mixed and inconclusive results.[23]

3.7.1 Forest Acres

As identified in Section 2.1.1, the forested area in the four-county region increased by 0.3% from 2010 to 2019 (an increase of 17.4 thousand acres on a total forested area of 5.43 million acres). In this case, the observed change in forested area in the region is so small that it is judged insignificant. However, what is important is that in a WITH PREP scenario, landowners have an option for selling biomass from their lands to the PREP facility. In other words, the presence of the PREP facility means forest management activities (e.g., forest thinning and wildfire risk reduction treatments) are much less costly because there is a market for the materials removed during the treatments. This creates an incentive for forest landowners to maintain their lands as forests as opposed to converting them to other uses. Therefore, in a WITH PREP scenario the conclusion is that the area of forested land in the four-county region will remain stable for the foreseeable future.

3.7.2 Total Aboveground Live Biomass & Number of Live Trees

As described in Sections 2.1.3 and 2.1.4 both the volume of aboveground live biomass and the number of live trees have been increasing by about 1% and 1.7% per year respectively between 2010 and 2019. These findings are consistent with a finding of increasing merchantable standing volume. These findings have limited environmental impact or direct economic on the region. However, these trends underscore how a facility such as PREP can utilize the increasing levels of wood fiber on the landscape, and thereby reduce the risk of wildfire by targeting treatments to areas deemed most susceptible to wildfire.

3.7.3 Volume of Merchantable Standing Trees & Tree Growth

The analysis in Section 2.1.5 concluded that WITHOUT PREP, the volume of merchantable standing trees in the four-county region was increasing by 0.8% per year on forestland and at 1.0% per year on timberland. In a WITH PREP scenario, where forest management activity (e.g., pre-commercial thinning, commercial thinning, sawtimber, and wildfire risk reduction harvests) are all taking place at higher levels, it is estimated that standing timber inventory would increase at a rate of 2.5% per year on timberland and 1.5% per year on forestland for the useful life of the PREP facility.[24] This means that the incremental increases in standing inventory due to PREP are 0.7% on forestland (1.5% projected minus 0.8% currently) and 1.5% on timberland (2.5% projected minus 1.0% currently). These estimates of annual growth rates are consistent with published reports about actively managed forested lands in Eastern Oregon.[21]

Table 3.12 illustrates the estimated annual increase in growth that will be achieved as landowners begin more intensively managing their forestlands by carrying out thinning operations. As the table shows, thinning is expected to increase average annual growth by 50 board feet of growth per acre per year on forestland and 90 board feet per acre per year on timberland (see the first two rows of the table). The bottom two rows of the table show the annual increase in stumpage value expected to accrue to

[23] Using Remote Sensing to Quantify the Additional Climate Benefits of California Forest Carbon Offset Projects. Shane R. Coffield et al. September 2022. Global Change Biology. Accessed at: https://onlinelibrary.wiley.com/doi/10.1111/gcb.16380.
[24] Personal Communication. Steve Courtney, former timber manager at Malheur Lumber Company. 9/28/22.

landowners due to actively thinning 1,950 acres per year. The table shows that the annual increase in value is estimated to be $9,100 when forestland is included and $15,300 on timberland. Both are a benefit to landowners, but the increased values are very modest. The increased value from extra annual timber growth could become more significant if the fuel supply recipe for the PREP facility included a greater proportion of fuel from forest thinning treatments. Key assumptions in the analysis are that there are 0.52 MBF Scribner per 100 cubic feet, annual growth increase by 0.8% on forestland and 1% on timberland relative to current growth rates, and that stumpage rates in the region average $85/MBF across all species and log sizes.[21]

Table 3.12 – Estimated Increase in Standing Timber Inventory Value Arising from More Active Forest Management in a WITH PREP Scenario

Metric	Landowner Type				Weighted Average
	National Forest	Other Federal	State & Local	Private	
Forestland Extra Growth (MBF Scribner/Year/Acre)	0.09	0.01	0.01	0.03	0.05
Timberland Extra Growth (MBF Scribner/Year/Acre)	0.11	0.06	0.17	0.06	0.09
Estimated Increase in Stumpage Value ($) Forestland	14,604	2,242	2,222	5,199	9,114
Estimated Increase in Stumpage Value ($) Timberland	18,292	10,183	27,871	10,168	15,283

CHAPTER 4 – ECONOMIC VALUE OF PREP EFFECTS

This section estimates the economic value of the preceding chapter's analysis of the PREP biomass power plant's environmental effects. The section addresses the same parameters as the preceding sections: water resources, landfill usage, air quality, carbon, forest health, and wildfire risk. Additionally, in the Other Benefits section, the effects of PREP on easing the power and transmission constraints in the region and its effects on economic development are discussed.

4.1 AIR QUALITY

As discussed in Section 3.6, the PREP initiative is expected to improve air quality by reducing smoke and emissions associated with burning of logging slash, as well as diminished forest fire intensity due to forest thinning. This will result in lower emission levels than the region currently experiences from slash burning and wildfire. This section presents the potential health value of the air quality improvements that are projected to result directly from PREP (reduced burning of logging slash, as summarized in **Table 4.1** below based on information presented in Section 3.6 above); all benefits of reduced wildfire risk, including air quality benefits, are separately discussed in Section 5.6 below. Health benefits of improvements to air quality are typically valued by estimating the avoided health-related costs of poor air quality. These include premature deaths, money spent on medical treatments, and lost time at work. In addition to health benefits, there may be visibility and other aesthetic benefits of improved air quality; these benefits are expected to be greatest due to reduction in wildfire risk (i.e., visibility is likely most affected by wildfire). Potential effects of PREP on aesthetics are discussed in Section 5.6 below.

Table 4.1 – Estimated Reduction in Air Emissions due to PREP
(Change in Logging Slash Emissions)

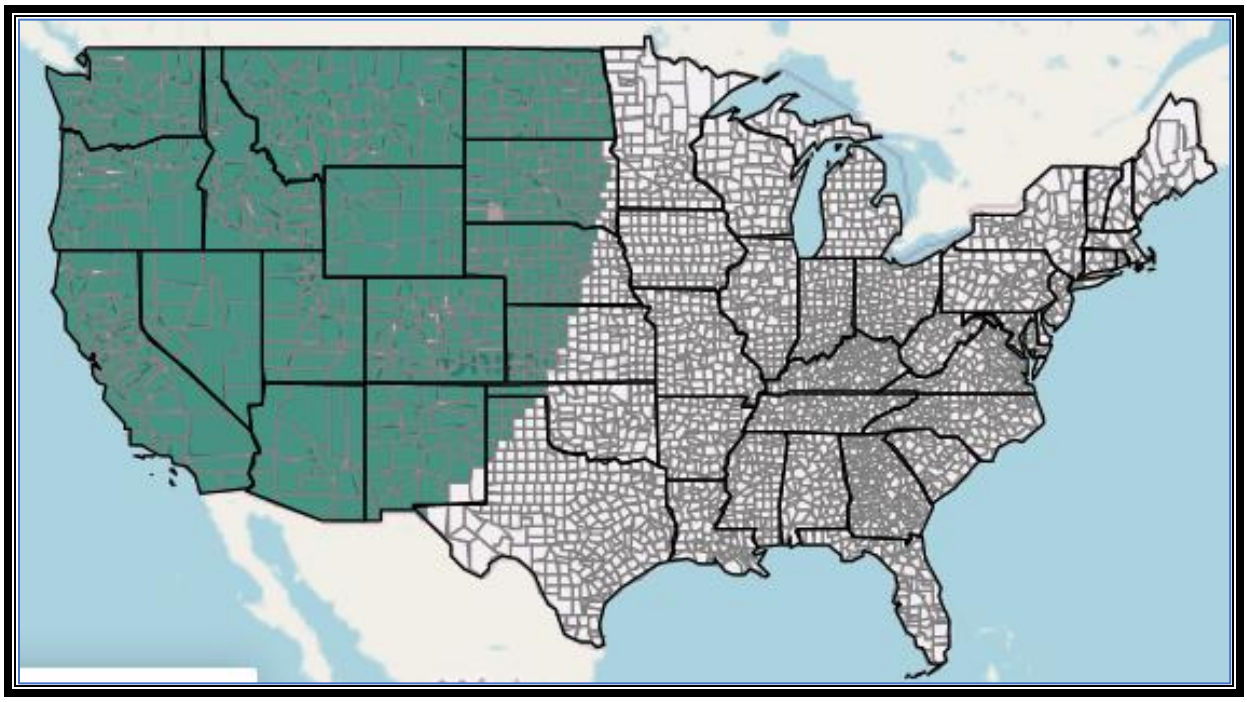
Pollutant	With Sawmill (Tons of Annual Reduction)	Without Sawmill (Tons of Annual Reduction)
NO_X	32	-10
CO	3,749	5636
VOC	229	331
PM	388	578
Total	**4,399**	**6,535**

* Emissions are only for the proportion of total combustion that is logging slash (i.e., about 25%).
* A negative value indicates an increase in emissions.

4.1.1 Population Affected

The health benefits of improved air quality depend on the population size and demographics of people affected by the change in air quality. Changes in air quality in Central Oregon have nationwide impacts; air pollutants disperse over large geographic areas, contributing to air quality problems and associated health problems throughout the western United States (see **Figure 4.1**). The per capita effects, however, are largest for individuals in the local area, particularly for individuals who are most sensitive to air quality changes.

Figure 4.1 – Geographic Extent of Health Impacts from Air Pollution in Central Oregon



Source: (U.S. EPA, 2021)

The four local counties with changes in total air pollutants released because of PREP (i.e., the counties where logging slash burning will decrease) had a total population of nearly 250,000 people in 2020 (U.S. Census Bureau, 2020). Of this population, approximately 25% (62,000 people) are in age groups that are particularly sensitive to poor air quality: the very young (under 5 years) and the old (over 65). The adult prevalence of asthma in Oregon is 10.6% (Centers for Disease Control and Prevention, 2022). If the four-county region's population experiences a similar rate of asthma, an estimated 21,000 adults in this region have asthma. Additionally, approximately 5% of the U.S. adult population suffers from chronic lung diseases including chronic obstructive pulmonary disorder, emphysema, and chronic bronchitis (National Center for Health Statistics, 2022). At this rate, the region's population has nearly 10,000 people who suffer from lung conditions. In total in the region, there are approximately 93,000 people in these age groups or with these health conditions that are especially vulnerable to poor air quality; these would be the populations most likely to benefit from air quality improvements generated by PREP. **Table 4.2** summarizes the relevant demographics in the region.

Table 4.2 – Region Total Population[1] and Most Vulnerable Population

Metric	Estimated Most Vulnerable Populations to Poor Air Quality					Total Population
	Estimated population <5 years old [2]	Population over 65 years old	Estimated population with asthma [3]	Estimated population with lung disease [4]	Total Most Vulnerable	
Crook County	1,212	5,905	2,100	991	10,208	**24,738**
Deschutes County	10,309	38,139	16,644	7,851	72,943	**198,253**
Jefferson County	1,544	4,642	1,984	936	9,106	**24,502**
Wheeler County	70	487	130	61	748	**1,451**
Region Total	**13,135**	**49,173**	**20,858**	**9,839**	**93,005**	**248,944**
By City						
Bend	99,178	5,951	16,343	8,137	129,609	**3,838**
Fossil	447	22	177	38	684	**18**
Madras	7,456	559	971	582	9,568	**274**
Mitchell	138	0	35	14	187	**7**
Prineville	10,736	666	2,090	882	14,374	**416**
Redmond	33,274	2,030	4,697	2,755	42,756	**1,299**
Sisters	3,064	144	946	243	4,397	**114**

[1] Source: (U.S. Census Bureau, 2020; U.S. Census Bureau, 2020)

[2] Estimated by applying the percent of population under 5 years in 2020 ACS data to the total population in the 2020 decennial census (U.S. Census Bureau, 2020).

[3] Estimated by applying the 2020 state asthma rate to the population over 18 years, which was estimated by applying the percent of population 18 years in 2020 ACS data to the total population in the 2020 decennial census (U.S. Census Bureau, 2020; Centers for Disease Control and Prevention, 2022).

[4] Estimated by applying the 2020 national lung disease rate to the population over 18 years, which was estimated by applying the percent of population 18 years in 2020 ACS data to the total population in the 2020 decennial census (U.S. Census Bureau, 2020; National Center for Health Statistics, 2022).

As indicated in the bold values in **Table 4.3** below, compared to the rest of the state, the four-county region also has a higher proportion of individuals living in poverty, and Jefferson County also has a higher proportion of Hispanic and non-white populations. Reductions in health hazards, such as those anticipated from PREP, would benefit these environmental justice populations.

Table 4.3 – Region Low Income and Minority Population Proportions, 2020 Census and 2018 American Community Survey Data

Population	Oregon	Crook County	Deschutes County	Jefferson County	Wheeler County
% Hispanic	14%	7%	9%	**20%**	6%
% Minority[1]	16%	6%	7%	**28%**	5%
% Living Below Poverty	14.1%	**14.6%**	**19.9%**	**19.9%**	**20.0%**

Source: (U.S. Census Bureau, 2020; U.S. Census Bureau, 2020)

[1] Identifying as some other race than white, or as white and another race.

The Central Oregon region currently has occasional impacts from very poor air quality. **Table 4.4** summarizes the number of poor air quality days for cities in the region over the last five years. The worst air impacts are often caused by wildfires, which are likely to become more frequent and severe in the coming decades (U.S. Department of Agriculture, n.d.).

Table 4.4 – Local Region Number of Days with Poor Air Quality[1] by City

City	2016	2017	2018	2019	2020	5-year Average
Bend	1	15	9	0	13	7.6
Madras	0	9	7	2	11	5.8
Prineville	0	16	5	0	8	5.8
Sisters	0	25	10	5	12	10.4

[1] Days with air quality ratings of "Unhealthy for Sensitive Groups" or worse. Source: (Oregon Department of Environmental Quality, 2021)

4.1.2 Health Value of Improved Air Quality

Numerous studies have focused on the social costs of air pollutants, but local impacts depend on the source of emissions, local climatic conditions, and the specific population exposed to the emissions. This section presents the potential health value of the air quality improvements projected to result from PREP. Health improvements to air quality are typically valued by estimating the avoided health-related costs of poor air quality, which include premature deaths, money spent on medical treatments, and lost time at work. There are a variety of studies estimating the health benefits of improved air quality.

Because of the importance of estimating impacts on the specific local population, we use the U.S. Environmental Protection Agency's Co-Benefits Risk Assessment (COBRA) Health Impacts Screening and Mapping Tool. The COBRA tool compiles estimates from peer-reviewed studies and allows users to model the health impacts at the county level for changes in PM, NO_X, and VOC emissions. Estimated impacts are

specific to the source of emissions, whose relevant sector categories include "Natural Resources" and "Fuel Combustion: Electric Utility." Pollutant impacts are broken down by specific health conditions (such as acute bronchitis) and ranges are provided for the expected change in annual cases and associated monetary values. Because pollutant emissions can travel great distances in the atmosphere, the estimated monetary values include impacts to other counties and states. The COBRA tool indicates that emissions in Central Oregon can have health impacts as far east as the Great Plains states and as far south as the Mexican border (as shown in the Figure 4.1).

To estimate the benefits of avoided carbon monoxide (CO), we used a 2015 study by Shindell that modeled the economic impacts of various air pollutants including carbon monoxide. This study found that one ton of CO has average health costs of between $274 and $342 (Shindell, 2015).[25] As shown in **Table 4.5** below, with these methods we estimate that the total health cost savings (benefits) from PREP-avoided air pollutants associated with logging slash is in the range of $14.2 million to $44.1 million. The impacts of PM constitute roughly 90% of the health benefits.

Table 4.5 – Estimated Value of Health Benefits of Avoided Emissions from Logging Slash

Pollutant	Annual Emissions Avoided Under PREP (tons)		Cost per Ton of Emissions [1]		Cost Savings of Emissions Avoided Under PREP	
	Low	High	Low	High	Low	High
NO_x	32	-10	$12,100	$27,258	$390,000	-$270,000
CO	3,749	5,636	$274	$342	$1,030,000	$1,930,000
VOC	229	331	$4,822	$10,862	$1,100,000	$3,600,000
PM	388	578	$30,082	$67,240	$11,670,000	$38,860,000
Total	4,399	6,535	N/A	N/A	$14,190,000	$44,120,000

[1] Source for NO_x, VOC, and PM costs: (U.S. EPA, 2021). All costs were adjusted from 2017 dollars to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022). Each pollutant was modeled separately in COBRA using a 3% discount rate, estimating the health costs without PREP (using the "Natural Resources" sector category) and subtracting the health costs with PREP (using the "Fuel Combustion: Electric Utility" sector category).[26] For avoided wildfire emissions, the "Miscellaneous" sector and "Agriculture & Forestry" subsector categories were used. Source for CO costs: (Shindell, 2015). All costs were adjusted from 2007 dollars to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022).

4.2 WATER RESOURCES

Reduced water usage in forests thinned in association with PREP (see Section 3.4) could offer numerous benefits. Primary water uses in the region include agriculture, recreation, public and domestic drinking water supply, and habitat (including instream flows and groundwater-dependent ecosystems). The primary watersheds where juniper would be thinned and used in the PREP Facility include the Upper Deschutes, Middle Deschutes, Crooked River, and Mid-John Day / Bridge Creek watersheds. This section

[25] All costs were adjusted from 2007 dollars to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022). Estimates represent the global average, with the range representing discount rates between 1.4% and 5%.

[26] COBRA limits the total number of emissions that can be modeled by sector category in its database. In some cases, the amount was less the emissions with or without PREP. Where possible, the total emissions were modeled in COBRA; when not possible, one ton of pollutant was modeled and the health costs were multiplied by the total tons of emissions.

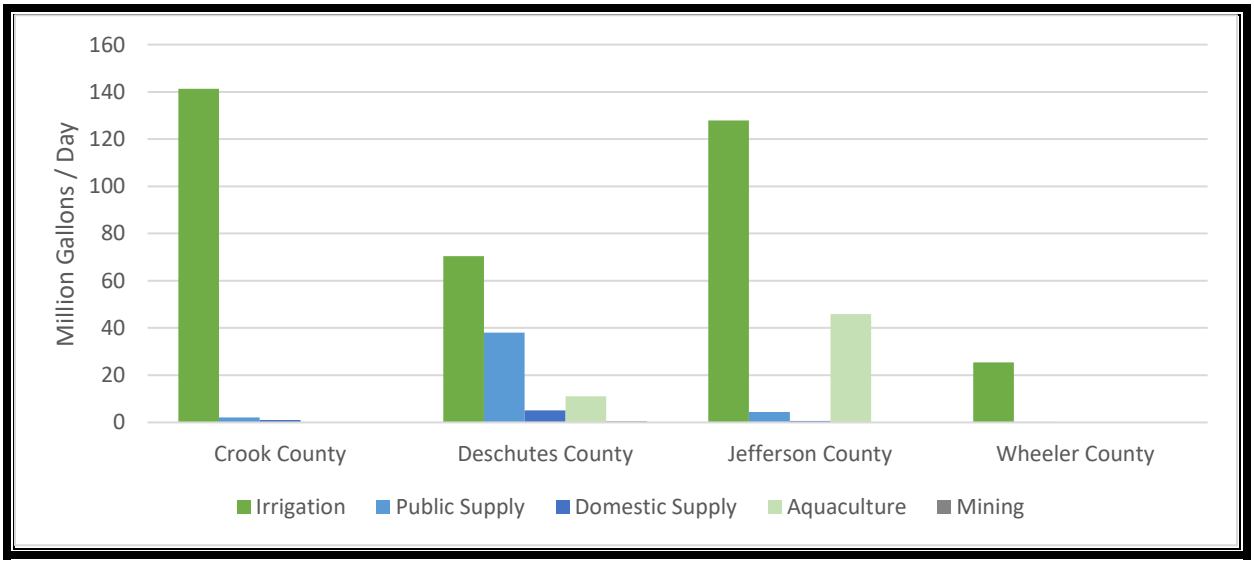
describes the water uses, regional water supply conditions, and associated value of conserved water in these watersheds.

4.2.1 Water Use Overview

Agriculture is the largest water user in the region, accounting for 86% of the water rights in the Upper Deschutes Basin and 60% of the water rights in the Middle Fork Subbasin of the John Day River (Demars, 2022; Oregon Department of Agriculture, 2019). Almost 90% of the Deschutes's flow in Bend is diverted to irrigation (Mucken & Bateman, 2017). Groundwater is also used for agricultural purposes (irrigation and watering livestock); however, surface water constitutes most irrigation water supplies (see **Table 1.1**). Water is also used for municipal, commercial, and industrial purposes. In Central Oregon, municipal water is primarily supplied through groundwater (Upper Deschutes River Basin Study Work Group, 2019).

As shown in **Figure 4.2**, data from the United States Geological Survey on water withdrawals for consumptive uses (including irrigation, public and domestic water supplies, and industrial uses) in the four-county region indicates that irrigation is by far the dominant consumptive water use (USGS, 2022). Public and domestic water is a relatively large source of water withdrawals in Deschutes County but is relatively minor in the other three counties. Jefferson County has relatively large surface water withdrawals for aquaculture. In total for the four counties, irrigation and livestock consume roughly 365 million gallons per day, of which around 93% comes from surface water. Public and domestic supplies consume just over 50 million gallons per day with 85% coming from groundwater. Aquaculture (used only in Deschutes and Jefferson Counties) consumes about 57 million gallons per day, all of it surface water. Mining and other industrial uses consume less than 1 million gallons per day, which all comes from groundwater (USGS, 2022).

Figure 4.2 – Water Withdrawals in 2015 by County and Use



Source: Highland Economics analysis of USGS Water Data by County

In addition to consumptive water uses, aquatic riverine habitats depend on instream flow to support fish and amphibians. Reservoirs, lakes, streams, and rivers support a diverse set of aquatic life in Central Oregon, some of which are endangered. In the Deschutes and John Day River Basins, surface and groundwater have been found to be closely interconnected, with groundwater flowing into surface waterways and surface water seeping into the ground. For this reason, new groundwater withdrawals in

Oregon must be mitigated with a similar amount of water placed instream to offset the potential impact to surface water flows (Mucken & Bateman, 2017).

A variety of recreational activities also depend on instream flow in Central Oregon: fishing, motorboating, whitewater rafting, tubing, swimming, and stand-up paddleboarding. Water rights protecting recreational uses are often held by public entities with recreation missions. Examples on the Deschutes and John Day Rivers include the Oregon Department of Fish and Wildlife and the U.S. Forest Service (Deschutes, Ochoco, and Mount Hood National Forests).

4.2.2 Water Shortages in the Region

The region is experiencing irrigation water shortages, which are projected to increase in the future. And agriculture has been the principal industry of the Middle Fork of the John Day River, which provides irrigation water primarily for hay and livestock grazing (Bureau of Land Management, 1999). The Deschutes River supplies water to seven irrigation districts which serve roughly 123,000 acres of cropland, pasture, and residential landscapes in the Upper Deschutes Basin (Headwaters Economics, 2017). In this basin (including the Tumalo, Whychus, and Crooked systems), agricultural water uses consume approximately 720,000 acre-feet (AF) per year, which accounts for roughly 30% to 85% of the total inflows into the basin depending on amount of precipitation and snowmelt. In average and wet years, shortages for irrigation water total approximately 30,000 AF and in dry years about 160,000 AF. Climate models indicate that temperatures in the area may increase by 2.8°C (4.9°F) over the next 50 years, which would increase demand for irrigation water. The same models predict that snowmelt and precipitation could occur earlier in the year, decreasing the supply of water in summer months (Upper Deschutes River Basin Study Work Group, 2019). These changes make it likely that farms in the region will experience even greater water shortages in the coming decades.

Municipal (and quasi-municipal) water use in the Deschutes Basin totals approximately 40,000 AF per year, which comes primarily from groundwater. To meet the demands of cities and private water suppliers in the basin in the next 50 years, it is estimated that additional supplies of 16,000 AF per year will be needed for permanent mitigation, that is, water placed instream to offset groundwater pumping (Upper Deschutes River Basin Study Work Group, 2019). Of all counties in Oregon, Deschutes County is expected to have one of the highest increases for municipal/industrial water needs by 2050 (Mucken & Bateman, 2017). The City of Prineville is expected to need 5,100 AF in mitigation water from the Crooked River to support future economic development (Hardin, 2011).

In terms of water to support fish and wildlife, the Deschutes and Crooked River Basins host several aquatic species whose populations are low enough to warrant special protections. These include the redband trout, summer steelhead, Chinook salmon, and the Oregon spotted frog. Wintertime flow levels are the limiting factor for aquatic habitat in much of the Upper Deschutes; however, the Crooked River also suffers from low summer and fall flow levels (Hardin, 2011). While there are instream water rights in place to protect aquatic ecosystems, in an average year, instream flows fall short by 108,000 AF; in dry years, 175,000 AF. In some reaches of the river, twice as much flow is needed to meet ecological objectives than is currently protected by instream water rights (Upper Deschutes River Basin Study Work Group, 2019). To meet ecological objectives for the Crooked River, an additional 41,600 AF would be required in a median water year, and in some years, flows drop to less than 15% of the level needed to support fish habitat (Deschutes River Alliance, 2020; Kohn, 2022; Hardin, 2011).

In the Middle Deschutes River (the stretch below Bend and above Lake Billy Chinook), summer is the most problematic time for low flows. Median flows in this stretch do not meet the instream targets for the months of April through October. In the three decades between 1968 and 1997, the Middle Deschutes met its instream flow targets less than 5% of days in May through August (Golden & Aylward, 2006).

Aquatic habitats rely not only an adequate quantity of water, but water of the proper temperature. Water that is too warm cannot support some species and their life cycles. For example, salmon and trout rearing requires water temperatures to be below 18°C (Upper Deschutes Watershed Council, 2021). High water temperatures impact aquatic habitats in both the Deschutes and John Day River Basins and are directly related to the amount of instream flow (as well as other factors such as riparian shade and air temperatures). Observations of the Middle Deschutes between 2001 and 2019 show that water temperatures commonly exceed the 18°C standard between April 21 and September 30 (Upper Deschutes Watershed Council, 2021).

The John Day Basin supports populations of rainbow trout, smallmouth bass, and channel catfish, as well as good spawning habitat conditions for steelhead and resident trout. The middle section of the John Day River serves as a migration corridor for spring Chinook salmon and summer steelhead. However, similar to the Deschutes Basin, the habitat quality is limited by low flows (during the summer) and high water temperatures (Bureau of Land Management, 1999).

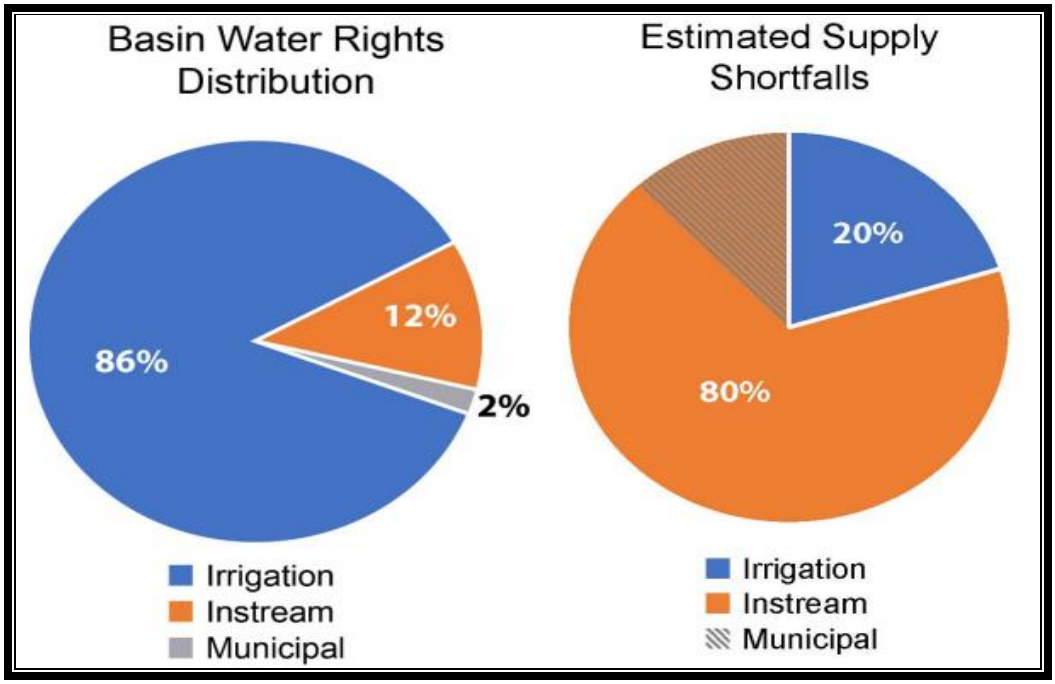
Both the Deschutes and John Day Rivers support a variety of recreation activities that require instream flow. These include fishing, boating, floating, and swimming. Both rivers also have sections that are protected for being 'wild,' 'scenic,' and 'recreation' reaches. The Middle John Day River is classified as both a Federal Wild and Scenic River and a State Scenic Waterway from Clarno to Service Creek (Bureau of Land Management, 1999). All three reaches of the Crooked River are classified as a Federal Wild and Scenic River (Bureau of Land Management, n.d.).

Instream flows in the Deschutes and John Day Rivers are sometimes insufficient to meet recreation purposes. On the Middle John Day River, boating typically occurs between the months of April and July, after which flow levels are too low to allow access (Bureau of Land Management, 1999). This section of the river is popular, with at least one annual tally at 9,200 boater-days (Bureau of Land Management, 1999). If instream flow were increased through the late summer and early fall, it could facilitate more boating recreation.

On the Crooked River, there are multiple sections offering the potential for whitewater rafting. However, the river rarely has adequate instream flows to make this type of recreation possible. In most months of the year, the average monthly flow is less than one-third the minimum flow needed to support whitewater rafting (Stafford & O'Keefe, 2008; U.S. Geological Survey, 2007).

Figure 4.3 shows the water rights distribution and shortages by use in the Upper Deschutes Basin. As the righthand pie chart illustrates, instream flow experiences the vast majority (80%) of supply shortfalls, followed by irrigation (20%), and municipal. The latter is shown as an overlay with instream shortages because water for mitigating groundwater pumping is dedicated instream (Upper Deschutes River Basin Study Work Group, 2019).

Figure 4.3 – Water Rights and Shortfalls in the Upper Deschutes Basin



Note: Municipal shortages are shown as an overlay with instream shortages because water for mitigating groundwater pumping is dedicated instream. Source: (Upper Deschutes River Basin Study Work Group, 2019).

4.2.3 Per Acre-Foot Value of Water

As discussed in the last section, there are regional shortages of water for instream, agricultural, and municipal uses. These shortages increase the value of water. In the remainder of this section, we present information regarding the value of water in the region and discuss the implications for the value of conserved water related to juniper forest treatment associated with PREP (an estimated 119,000 gallons of water conserved per acre of juniper treatment).

Decreased water use by junipers can increase water availability, which can potentially benefit hydrologic processes, such as aquifer recharge and streamflow in central Oregon (Mata-Gonzalez, Abdallah, & Ochoa, 2021). Water use is particularly high in the summertime. The value of water conserved from juniper treatment will dramatically vary depending on the final use of the water; if the conserved water has only localized groundwater benefits or only marginally enhances instream flows in any creek or river, then the value may be relatively low. If the increased water availability were to increase surface water supplies and benefit agriculture or other water users, then economic value could be higher.

We assume that the bulk of the conserved water is used for environmental purposes, either enhancing groundwater or surface water flows. Some of this water may benefit agricultural users – the primary consumptive users of water in the region. As such, we estimate that the per AF value of water conserved due to juniper treatment is approximately $50 to $100 per AF per year based on the following information:

1. **Prices paid for instream flow augmentation by environmental buyers throughout the western United States[27]**— As quantitative information on how instream flows would change due to juniper thinning (and how this would in turn improve fish and wildlife populations) is not available, the analysis is not able to directly measure the economic benefit of enhanced instream flow. As such, the value of conserved water is estimated in this section using the prices paid by environmental groups, federal agencies, and other funders of conservation for environmental water in the western United States.[28] Water rights leases and purchases for environmental purposes across the western United States were analyzed in a 2003 paper (Loomis, Quattlebaum, Brown, & Alexander, 2003). Across 35 lease transactions for instream flows, the annual price was $76 per AF per year.[29] Another analysis of western water transactions in the period 2000 to 2009 found that the purchase price of environmental water varied from just over $0 to nearly $1,600 per AF per year, with a median price of approximately $80 per AF per year (Bren School of Environmental Science & Management, 2017). This indicates that organizations are willing to pay these types of values for environmental enhancement.[30]
2. **Value of water to irrigators in the Deschutes Basin**— As discussed above, irrigation is the largest source of water withdrawals in the region. We estimate the value of water based on the increased net value from hay and grain crop[31] production that can result from increased water supply. Several economic analyses associated with Deschutes Basin watershed planning and environmental assessment (EA) studies have recently estimated the value of water to irrigation districts in Central Oregon, including to Arnold, Lone Pine, Ochoco, Tumalo, and Swalley Irrigation Districts. These studies model the value to farmers (in terms of net increase in profits) that are generated from each additional acre-foot of irrigation water made available to the "typical" irrigator growing alfalfa hay in the region. Estimates from these studies of the marginal value of

[27] While these values are in fact costs rather than a measurement of benefit, the amounts paid in the past for water to enhance instream flow represent the minimum value to the funding entities of instream flow (benefits as perceived by funding entities are expected to at least equal costs, or funding would not be provided). As most water rights transactions for environmental purchases are to enhance fish habitat, this value is expected to be a conservative proxy for the value to the public of enhanced fish habitat and fish populations. These values also represent the cost of increasing instream flow, similar to the data on costs of water conservation projects and may significantly underestimate the full value of instream flow augmentation.

[28] It is important to note that the value paid in these transactions is the cost to environmental organizations to enhance instream flow. The transaction data indicate that these organizations are willing to pay at least this amount for environmental water, and so implicitly must view the benefit to be at least this great. However, benefits may be much greater as these transaction prices do not represent the benefit of environmental water to all of society.

[29] All values were adjusted for inflation from 1999 dollars to 2022 dollars using the Implicit Price Deflator for Gross Domestic Product (GDP) (Bureau of Economic Analysis, 2022). Note also that there are lease transactions in the Deschutes Basin to enhance instream flow; however, these transactions are typically short-term leases for farmers that are temporarily idling land for a variety of purposes and thus are not expected to reflect the value of water in agricultural production.

[30] However, it is also important to note that the amount paid per AF tends to decline with an increase in water volume traded; using this same database and weighting the purchase price by the water volume sold decreases the average permanent sale transaction price to $20 per AF per year. There are also some short-term lease transactions in the Deschutes Basin with lease price of approximately $10 to $20 per AF year; these leases are short-term leases, typically agreed to by farmers that are temporarily idling land in the Deschutes Basin. All transaction prices, including these lower values, represent the *cost* to environmental organizations to enhance instream flow, and indicate that these organizations are willing to pay *at least* this amount for environmental water, but these transaction prices do not represent the benefit of environmental water to all of society. As such, we focus on the range of values, particularly the median prices, that are presented in the broader literature that indicate much higher general willingness to pay to protect instream flows throughout the Western United States.

[31] These are the predominant crops grown in the region, although higher value crops are also grown. We use the value of water to hay and grain, as these crops are generally the first to be fallowed in the face of water shortages rather than higher valued crops. Hay can serve as a "water buffer" crop for irrigators: Farmers with multiple crops and an uncertain water supply can prioritize irrigation to higher value crops and irrigate hay to the extent water is available. This strategy can help ensure water for high-value crops, generate greater hay yields and revenues in water-rich years, and minimize losses in years of water shortage. For these reasons, the water value to hay production can act as a useful indicator of the marginal value of water to agriculture.

water– the value of each additional acre foot of water applied to an existing irrigated acre of alfalfa – ranges from roughly $125 to $260 per AF.[32] The average value of water (the total profits divided by the total water applied, representing average value of water applied to a new acre of alfalfa) from the studies is much lower, ranges from approximately $60 to $95 per as shown in **Table 4.6**.

Table 4.6 – Estimated Value of Water for Alfalfa Hay Production in the Deschutes and Crooked River Watersheds

Irrigation District	Marginal Value per AF (2022$) [1]	Average Value per AF (2022$) [2]
Lone Pine Irrigation District [3]	$223	$94
Arnold Irrigation District [4]	$263	$85
Central Oregon Irrigation District [5]	N/A	$60
Ochoco Irrigation District [6]	$125	$92
Swalley Irrigation District [7]	N/A	$86
Tumalo Irrigation District [8]	N/A	$94

Note: All values were adjusted from their respectively dollar years to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022).
[1] The marginal value is the value of an additional unit or the last unit added.
[2] The average value is calculated by dividing the net returns by the total water applied.
[3] Source: (Farmers Conservation Alliance, 2021)
[4] Source: (Farmers Conservation Alliance, 2022)
[5] Source: (Farmers Conservation Alliance, 2020)
[6] Source: (Farmers Conservation Alliance, 2020)
[7] (Farmers Conservation Alliance, 2018)
[8] (Farmers Conservation Alliance, 2018)

3. **Cost of irrigation water conservation projects—**The costs of past piping projects in the Deschutes Basin highlight the willingness of funding entities to pay for water conservation and instream flow augmentation in the region. In the Deschutes Basin, roughly 90 projects have restored approximately 80,000 AF of water instream (Central Oregon Irrigation District, 2016). Additionally, six major irrigation canal piping projects have been approved with total estimated costs of nearly $205 million, which will save an estimated 47,267 AF per year when all projects are completed as summarized in **Table 4.7**.[33] On a combined average annual basis, these projects save water at a cost of $109 per AF per year.[34] Individual project costs range from $70 to $345 per AF of water conserved.

[32] All values were adjusted from their respective dollar years to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022).
[33] These include piping projects for Arnold, Central Oregon, Lone Pine, Ochoco, Swalley, and Tumalo Irrigation Districts (Farmers Conservation Alliance, 2022; Farmers Conservation Alliance, 2020; Farmers Conservation Alliance, 2021; Farmers Conservation Alliance, 2020; Farmers Conservation Alliance, 2018; Farmers Conservation Alliance, 2018). All costs were adjusted from their respective dollar years to 2022 dollars using the Implicit Price Deflator for Gross Domestic Product (Bureau of Economic Analysis, 2022).
[34] Annualized costs were calculated using an amortization period of 100 years and a discount rate of 2.25%.

Table 4.7 – Estimated Cost of Conserved Water Piping Projects in the Deschutes and Crooked Watersheds

Irrigation District	Watershed	AF of Savings Per Year	Cost of Project (million 2022$) [1]	Cost per AF per Year [2]
Swalley ID	Deschutes	6,172	$17.22	$70
Tumalo ID	Deschutes	15,115	$51.03	$85
Arnold ID	Crooked	11,083	$38.92	$89
Central Oregon ID	Deschutes	10,281	$47.80	$117
Lone Pine ID	Crooked	2,103	$15.50	$186
Ochoco ID	Crooked	2,513	$34.34	$345

[1] All costs were adjusted from their respective dollar years to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022).

[2] Annualized costs were calculated using an amortization period of 100 years and a discount rate of 2.25%.

4. **Cost of municipal water supply augmentation projects—** As noted above, to meet the demands of cities and private water suppliers in the basin in the next 50 years, it is estimated that additional supplies of 16,000 AF per year will be needed for permanent mitigation; that is, water placed instream to offset groundwater pumping (Upper Deschutes River Basin Study Work Group, 2019). To meet growth in its demand, the City of Prineville recently invested in an aquifer storage and recovery (ASR) project to augment the City's water supply during peak demand periods. Water is collected during the winter months when supplies are higher and demand is lower, and is stored in the aquifer for use during the higher water demand and lower water supply summer months. The ASR water treatment facility including water lines and well retrofit cost approximately $12.9 million, while the booster pump station and utility lines associated with the project cost $8.2 million, and the water rights cost approximately $1 million (Klann, 2022). Annualizing this total cost of $22.1 million over 30 years translates into an annualized cost of approximately $1.63 million. The City estimates that approximately 75% of the City's water demand is tied to this facility, or approximately 1,726 acre-feet annually (Klann, 2022). Dividing the annualized cost of $1.63 million by the 1,726 acre-feet of water supported by this facility translates into a cost of approximately $944 per AF. This indicates a very high willingness to pay for municipal water; in fact, municipal water supplies are typically the highest valued use of water. However, as noted above, we do not expect that the water conserved from juniper treatments would be available to augment municipal supplies. Therefore, we do not use the value of water to municipalities as an indicator of the value of water from PREP-related water conservation.

4.2.4 Value of Water Conserved from PREP

As discussed in Section 3.4, juniper thinning associated with the PREP facility would reduce forest water usage, thereby conserving water. For every acre thinned, an estimated 119,000 gallons would be saved annually, or approximately 0.4 AF of water annually. So, using the value of $50 to $100 per AF estimated in the previous section and multiplying this by 0.4 AF conserved, we estimate in the first year after thinning a value of approximately $18 to $37 of value per acre thinned. However, water savings continue after the

first year of thinning. In this analysis, we assume that this water savings decreases 3% every year post-thinning; in other words, in the second year after thinning, water savings would decrease to 115,430 gallons per acre (119,000 multiplied by 97%). To estimate the total value through time of the cumulative water savings, we project the water savings over a 20-year time horizon, which equates to 6.07 AF for every acre thinned (or 2,200 AF over 7,500 acres thinned). Then we multiply this water savings by the present value of money received in the future, discounting future values by 3% annually to account for society's preference to receive benefits today versus in the future. As shown in **Table 4.8**, the cumulative value over the next 20 years of water conservation for every acre thinned is estimated at between $237 and $474 dollars per acre. The PREP facility is projected to treat approximately 7,250 acres annually. As such, we estimate benefits of juniper thinning at between $1.72 million and $3.44 million annually (in addition to the acreage currently remediated). This thinning is projected to result in a range of water savings, increasing in each year from 2,650 AF in Year 1 to 44,000 AF (in Year 20, and every consecutive year, assuming 7,250 acres of juniper continue to be thinned annually) of conservation, as more and more thinned acres provide water savings benefits (See **Table 4.9**).

PREP will also use some water, although this is a small amount compared to the water conservation from juniper thinning. As discussed in Section 3.4, the water use by PREP is estimated at 210 million gallons per year, or 644 AF annually. Relative to the forest-related water savings, this is a very small amount on an annual basis, particularly after several years of cumulative effects of thinning. However, assuming that the PREP water use likely has the same opportunity cost and value as changes in juniper forest water usage (i.e., potential effects on groundwater levels and instream flows), then the net opportunity cost of the 644 AF per year of water usage by the facility is estimated at $32,000 to $64,000 annually. This reduces the estimated value of net water savings from juniper thinning and the PREP facility to $1.69 million to $3.37 million annually.

Table 4.8 – Water Savings Benefit and Value (2022 $s) Over 20 Years per Acre of Juniper Thinned

Year	Low Present Value Per Year Per AF in 2022 Dollars	High Present Value Per Year Per AF in 2022 Dollars	Acre-Feet/Acre of Water Savings	Present Value/Acre (Low Value Per Acre)	Present Value/Acre (High Value Per Acre)
1	$50	$100	0.37	$18	$37
2	$49	$97	0.36	$17	$35
3	$47	$94	0.35	$17	$33
4	$46	$92	0.34	$16	$31
5	$44	$89	0.34	$15	$30
6	$43	$86	0.33	$14	$28
7	$42	$84	0.32	$14	$27
8	$41	$81	0.32	$13	$26
9	$39	$79	0.31	$12	$25
10	$38	$77	0.30	$12	$23
11	$37	$74	0.30	$11	$22
12	$36	$72	0.29	$11	$21
13	$35	$70	0.29	$10	$20
14	$34	$68	0.28	$10	$19
15	$33	$66	0.28	$9	$18
16	$32	$64	0.27	$9	$17
17	$31	$62	0.26	$8	$16
18	$30	$61	0.26	$8	$16
19	$29	$59	0.25	$7	$15
20	$29	$57	0.25	$7	$14
Present Value Over 20 years			**6.07**	**$237**	**$474**

Table 4.9 – Water Savings By Year from Juniper Thinning

Year of Water Savings	Year of Tree Thinning (7,250 Acres Each Year)																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
1	2648																				2,648
2	2595	2648																			5,242
3	2543	2595	2648																		7,785
4	2492	2543	2595	2648																	10,277
5	2442	2492	2543	2595	2648																12,719
6	2393	2442	2492	2543	2595	2648															15,113
7	2345	2393	2442	2492	2543	2595	2648														17,458
8	2299	2345	2393	2442	2492	2543	2595	2648													19,757
9	2253	2299	2345	2393	2442	2492	2543	2595	2648												22,009
10	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648											24,217
11	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648										26,380
12	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648									28,500
13	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648								30,578
14	2036	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648							32,614
15	1995	2036	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648						34,609
16	1955	1995	2036	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648					36,565
17	1916	1955	1995	2036	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648				38,481
18	1878	1916	1955	1995	2036	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648			40,359
19	1840	1878	1916	1955	1995	2036	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648		42,200
20	1804	1840	1878	1916	1955	1995	2036	2078	2120	2163	2207	2253	2299	2345	2393	2442	2492	2543	2595	2648	44,003

4.3 LANDFILL USAGE

In both the With Sawmill and Without Sawmill scenarios, the PREP facility is projected to consume 10,000 bone dry tons of urban wood waste/year. One source of wood waste is yard debris that is taken to landfills in the region. The Deschutes County landfill, for example, received approximately 5,500 tons (not bone dry) of yard debris last year through events in its FireFree Yard Debris Disposal program (a program to reduce wildfire risk by creating defensible space) in which local residents can drop off yard debris at no charge. In total, including yard debris received at other times, the Deschutes County landfill received approximately 17,000 tons last year (Centola, 2022). The landfill has a composting operation for this waste, but as volume has been exceeding capacity, they have begun grinding it and burying the waste in the landfill. The cost to the landfill is approximately $35 per ton to grind and haul this yard debris. Purchase of this material by the PREP facility (expected to be roughly equal to the cost to grind and haul) would cover the cost of grinding and hauling the debris, resulting in an economic benefit to Deschutes County of approximately $350,000 ($35 per ton multiplied by 10,000 bone dry tons). The Crook County landfill may also benefit from purchase of its wood waste, but its clean wood stream is only approximately 1,100 tons of clean wood waste (pallets) and yard waste annually.

Further, for Deschutes County, the landfill has a limited lifespan, with a capacity expected to be reached in 2029. All cells in the landfill are lined, which means that development of additional landfill space is more expensive (in contrast, Crook County uses an unlined cell for its wood waste disposal). To the extent that yard debris waste can be diverted from the landfill to PREP, this would also result in a benefit to Deschutes County by extending the life of the landfill. Additionally, the landfill has a requirement by the Oregon Department of Environmental Quality regarding the amount of waste that is diverted (recycled or otherwise reused) from the landfill; sending yard debris to PREP is expected to help them meet this recycling requirement.

As another potential benefit, combustion of the wood waste would result in less methane generation at the landfill (the wood anaerobically decomposes in the landfill, resulting in methane which is a potent greenhouse gas). Although the EPA WARM model provides estimates of the change in carbon dioxide equivalent released from wood waste in landfills, we do not include an estimate of this benefit as it does not provide data to enable a comparison of the net change in carbon dioxide equivalent of combustion versus anaerobic decomposition.

4.4 FOREST HEALTH

This section describes two potential socioeconomically significant effects on forest health: merchantable timber value, and fish and wildlife values.

4.4.1 Merchantable Timber Value

As described above in Section 3.8 and presented in Table 3.12, due to thinning activities related to PREP, this analysis projects that owners of timberland and forestland in the four-county region can expect an increase in merchantable timber of .05 to .09 MBF per year per acre thinned. As discussed in Section 3.8, this increased growth rate is projected to benefit the landowner for 20 years post-thinning treatment, with value assumed to be equal to approximately $85 in stumpage value (value paid to the landowner for standing timber). **Table 4.10** summarizes the value over 20 years of each year's thinning of 1,950 acres. Accounting for the passage of time (using a real discount rate of 3% annually), the total present value over 20 years of increased growth from each year's thinning is estimated at $196,000 in stumpage value (note

that due to discounting this is less than the approximately $250,000 in estimated increased stumpage value presented in Section 3.8). Annualized, this value is equivalent to approximately $12,000 annually; this represents the approximate increased value in merchantable timber each year from PREP-associated thinning.

Table 4.10 – Estimated Present Value of Merchantable Timber from 1 Year of Thinning (1,950 acres)

Year	Increase in MBF from thinning 1,950 acres in Year 1	Value to Landowner Per MBF (Discounted to Present Value)	Value of Thinning 1,950 Acres (Discounted to Present Value)
1	150.7	$85.00	$12,810
2	150.7	$82.52	$12,436
3	150.7	$80.12	$12,074
4	150.7	$77.79	$11,723
5	150.7	$75.52	$11,381
6	150.7	$73.32	$11,050
7	150.7	$71.19	$10,728
8	150.7	$69.11	$10,415
9	150.7	$67.10	$10,112
10	150.7	$65.15	$9,817
11	150.7	$63.25	$9,531
12	150.7	$61.41	$9,254
13	150.7	$59.62	$8,984
14	150.7	$57.88	$8,723
15	150.7	$56.20	$8,469
16	150.7	$54.56	$8,222
17	150.7	$52.97	$7,982
18	150.7	$51.43	$7,750
19	150.7	$49.93	$7,524
20	150.7	$48.47	$7,305
Over 20 Years, Total Present Value	3014	N/A	$196,290
Annualized Value Over 20 Years	3014	N/A	$11,900

4.4.2 Fish and Wildlife Values

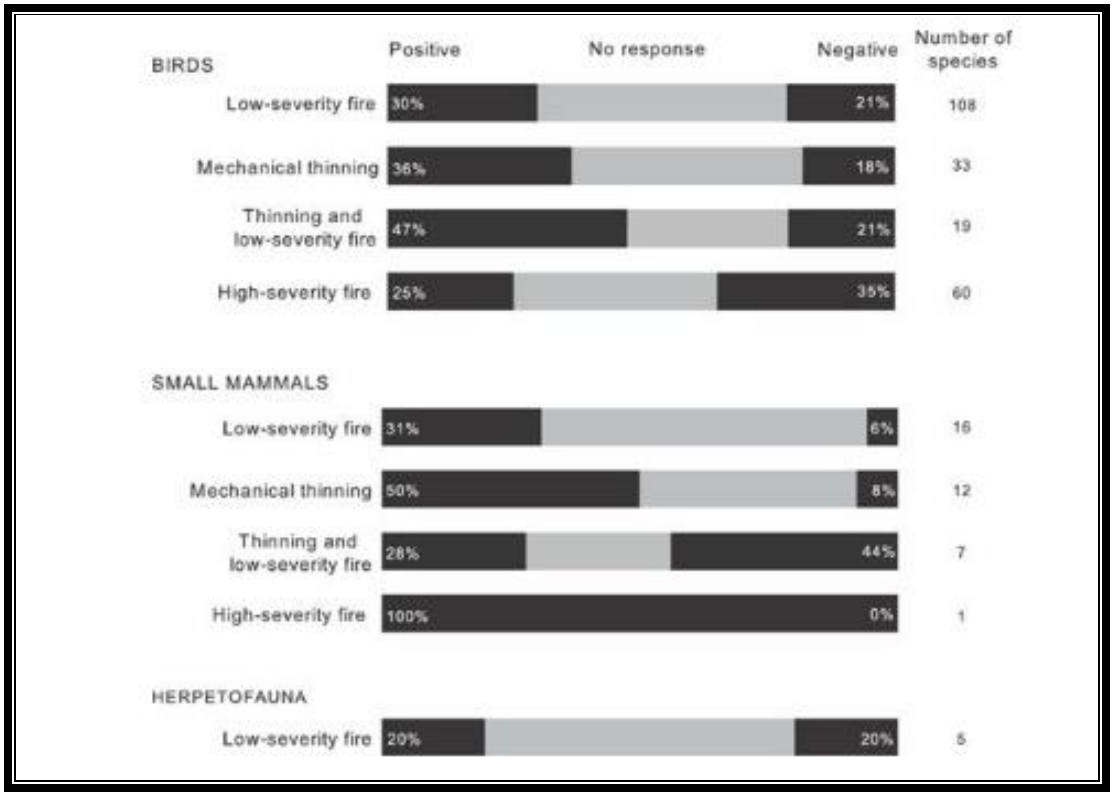
In addition to effects on merchantable timber, forest health can also affect fish and wildlife, which can have economic and social effects related to aesthetics, recreation, and cultural/conservation values. Effects on fish and wildlife of forest thinning and mechanical treatments are complex and vary by resource, landscape, climate, species types, and treatment type. As noted in a 2021 assessment of the effects of fuel treatments in a conifer forest in the Southern California Sierra on a variety of environmental

parameters (Burke, Tague, Kennedy, & Moritz, 2021), "the wide range of covarying factors that both affect and are affected by fuel treatments combine to make predicting the net effects of a given treatment difficult". However, a 2012 review (Stephens, et al., 2012) of the diverse research on the effects of forest fuel reduction treatments in the United States found that mechanical treatments reduce fire risk with "few unintended consequences since most ecosystem components (vegetation, soils, wildlife, bark beetles, carbon sequestration) exhibit very subtle effects or no measurable effects at all." Given the complexity of these factors, we acknowledge that there may be beneficial or adverse effects on vegetation, fish, and wildlife from treatments, but do not attempt to quantify those effects in this study. Summarized below are the findings from the 2012 review regarding vegetation and wildlife (effects on fish were not analyzed in the study):

Vegetation: The 2012 review found that effects of mechanical fuel treatments are variable in their effects on understory plant communities due to differences in treatments and vegetation composition. Treatment may modify or add to organic material, introduce exotic species, and/or damage some non-target vegetation; it also provides increased light to the understory and reduces competition among trees and other vegetation. Accordingly, the observed pattern in studies is that mechanical treatments result in increased understory vegetation productivity and diversity, similar to that seen following a low- to moderate-intensity fire (although mechanical treatments alone do not provide recruitment conditions conductive to species needing fire for regeneration). The review concluded that in ponderosa pine forests, the risk of mechanical treatments on forest overstory is low, while the risk in the understory is low to medium (due to potential for exotic species introduction).

Wildlife: The review compared studies of fuel reduction treatments, low/moderate-severity fires, and high-severity fires in the four years post-treatment (there is a lack of studies for longer term post-treatment analysis). As shown in **Figure 4.4**, all types of treatments and fires may have positive and negative effects, depending on the species. However, as shown in the figure and as concluded in the review, "the similarity in the responses of birds and small mammals to thinning and low-severity prescribed fire suggests that, at the stand scale and in the short term (0–4 years), thinning may adequately mimic low-severity fire in terms of its effects on these taxa". However, the review also noted that the "levels of regeneration of vegetation, fuel dynamics, and nutrient cycling following prescribed fire and following thinning differed substantially" and that "the long-term effects of these two treatments [prescribed fire and mechanical thinning] on wildlife require further investigation before these results can be fully integrated into management".

Figure 4.4 – Effects of Mechanical Thinning Versus Fire on Wildlife Species



Source: Figure 3 from (Stephens, et al., 2012)

4.5 WILDFIRE RISK

Wildfires bring numerous economic costs; they can take lives and destroy homes. Wildfires can damage infrastructure, including highways, airports, and railroads, which require new funding to repair. Fire damages timber resources that are an important part of Oregon's economy. Other business sectors lose revenue when fires hamper consumer access or disrupt the ability to get supplies and products. Evacuations cost money for those who must flee the fire (both in terms of time and money expended), and strain the resources of government entities that support the evacuation effort. Injuries resulting from the fire impose healthcare costs, suffering, and lost wages. Wildfires adversely affect air and water quality as well as wildlife habitat. Further, post-fire impacts (including flooding and erosion) can harm both human systems (property and infrastructure) and ecosystems that support fish and wildlife (Western Forestry Leadership Coalition, 2010). Finally, aesthetics and recreation in fire-damaged areas can be suspended or reduced in quality, which can reduce quality of life and recreation value.

Perhaps the most salient cost of wildfire is the damage to physical capital: telecommunication and transportation networks, buildings, and water, electricity, and gas infrastructure. The cost of this damage has been increasing in recent years along with number and sizes of fires, the average area burned, and the length of the fire season (Wibbenmeyer & McDarris, 2021; Feo, Mace, Brady, & Lindsey, 2020). As more people move into the wildland-urban interface (WUI), the number of homes and other structures vulnerable to wildfire is increasing (Burke, et al., 2020; Bliss & Patino, 2021). To protect these communities, more effort is required to prevent and suppress fires, protect infrastructure, and evacuate

people in imminent danger, which has increased these costs in recent years (Wibbenmeyer & McDarris, 2021).

In addition to the built environment, wildfire imposes significant costs on human health. Fires can harm people directly (for example, 85 people were killed in the Camp Fire in 2018), or harm them indirectly through smoke inhalation and by exacerbating mental health problems. Smoke from wildfires travels long distances and contributes to premature deaths, respiratory and circulatory problems, and lost days of work and recreation (Wibbenmeyer & McDarris, 2021; Burke, et al., 2020; Feo, Mace, Brady, & Lindsey, 2020; Cullen, 2020). These result in economic costs associated with healthcare expenses, lost wages, and lower quality of life. As described in Section 5.5.2, the health costs associated with wildfire smoke are considerable.

Ecosystems are also affected by wildfire. While fire can be helpful and even necessary for some ecosystems, high intensity wildfires can dramatically alter ecosystems, some of which are rare, sensitive, and highly valued by people. For example, the Castle Fire in 2020 destroyed 10% of the world's mature giant sequoias (Wibbenmeyer & McDarris, 2021). Not only are terrestrial habitats burned, but aquatic ecosystems can be adversely affected when high sediment runoff from adjacent wildfire affected areas moves into waterways. Of course, wildfire also results in vast emissions of smoke. By releasing greenhouse gases (including carbon dioxide, methane, and carbon monoxide), wildfire contributes to climate change and the myriad of costs associated with it (Wibbenmeyer & McDarris, 2021; Shindell, 2015; Feo, Mace, Brady, & Lindsey, 2020).

In Oregon in recent years, wildfire has taken an increasing toll. For example, in 2017, 717,212 acres burned in Oregon (Oregon Department of Forestry, 2018). Almost 20,000 structures statewide were threatened, with 10 homes and 20 other structures destroyed. Over 7,600 people were evacuated. Wildfire caused traffic delays and road closures, as well as poor air quality due to wildfire smoke. The Oregon Health Authority reported that visits to emergency rooms and urgent care centers statewide, including 583 asthma-related visits, were 86% higher than expected in the first full week of September when many wildfires were burning in the State (Oregon Department of Forestry, 2018).

Wildfires can thus impose large social, economic, and environmental costs. PREP, which is expected to reduce annual wildfire acre equivalents by approximately 280 to 840 acres, has the potential to deliver economic benefits by reducing wildfire costs. This section presents data on some of these economic costs of wildfire, and the potential associated benefits of the PREP in reducing the fuels that increase wildfire severity and magnitude in Central Oregon.

4.5.1 Wildfire Suppression Costs

As noted by the U.S. Department of the Interior (US Department of Interior, n.d.): "Reducing fuels makes wildfires less intense and easier to control with fewer people, making it one of the most effective ways to build an efficient, proactive program to safely manage wildfire." This section provides information on the cost of wildfire suppression, and the potential reduction in these costs with the reduced wildfire severity in Central Oregon that is projected to occur due to PREP.

On land protected by the Oregon Department of Forestry (ODF), 47,165 acres burned in 2017. On these lands, the Oregon Department of Forestry spent $45.9 million to fight these fires, for an average of $974

per acre (Oregon Department of Forestry, 2018).[35] This compares to $45.1 million in ODF annual average large fire suppression costs over the period 2008 to 2017, across 33,806 acres burned, for an average cost per acre burned of $1,334 (all expressed in 2022 dollars). This is in addition to the base-level ODF fire protection budget of $55.2 million in the 2017 to 2019 biennium.[36] Applying the estimated per-acre cost to fight wildfire of $1,334 (as shown in **Table 4.11**) to the acre-equivalents of reduced wildfire (due to reduced intensity), we estimate the potential fire suppression cost savings of PREP-associated forest treatments at $320,000 to $1,120,000 annually (see **Table 4.12**).

Table 4.11 – Wildfire Suppression Costs in Oregon 2008-2017

Year	ODF Large Fire Gross Suppression Costs, Millions (2022 Dollars)	Acres Burned	Suppression Costs Per Acre Burned
2008	$17.5		
2009	$14.7		
2010	$6.6		
2011	$3.9		
2012	$8.9		
2013	$153.4	104,167	$1,473
2014	$90.6	53,387	$1,697
2015	$88.5	86,629	$1,022
2016	$21.0	5,661	$3,710
2017	$45.9	47,165	$974
10-Year Average (2008-2017)	**$45.1**	**33,806**	**$1,334**

Source: Fire Protection Division, Oregon Department of Forestry Annual Fire Season Reports (2016 Fire Season Report, 2017 Fire Season Report, 2018 Fire Season Report). Annual values for each year were adjusted for inflation to April 2022 dollars using the GDP Implicit Price Deflator.

Table 4.12 – Potential Reduced Wildfire Suppression Costs Associated with PREP

Parameter	Avoided Wildfire Effects @ 25% Intensity Reduction	Avoided Wildfire Effects @ 50% Intensity Reduction	Avoided Wildfire Effects @ 75% Intensity Reduction
Avoided Wildfire Suppression Efforts (Acre-Equivalents)	240	560	840
Avoided Cost of Wildfire Suppression Efforts (2022 Dollars)	$320,000	$750,000	$1,120,000

[35] Annual costs of $39 million in 2017 dollars were adjusted for inflation to April 2022 dollars using the GDP Implicit Price Deflator.
[36] Annual cost of $48 million in 2018 dollars was adjusted for inflation to April 2022 dollars using the GDP Implicit Price Deflator.

4.5.2 Air Quality

Reduced wildfire intensity is expected to result in reduced air pollutant emissions, as estimated in Section 3.6. Using the data and methods described in Section 5.1 above, we estimate the health benefit of reduced wildfire smoke in the region at $2.0 million to $13.2 million, as shown in **Table 4.13**.

Table 4.13 – Estimated Value of Health Benefits of Avoided Emissions from Reduced Wildfire

Pollutant	Annual Emissions Avoided Under PREP (tons)		Cost per Ton of Emissions [1]		Cost Savings of Emissions Avoided Under PREP	
	Low	High	Low	High	Low	High
NO_X	12	36	$12,100	$27,258	$150,000	$980,000
CO	501	1,504	$274	$342	$140,000	$510,000
VOC	32	97	$4,822	$10,862	$150,000	$1,050,000
PM	53	158	$30,082	$67,240	$1,590,000	$10,620,000
Total	598	1,795	N/A	N/A	$2,030,000	$13,160,000

[1] Source for NO_X, VOC, and PM costs: (U.S. EPA, 2021). All costs were adjusted from 2017 dollars to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022). Each pollutant was modeled separately in COBRA using a 3% discount rate, estimating the health costs without PREP (using the "Natural Resources" sector category) and subtracting the health costs with PREP (using the "Fuel Combustion: Electric Utility" sector category).[37] For avoided wildfire emissions, the "Miscellaneous" sector and "Agriculture & Forestry" subsector categories were used. Source for CO costs: (Shindell, 2015). All costs were adjusted from 2007 dollars to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022).

4.5.3 Greenhouse Gas Emissions

Carbon dioxide (CO_2) is a greenhouse gas (GHG) that warms the earth by trapping heat in the atmosphere. Burning forest material emits carbon dioxide. As discussed in Section 3.7, if the PREP facility reduces the severity of wildfire, less GHG might be emitted. Through carbon capture, it is also possible that the PREP could reduce the amount of GHG emitted, compared to burning of logging slash in the WITHOUT PREP scenario (although this effect was not quantified in section 3.7, and is thus not valued here).

Reduced GHG emission from reduced wildfire offers the benefit of climate change cost reduction. Climate change is expected to impact all regions of the US and nearly every economic sector, including transportation, energy, water supply systems, agriculture and forestry, fisheries, and tourism.[38] There are different methods of estimating the value of reduced atmospheric carbon, including the value revealed by trading in carbon markets, values placed on carbon through policy, the cost of carbon sequestration projects, and the social cost of carbon (SCC), which is an estimate of the true economic value of avoiding damages caused by climate change. As the SCC is the true economic value of climate change mitigation, this study uses the SCC as the basis for the valuation of reduced carbon emissions associated with PREP.

[37] COBRA limits the total number of emissions that can be modeled by sector category in its database. In some cases, the amount was less the emissions with or without PREP. Where possible, the total emissions were modeled in COBRA; when not possible, one ton of pollutant was modeled and the health costs were multiplied by the total tons of emissions.

[38] Center for Integrative Environmental Research (CIER), University of Maryland. "The US Economic Impacts of Climate Change and the Costs of Inaction". October 2007. Chapter 3. Accessed online at http://cier.umd.edu/documents/US%20Economic%20Impacts%20of%20Climate%20Change%20and%20the%20Costs%20of%20Inaction.pdf

There is a considerable range of estimates in the economics literature; even within a study, the range can vary widely under different assumptions and climate change scenarios. However, several recent studies have converged on a central estimate value of approximately $210 per metric ton of CO_2[39]. These include a study published in the journal Nature (Rennert, et al., 2022) by researchers at Stanford and Resources for the Future (a well-respected non-profit research institution), and a recent draft SCC estimate released by the US Environmental Protection Agency (U.S. Environmental Protection Agency, 2022).

This is a higher value than that currently used by the federal Interagency Working Group (IWG)[40] on the Social Cost of Carbon (SCC). The SCC developed by the IWG, currently estimated at $58 per ton, is intended to include (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services due to climate change.[41] The value from the IWG is based on older data and estimates and is currently undergoing revision by the IWG. We use the values more recently published by the EPA and Stanford/RFF, as these values incorporate more recent and updated representation of current climate science and understanding of the effects of climate change on agriculture, energy use, sea-level rise, mortality, and economic uncertainty.

As described in the Section 3.6, forest treatments associated with the PREP facility are roughly estimated to reduce wildfire risk by 280 to 840 acre-equivalents per year, with an estimated annual reduction in emissions of 11,869 to 35,606 metric tons of reduced releases in carbon dioxide equivalent. At a value of $210 per metric ton, this equates to a range in avoided climate change costs of $2.5 million to $7.5 million annually (see **Table 4.14**). Note that this is not a full carbon accounting, but a rough estimate of carbon dioxide emitted from avoided wildfire. The analysis does not take into account the energy use and associated greenhouse gas emission associated with the thinning treatments (transportation emissions, equipment use emissions, etc.). It also does not account for the trucking emissions associated with transporting logging slash to PREP.

Table 4.14 – Avoided Climate Change Costs due to Reduced Wildfire Risk Associated with PREP

Parameter	Avoided Climate Effects @ 25% Intensity Reduction, 240 acres	Avoided Climate Effects @ 50% Intensity Reduction, 560 acres	Avoided Climate Effects @ 75% Intensity Reduction, 840 acres
Reduced Emissions (CO_2e Tons)	11,869	23,738	35,606
Reduced Costs (2022 Dollars)	$2,490,000	$4,980,000	$7,480,000

[39] The EPA study presents a central estimate of 190 per metric ton in 2020 dollars; the Stanford/Resources for the Future study presents a central estimate of $185 in 2020 dollars. Updating these to 2022 dollars results in a value of approximately $210 per metric ton.

[40] A working group of federal regulatory agencies that has developed a SCC for use in regulatory impact analyses to estimate the dollar damages per unit of carbon emissions.

[41] In February 2021, the IWG updated its estimates of the SCC. They estimated that in the year 2022, at a 3-% discount rate, the SCC value was $53.22 per MT in 2020 dollars (Interagency Working Group on Social Cost of Greenhouse Gases, 2021). We adjust this value for inflation to roughly $58 per MT in 2022 dollars using the GDP Implicit Price Deflator.

4.5.4 Aesthetics

Fires also can result in a reduction in aesthetics and amenities, which can be reflected in a decline in property values. For example, one study that examined the impact of a wildfire on home values in Colorado found that property values in a nearby town dropped roughly 15% within five years after the fire. While the price declines could be attributable to the perception of wildfire risk, the author concluded that the declines could reflect the loss of amenities in the burned area (Loomis, 2004). Similarly, a study of properties in Montana indicated that proximity to and view of areas burned by wildfire had large and persistent negative effects on home values (Stetler, Venn, & Calkin, 2010). Homes within 3 miles of a wildfire were about 14% lower than equivalent homes at least 12 miles from a fire, and homes 3 to 6 miles away were around 8% lower. The results also showed that when a nearby burned area was not visible from a home, it had no effect on a home's value.

Other studies estimate people's willingness to pay to preserve visibility and scenic views. For example, one study conducted in 1991 found that visitors to a Portland area vista were, on average, each willing to pay approximately $275 to be certain of a 50-mile view for a summer (Crocker & Shogren, 1991); converted to a daily value and assuming 100 days of summer, this corresponds to approximately $2.75 per day of 50-mile protected views[42]. This same study found an average willingness to pay by visitors to a wilderness area in Central Oregon of approximately $27 per day of their visit for permanent protection and certainty of 185-mile visibility[43]. Another study of residents in Northwest New Mexico found that the willingness to pay to improve visibility (or accept compensation for a decrease in visibility) varied from approximately $20 to $300 per month per household (or approximately $1 to $10 per day per household)[44], depending on income level and type of improvement (Rowe, d'Arge, & Brookshire, 1980). These studies indicates that that value of improved visibility may be approximately $1 to $30 per day per household, depending on the sensitivity of the viewer to visibility declines, the degree of change in visibility, and the number of days of visibility improvement.

To apply this to the change in visibility that may result from reduced wildfire due to the PREP, we use the historic data on poor air quality days in Central Oregon. As presented in Table 4.2, there are an average of 7.5 poor air quality days in Central Oregon; as smoke is now the most significant contributor to poor visibility in the West, we assume that these poor air quality days are due to wildfire, and that these poor air quality days cause poor visibility. As discussed above in Section 3.6.2, we estimate that the PREP may decrease the amount of wildfire in the region by approximately 1% to 3%. We therefore assume that PREP would decrease the number of poor air quality and poor visibility days by approximately 1% to 3%, or approximately 0.1 to 0.2 days annually. As visibility is expected to be heavily impaired in poor air quality days, we conservatively assume the value per household of this reduction in poor visibility days is around the midpoint of the range from the literature, or approximately $10 to 15 per day. As such, we estimate the visibility value of PREP (related to reduced wildfire) per household in Central Oregon is approximately $1 to $3 per household annually (.1 to .2 days annually multiplied by $10 to $15 per day). As there are approximately 100,000 households in the four-county region, we very roughly estimate the potential value of the visibility improvements from reduced wildfire smoke at approximately $100,000 to $300,000

[42] Note that the value in the original study was $117.57; this was inflated to 2022 dollars using the GDP implicit price deflator.
[43] Note that the value in the original study was $11.48; this was inflated to 2022 dollars using the GDP implicit price deflator.
[44] Note that the value in the original study was $5 to $70 per month; this was inflated to 2022 dollars using the GDP implicit price deflator.

annually (see **Table 4.15**). Note that this does not take into account the potential improved visibility and aesthetics associated with reduced logging slash burning.

Table 4.15 – Estimated Value of Visibility/Aesthetic Benefits of Avoided Emissions from Reduced Wildfire (Rough Approximate)

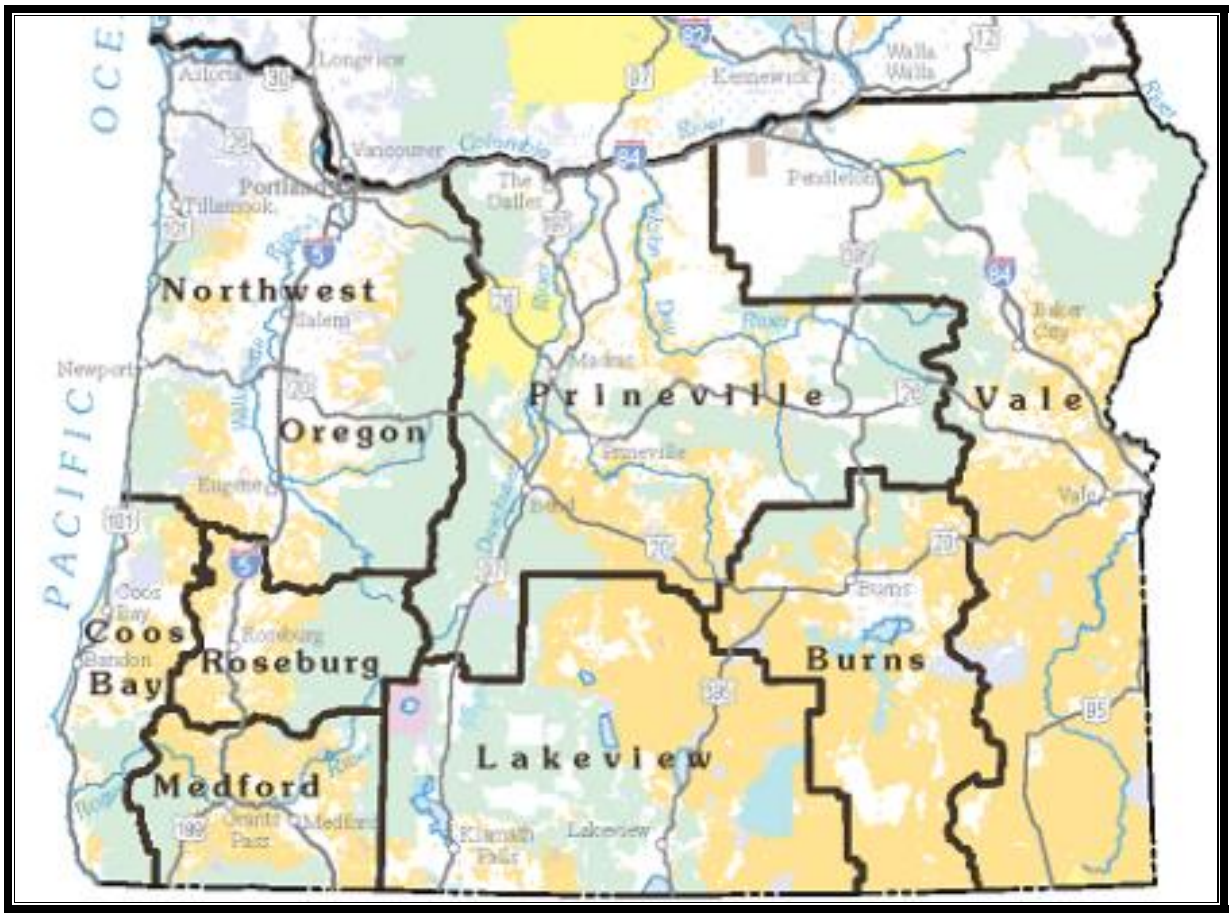
Parameter	# of Low Visibility Days Avoided	
	Low	High
# of Low Visibility Days Avoided	0.1	.2
Cost Per Day (2022 $'s) of Low Visibility Per Household	$10	$15
Regional Households	100,000	100,000
Value of Visibility/Aesthetic Improvements Under PREP (2022 $'s)	**~$100,000**	**~$300,000**

4.5.5 Recreation

Wildfire and associated smoke can also affect recreation opportunities and recreation value. During wildfire events, and for several years following fires, recreation areas in and around burned areas may be closed to recreational users. Even after recreation areas are accessible, the value of recreation may be affected due to changes in recreation quality and access. This section provides a very preliminary overview of the magnitude of potential recreation value that may be increased by reduced fire severity and magnitude on Central Oregon public lands due to PREP. This section focuses on net value of recreation opportunities to the recreator. Changes in recreation value can also affect the tourism economy; this economic development value is not estimated in this study.

The four-county study area is encompassed in the Prineville District of the Bureau of Land Management see **Figure 4.5**), which stretches south from the Columbia River to the Great Basin and stretches east to the Blue Mountains and West to the Cascade crest. Approximately half of the Prineville District of the BLM is public land managed by the US Forest Service (33%), the Bureau of Land Management (13%), or the Bureau of Indian Affairs (5%), while nearly all remaining lands are private (US Bureau of Land Management, n.d.). Assuming this same land distribution in the four-county area, and further assuming that fuel treatment occurs equally on public lands versus private lands, then approximately 50% of the fuel treatments will benefit recreation on public lands. In other words, we assume that approximately half of fuel treatments would occur on public lands that may affect recreation values. So of the 280 to 840 acre-equivalents of reduced fire effects, we assume 140 to 420 will be on public lands that may affect recreation values. Further, we multiply this acreage by five to factor in effects of smoke on recreation on other lands, and also the fact that the effects of fire on recreation may last five years post-fire. Cumulatively, then, on average with PREP there may be approximately 700 acres to 2,100 fewer acres on public lands that would be affected by current or past fires on which recreation quality or opportunities could be limited. We now turn to data on recreation visitor usage on public lands in the region to estimate the potential effects on recreation value of changes in quality or access.

Figure 4.5 – Prineville District of the Bureau of Land Management
(Northwest Oregon, Coos Bay, Roseburg, Medford, Princeville, Lakeview, Burns, and Vale)



Source: Bureau of Land Management

The National Forest Service tracks visitors through its National Visitor Use Management (NVUM) system. **Table 4.16** presents data on recent annual visitation at the three national forests located in the four-county region where fuel treatments are expected to occur: Deschutes, Umatilla, and Ochoco National Forests. We use these visitation characteristics combined with the acreage in each of the national forests to estimate the average recreation user days by acre. Recreation use is not spread evenly across the forests, but is rather concentrated in specific recreation areas. However, as it is not known where PREP-related forest treatments will occur relative to recreation locations, we use the average recreation usage across all forest acres to provide an estimate of reduced fire severity's potential benefit to recreators. As shown in the table, with this approach we estimate that, on average, there are approximately 0.8 recreation days per acre of national forests in the region. As the Forest Service managed land makes up two-thirds of the public lands in the region, we assume that this level of visitation represents approximately the level of visitation across all public lands in the region.

Table 4.16 – Visitation Data at National Forests in the Four-County Region

Forest	Annual Forest Visitation Estimate Total	Overnight Forest Visits	Additional Recreation Days from Overnight Visits	Total Recreation Days (Forest Visits + Additional Days from Overnight Visits)	National Forest Acreage	Recreation Days/Acre
Deschutes	2,087,000	248,000	744,000	2,831,000	1,600,000	1.8
Ochoco	116,000	31,000	93,000	209,000	850,000	0.2
Umatilla	168,000	17,000	51,000	219,000	1,400,000	0.2
Total	**2,371,000**	**296,000**	**888,000**	**3,259,000**	**3,850,000**	**0.8**

Source: National Forest Service Visitor Use Monitoring Data for the Ochoco (2019), Deschutes (2018), and Umatilla (2018) National Forests (US Forest Service, n.d.). Note that for each overnight visit, there are three additional days of visitation as overnight visitors tend to spend four total days in the region. Acreage data in each national forest is from the National Forest Foundation (National Forest Foundation, n.d.).

In terms of economic value to the visitor, we use estimates of the average net value or benefit of recreation visits to national forests in the Pacific Northwest, US Forest Service Region 6, as published by the US Forest Service in 2017 (Rosenberger, White, Kline, & Cvitanovich, 2017). These values range from approximately $40 to $130 per person per recreation day, with the average value (weighted across primary activities engaged in) estimated at $82.[45] We use the value of $82 per recreation visitor day, and apply that to the estimated number of visitor days that may benefit from reduced wildfire severity due to PREP, as shown in **Table 4.17**. The results indicate an annual benefit (in terms of avoided recreation losses from wildfire) to recreators of approximately $50,000 to $140,000.

Table 4.17 – Rough Estimated Recreation Value of Reduced Wildfire Associated with PREP

	Parameter	Low Value	High Value
A	Reduced Acreage Affected by Fire	280	840
B	Portion of Treated Acreage that is Public Land (A*B)	50%	50%
C	Acreage on Public Lands (B*C)	140	420
D	Years of Recreation Affects	5	5
E	Acreage Affected by Fire Each Year (C*D)	700	2,100
F	Average Recreation Visitor Days per Acre	0.8	0.8
G	Potentially Affected Recreation Visitor Days (E*F)	560	1,680
H	Value per Visit	$82	$82
Approximate Preserved Recreation Value (G*H)		**~$50,000**	**~$140,000**

[45] Note that the study values were presented in 2016 dollars, and were estimated to range from $33.15 to $108.38, with a weighted average value of $68.64. The values are updated to 2022 dollars using the GDP implicit price deflator.

4.6 ECONOMIC DEVELOPMENT BENEFITS

The preceding subsections (subsections 5.1 to 5.5) estimate the potential economic benefits of the PREP facility; these are benefits related to environmental effects can be compared to the project costs. Additionally, there are economic development benefits related to local employment and income growth. These are benefits that accrue to the region that are not traditionally included in a cost/benefit analysis (unless it can be shown that people would be unable to obtain similar employment in this region, or any other region of the state or country). However, the economic development benefits of the facility would likely be a net gain to the local area in terms of total available employment and income to local residents. There are three types of economic development benefits to the region: 1) employment opportunities at PREP, and at associated businesses that supply or benefit from the presence of PREP in the region, 2) increased regional power supply to help ease transmission constraints in the region, and 3) potential economic development benefits associated with reduced wildfire. These are addressed in turn below.

4.6.1 PREP-Supported Employment and Income

As discussed in Section 3.2, PREP will cost approximately $145.5 million to design and build, of which $69.6 million is construction cost. This construction expenditure will support in jobs and income in the local area, not just in the construction sector, but in other, related sectors. Using the JEDI (Jobs and Economic Development Impact Model) from the National Renewable Energy Laboratory, construction of a biofuel plant of 25 MW may support (assuming construction in one year) approximately 160 jobs and $12.5 million in earnings statewide in Oregon for the year of construction (National Renewable Energy Laboratory, 2021); if construction were longer, the annual effects would be proportionally diminished. These are very rough approximations of the magnitude of the employment and income as these were not modeled specifically based on the proposed PREP project.

The PREP facility will also directly provide jobs and income through employment at the facility and in forest-sector jobs, as well as other sectors that will provide inputs to the facility and its suppliers. Further, the income to employees at PREP and supplier businesses will be spent in the local economy, further generating economic activity at local businesses. As discussed in Section 3.2, payroll (including benefits) at PREP is estimated to be approximately $990,000 annually, which would correspond to approximately 10 to 15 jobs. Additionally, an estimated 24 to 28 trucking jobs and 20 to 24 forest sector jobs (or a total of 44 to 52 jobs) would be supported by thinning treatments and material transport to the PREP facility. Assuming total compensation of approximately $30 per hour, this is an additional $2.7 million to $3.2 million in labor compensation associated with PREP. In sum, in the transportation and forestry sectors, and at the PREP facility itself, there may be approximately 54 to 67 jobs and $3.6 to $4.1 million in employee compensation supported by PREP (see **Table 4.18**). Additional jobs and income may be indirectly supported in other sectors that provide supplies to the facility (or to other suppliers) and that sell goods and services to employees whose income is related to PREP.

Table 4.18 – Operations Employment and Income Supported by PREP: Key Sectors Only

Sector	Employment		Compensation	
	Low	High	Low	High
PREP Facility	10	15	$990,000	$990,000
Trucking	24	28	$1,500,000	$1,750,000
Forestry (Woods)	20	24	$1,250,000	$1,500,000
Total	**54**	**67**	**$3,740,000**	**$4,240,000**

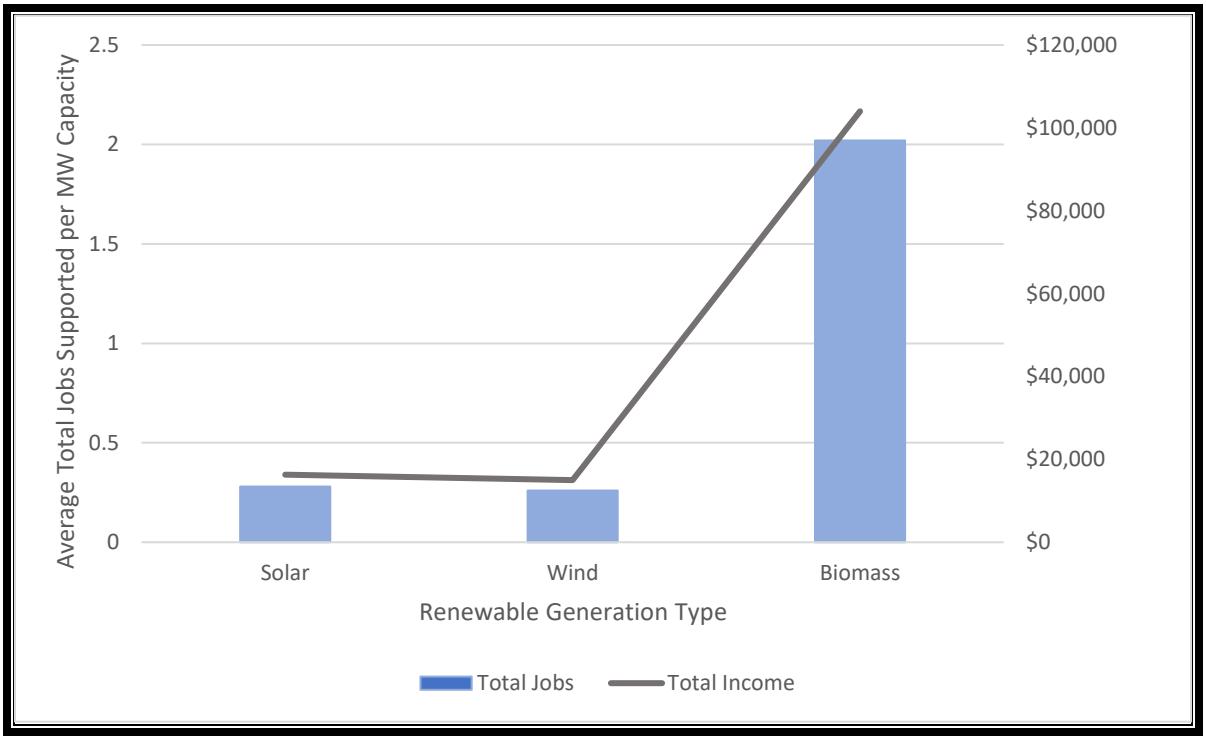
For a comparison to other renewable energy facilities, we present data from the National Renewable Energy Laboratory in **Table 4.19** and **Figure 4.6** that compare the local employment and income supported by a biomass plant compared to wind and solar facilities. As shown in the table, for every MW of generation, biomass supports approximately seven times more total income and employment (including direct employment/income at the energy facility and indirect/induced jobs supported in other sectors due to facility-related spending) than wind or solar facilities tend to support. Note that these are averages, and not necessarily the increased employment and income that the PREP facility would support relative to wind and solar.

Table 4.19 – Operations Employment and Income Supported by Renewable Energy Facilities: Averages Across Projects

Source of Renewable Energy	Operating Economic Contribution per MW			
	Direct Jobs	Direct Income	Total Jobs [1]	Total Income [1]
Solar	0.19	$11,108	0.28	$16,309
Wind	0.04	$2,333	0.26	$15,000
Biomass	0.50	$20,000	2.02	$104,000

[1] Total impacts are the sum of direct, indirect, and induced impacts. Source: (National Renewable Energy Laboratory, 2021)[46]

Figure 4.6 – Average Total Employment and Income Supported per MW: Biomass Compared to Solar and Wind



Source: (National Renewable Energy Laboratory, 2021)

4.6.2 Power Supply

Power demands in Prineville have dramatically increased in recent decades with the data centers that have begun operating in the region. A power crunch became apparent in 2017 when the City was approached by an energy-intensive manufacturer potentially interested in constructing a factory in Prineville, and the City learned that its available power supply would not be adequate to power the factory, jeopardizing that economic development opportunity and potentially other opportunities

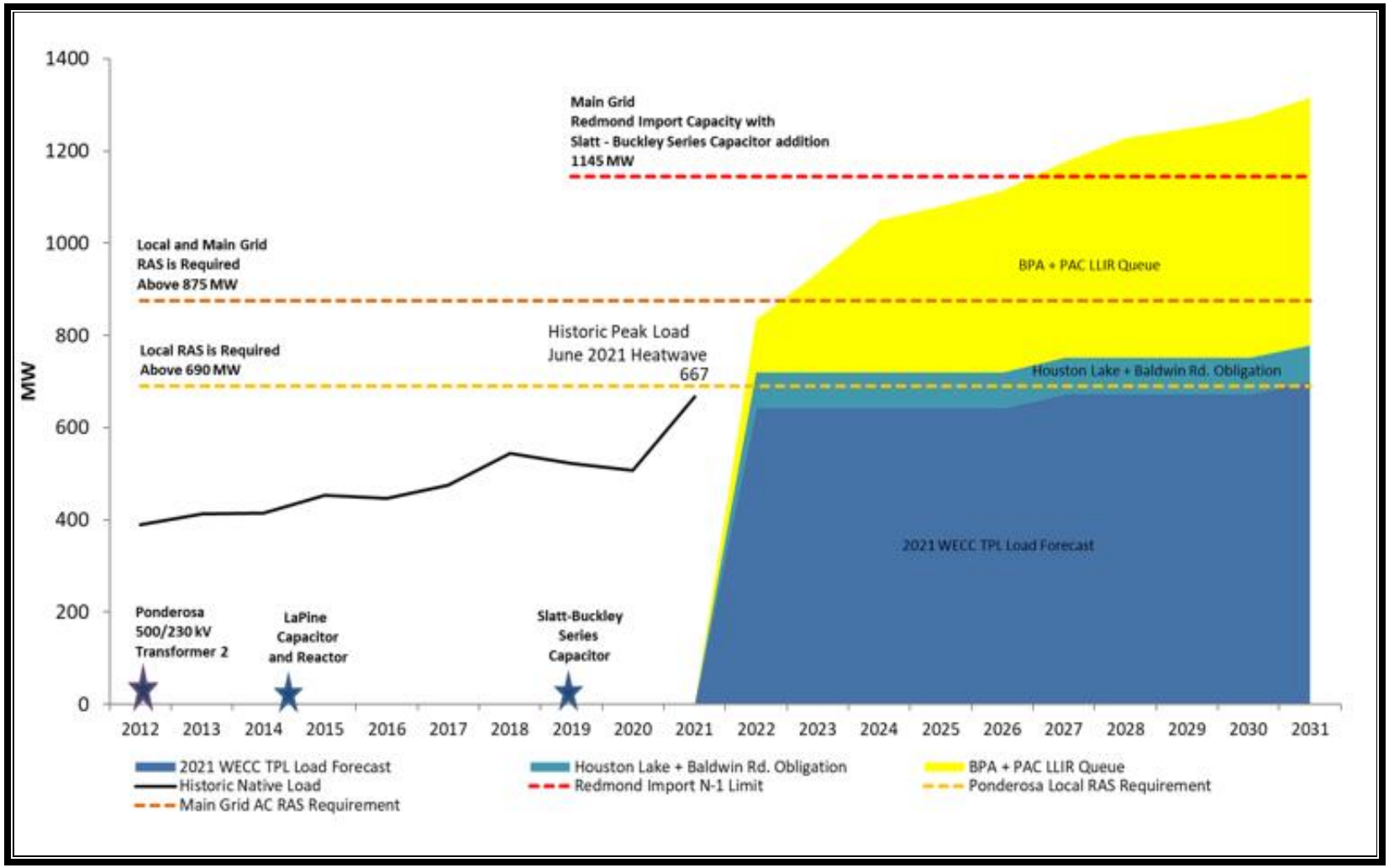
[46] Impacts per MW were estimated by dividing the jobs and income by the nameplate capacity. For each model, all default values were kept except for the following: The location was changed to Oregon, the construction year was changed to 2023, and the dollar year was changed to 2022.

(Rogoway, 2017). While the Pacific Northwest generates enough power overall, the Central Oregon region is constrained by transmission capacity.

According to the 2021 Bonneville Power Administration Transmission Planning and Transmission Needs study, electricity demand in the Central Oregon region (which spans from Redmond to Prineville south to La Pine and Sunriver), is projected to reach 823 MW in the summer and 945 MW in the winter in 2030 (Bonneville Power Administration, 2021). The main grid capacity in Central Oregon is now 875 MW after completion of the Slatt-Buckley series capacitor at the Slatt substation. To increase loads beyond 875 MW, Bonneville Power Administration (BPA) has proposed implementing a main grid RAS (remedial action scheme) and a local RAS that could enable a Redmond Import level of 1145 MW (see **Figure 4.6**). The blue- and yellow-shaded sections of the figure indicate line and load interconnection requests (LLIR) compared to the main and local area grid limits (dashed lines) at the Redmond Import location.

In response to a meeting in September 2017 with customers and stakeholders in Prineville, BPA provided in December 2017 an analysis of potential upgrades or options to provide load service and transmission infrastructure adequacy in the Central Oregon region (Bonneville Power Administration, 2017). As noted in the analysis, "In order to increase overall capability to serve load in central Oregon, both main grid and local area infrastructure require reinforcement." The 2017 analysis identified options that could increase main grid capability and options that could increase local area capability; one of those options was to increase local firm generation within the Redmond Import area. As noted by BPA, "firm generation has the effect of offsetting main grid and local impacts from load within the area". The benefit of PREP in increasing local power supplies is not quantified economically, but is a benefit in terms of increasing overall power reliability and supply in the region and easing the existing transmission constraints.

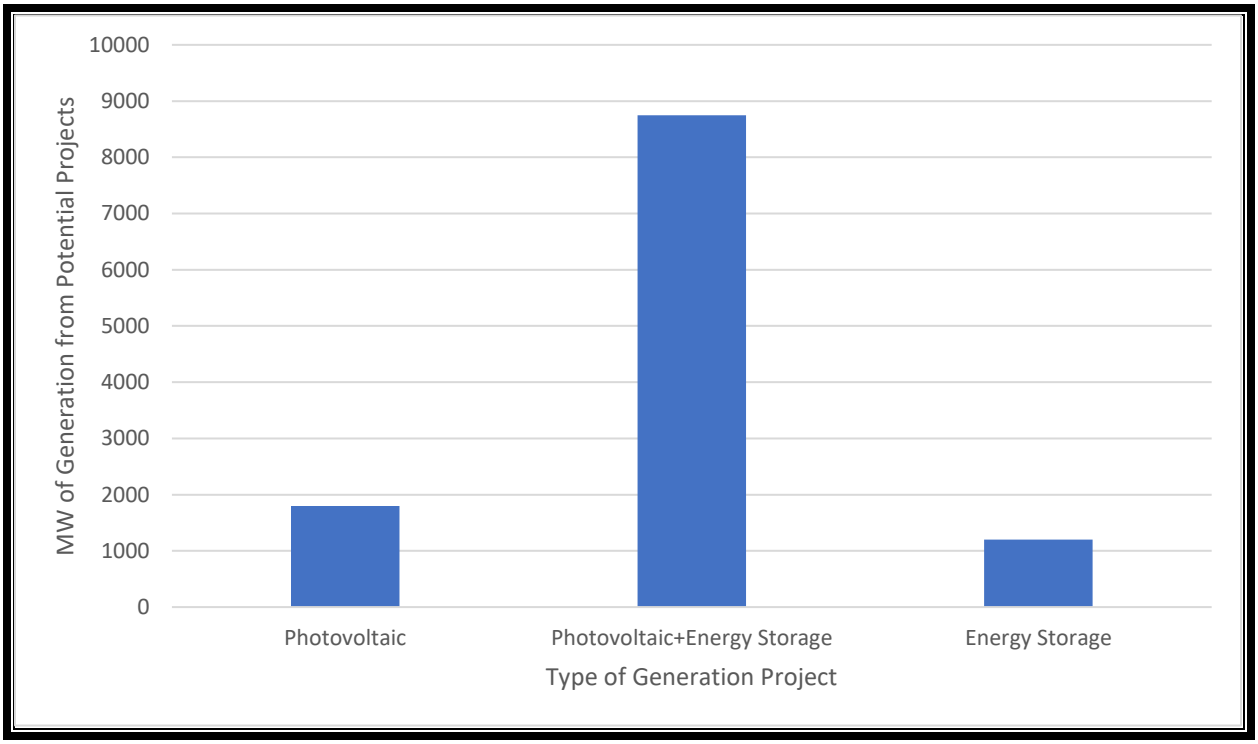
Figure 4.6 – Redmond Power Import Summer Limits



Source: Bonneville Power Administration, provided by City of Prineville

In November of 2022, BPA provided an additional update to the City of Prineville and other stakeholders on transmission and power planning in the region. This update included data on interest expressed by power producers on interconnection to the transmission system; Crook, Sherman, Wasco, and Morrow were the top four counties where energy developers had expressed interest in developing power generation facilities. Note that these are projects that have contacted BPA about transmission interconnection; the likelihood of any of these projects being built is not known. The vast majority of this potential future generation is solar, much of which may be coupled with some energy storage, as shown in **Figure 4.7**.

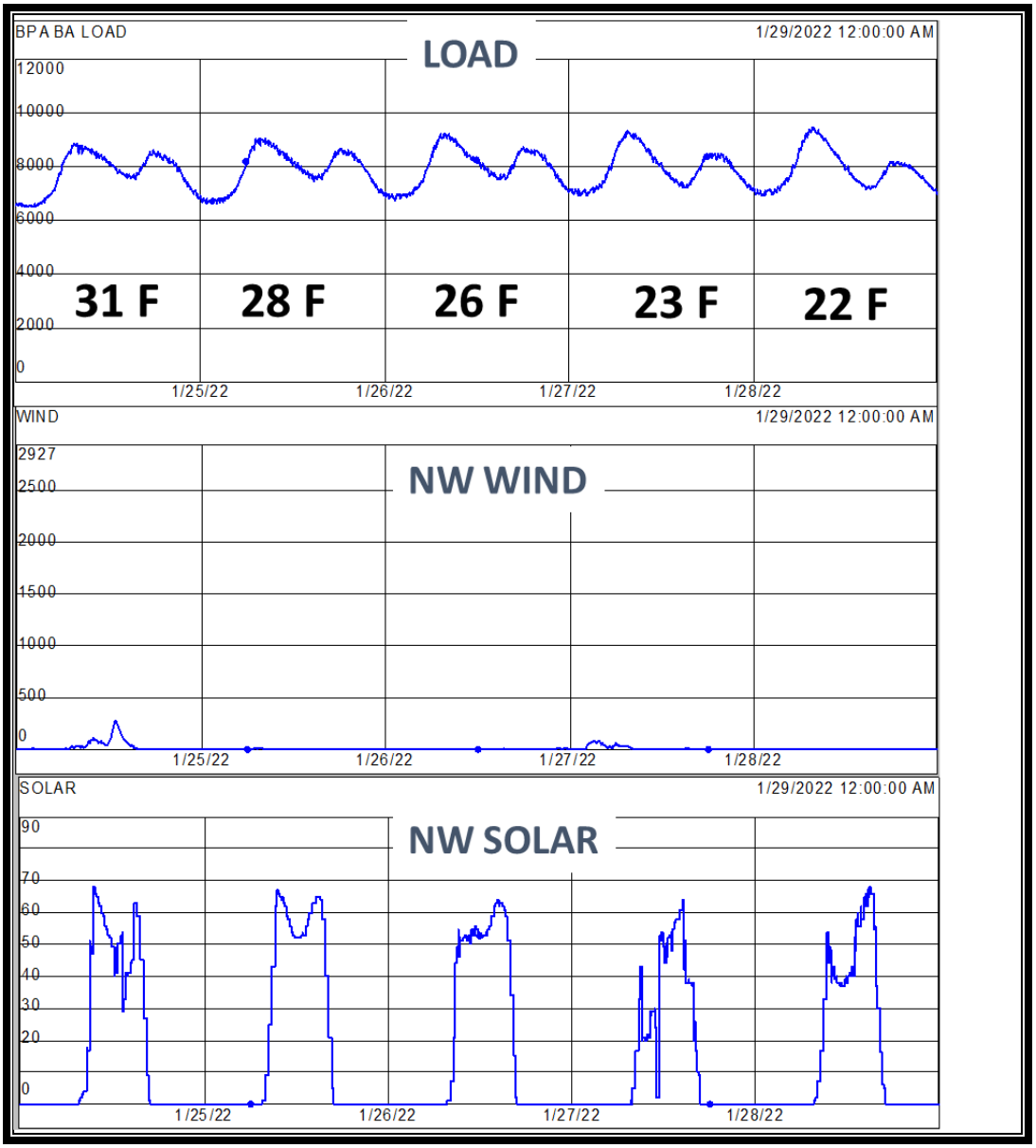
Figure 4.7 – Generation Connection Interest in Crook County (November 2022)



Source: Interconnection BPA Queue, Bonneville Power Administration data provided by City of Prineville

For solar power to assist with power constraints, particularly during the winter peak period, is critical. As shown in **Figure 4.8**, also from BPA data, solar output during winter months is low and variable, and snow cover can be an issue, while terrestrial wind generation is very low during extreme temperature conditions. As such, solar or wind projects need energy storage in order for them to contribute to meet these load peaks during winter. This is a major advantage of firm power, such as the PREP facility, as it provides constant power to meet demand during all times and is not intermittent – unlike solar and wind, which need energy storage to provide more consistent power.

Figure 4.8 – Load Demand Compared to NW Wind and Solar Energy Generation in Winter Weather Conditions



Source: Bonneville Power Administration data provided by City of Prineville

4.6.3 Reduced Wildfire Threat to Economic Development

By reducing wildfire and improving air quality, PREP has the potential to support (or prevent the loss of) economic development. Wildfire can impact economic development by destroying resources and infrastructure, reducing tourism, and motivating people to live away from fire-damaged or fire-prone areas.

There is some evidence to suggest that the threat of wildfire causes some people to move out of or avoid moving to wildfire-prone areas. In a 2021 survey conducted by real estate brokerage firm Redfin, almost half of Americans who planned to move in the next year said that natural disasters and extreme

temperatures factored into their decision to relocate (Rodriguez, 2021). Anecdotal accounts suggest that wildfire is a primary reason why some people move away from Western States, including Oregon and California, as well as a reason why some people choose not to move into these areas (Rodriguez, 2021; Allen, 2022; Hurdle, 2022; Lahr, 2020). Fewer people in these areas mean fewer workers, fewer business owners, and fewer customers, all of which can hinder economic development.

However, not all migrants are being dissuaded by the risk of wildfire. Data on migration trends and housing construction show that wildfire-prone areas are increasingly popular destinations for relocating Americans (Bliss & Patino, 2021; Samuel, 2021; Popovich & Plumer, 2022; Rao, Konings, Yebra, Diffenbaugh, & Williams, 2022). There are several reasons why people might choose to live in an area where wildfire threatens their home. One is ignorance of the risk: some movers and home builders are simply unaware they are locating to an area that has a significant risk of wildfire. Affordability is another reason. Building in the wildland-urban interface (which often carries a higher risk of wildfire in the Western US) is often cheaper than building in more developed areas, and affordable housing in safer areas is frequently in short supply (Rao, Konings, Yebra, Diffenbaugh, & Williams, 2022; Popovich & Plumer, 2022).

It is important to note that increased populations in wildfire-prone areas does not indicate a preference for wildfire. It is safe to say that nearly all homeowners are averse to living in wildfire-prone areas, but some are willing to accept the risk in exchange for other benefits (and others may not be aware of the risk). Regarding economic development, the relevant point is that wildfire risk may reduce the likelihood that someone will choose to live in a fire-prone area, and for each person that makes this choice, the risk of wildfire has reduced a potential source of economic development and economic activity (i.e., a potential employee, business owner, or customer). So even though some people may still choose to move to areas with wildfire risk, the area could have experienced greater economic development had the risk of fire been removed or reduced.

In addition, wildfire can negatively impact economic development by reducing tourism. One study examined the impacts of the 2017 wildfire season on the 2018 Oregon tourism economy. Approximately 1.2 million acres burned across the state in that year, which the study estimated to cause $60.7 million in lost visitor spending and $18.8 million in lost earnings in 2017.[47] In that year, the Chetco Bar fire burned over 191,000 acres (almost entirely in Curry County). This fire was estimated to reduce tourism spending in the area by roughly $6 million, with $1.5 million lost in associated earnings (Dean Runyan Associates, Inc., 2018). On average, each acre burned translated to nearly $16 in reduced earnings in the year of the fire.

The study assessed the potential future tourism-related economic impacts by surveying local businesses and organizations. Nearly half of survey respondents believed that wildfires would have an adverse effect on their business in 2018, primarily because their area would have less appeal to visitors. More than 30% of respondents reported that they believed their organization would lose future revenue because the fire reduced the scenic appeal of the area (Dean Runyan Associates, Inc., 2018). In this way, wildfire can reduce tourism; logically, reducing the prevalence of wildfire through initiatives such as PREP has the potential to support tourism.

During the 2020 wildfire season, Central Oregon also experienced a significant drop in tourism, with businesses adversely affected from the loss in revenue (Maher, 2022). In a recent article on how longer,

[47] The original values in 2017 were adjusted to 2022 dollars using the Implicit Price Deflator for GDP (Bureau of Economic Analysis, 2022).

more intense wildfires are hurting areas reliant on tourism, Bend Chamber of Commerce CEO Katy Brooks was cited as saying that “Living in Bend in 2020 was a like a summer that didn’t happen” (Maher, 2022). Wildfire can clearly reduce tourism; it follows that reducing the prevalence of wildfire through initiatives such as PREP has the potential to support tourism.

CHAPTER 5 – CARBON CAPTURE TECHNOLOGY

5.1 CARBON CAPTURE

Many believe that reducing society's carbon emissions in the future will not do enough to avoid social, economic, and environmental impacts from an associated change in climate. Therefore, there is interest in going a step further by capturing and sequestering carbon from the atmosphere. Thus, an emerging area of focus is on the technologies for capturing carbon dioxide formed during power generation and other industrial processes, and then sequestering the captured carbon dioxide so that it is not emitted into the atmosphere.

The technologies are not yet well developed or commercialized, but there is significant support for advancing them. For example, in January 2020 Microsoft Corporation announced a carbon-negative commitment. Their goal is that by 2030 Microsoft will be carbon negative and by 2050 Microsoft will have removed from the environment all the carbon the company has emitted either directly or by electrical consumption since it was founded in 1975. At the same time, the company pledged deployment of $1 billion in capital in a new Climate Innovation Fund to accelerate the development of carbon reduction and removal technologies.

There are three general types of carbon capture technology[48] including:

- *Post-combustion:* Capturing carbon (as CO_2) from the flue gas of a combustion process. This carbon capture technology would most likely be applied at a power plant that burns coal or natural gas. Coal and natural gas-fired power plants constitute roughly two-thirds of all power generation in the US and they produce roughly 25% of all carbon dioxide emissions annually in the US, or about 1.25 billion metric tons of carbon dioxide per year. As of 2021, planned or already deployed post-combustion carbon capture technology had the capacity to capture 40 million metric tons of carbon dioxide annually. Thus, the current capture rate of this technology is only 0.03% of annual output – a very small proportion.
- *Oxyfuel:* Combusting fuels in a pure oxygen environment so that nearly all of the waste gas is CO_2 and water vapor. The water is then condensed and the CO_2 gas is stored. Currently this technology has very high capital costs, consumes large amounts of energy, and is hampered by various operational challenges.
- *Pre-combustion:* The technology is generally applied to coal gasification where the syngas produced from gasifying coal produces carbon monoxide and hydrogen. The hydrogen is then captured and combusted to produce power, while the carbon monoxide is reacted with water to produce CO_2 which is then stored. Current estimates are that the cost of operating this technology is about $60 per metric ton, not including costs for storage or utilization.

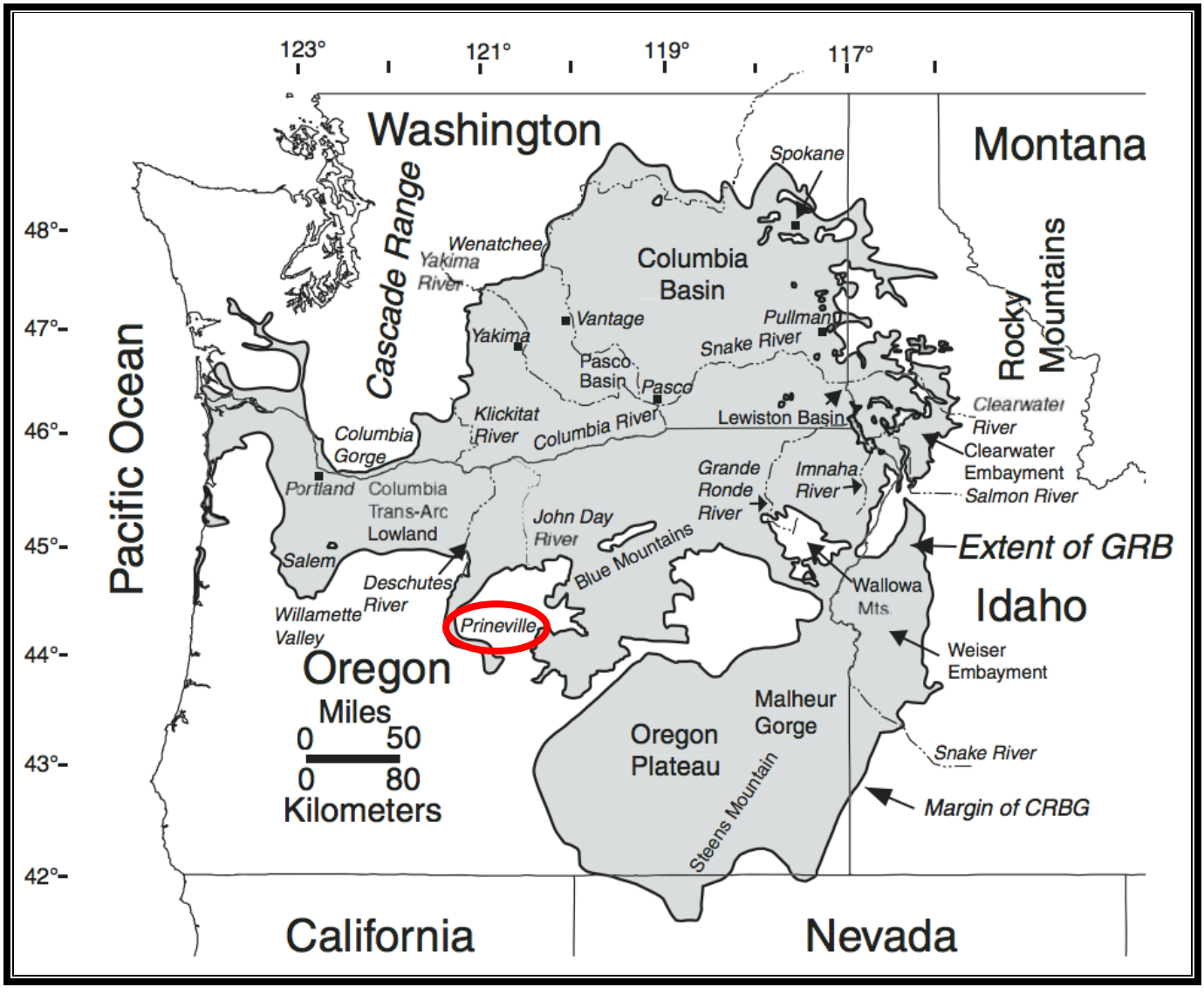
5.2 CARBON STORAGE AND/OR UTILIZATION

After the carbon dioxide is captured, it is typically compressed and deeply chilled so that it becomes a fluid. It is then typically transported by pipeline to a storage site. From the storage site, the carbon dioxide is often injected into deep underground geological formations. In some cases, the carbon dioxide injected deep within the earth is physically trapped and therefore is considered sequestered from the atmosphere. However, a focus of interest in the context of the Western US is injecting the carbon dioxide deep

[48] Much of the information in this section of the report is from: Resources for the Future, accessed at: https://www.rff.org/publications/explainers/carbon-capture-and-storage-101/ and from the US Department of Energy, https://www.energy.gov

underground into basalt rock formations. The basalt formations are deeply buried rocks deposited from volcanic eruptions that have occurred over millions and billions of years. The basalt formations typically contain small amounts of magnesium and calcium, which allow the basalt to transform into stable forms of calcite and dolomite when exposed to carbon dioxide through a mineralization process deep within the earth. Much of Washington and Oregon, including the region around Prineville, is underlaid by large basalt rock formations that would form a key component of any carbon storage project to be located in the region. The formations are believed to have formed about 20 million years ago when magma from massive eruptions erupted from a volcanic hotspot that is now believed to reside near Yellowstone Volcano in Northwest Wyoming. The magma flowed hundreds of miles to the north and west, which resulted in the widespread basalt formations shown in **Figure 5.1**.

Figure 5.1 – Columbia River Basin Basalt Formation Map[49]



[49] Map accessed at: https://www.usgs.gov/observatories/cvo/columbia-river-basalt-group-stretches-oregon-idaho

Another way of dealing with captured CO_2 involves finding uses for it. It is sometimes used for Enhanced Oil Recovery (EOR), which is the process of injecting carbon dioxide into an underground oil formation. Injecting carbon dioxide increases the pressure within the formation, which allows more oil to be recovered. In some cases, the carbon dioxide reacts with the oil in the formation, allowing it to become mobile and thereby available for recovery. While injecting carbon dioxide into a process to gather more of a carbon-producing material may seem counterproductive to efforts for reducing atmospheric carbon, research has shown that typically much more carbon dioxide must be injected into an oil formation than is released from the oil that is recovered.

5.3 BIOMASS ENERGY CARBON CAPTURE AND STORAGE

Generating heat/energy from biomass and capturing and storing the resulting carbon dioxide is of particular interest for the PREP. This is because biomass, through the photosynthesis process of plants, removes carbon from the atmosphere. If biomass is then combusted to produce heat/power and the resulting carbon dioxide is captured and permanently stored, the process could be a technology with negative carbon emissions so long as the carbon emissions associated with the growing, harvesting, transporting, and processing of the biomass do not outweigh the carbon captured.

The technology is of particular interest in the forests of the US West where, on many publicly owned lands, the current amount of biomass per acre is generally thought to be greater than historical levels. Thus, relatively large amounts of biomass naturally occur within an economical transport distance of a biomass power plant, a scenario where sustainability concerns are limited. A recent study[50] estimated that globally there is the potential to permanently sequester 3.4 to 5.2 billion tons of carbon dioxide per year via biomass energy carbon capture and storage. The cost estimate for biomass energy carbon capture and storage range from a low of $20 per ton of carbon dioxide sequestered to a high of $200 per ton.

From a technology perspective, biomass power generation is widely used, well understood, and has been used commercially at industrial scale for many decades. However, while carbon capture technology is well understood, it has yet to be fully commercialized with only a few small-scale demonstration projects completed to date. Still, several of the demonstration projects are backed by well-funded organizations. For example, Drax is a renewable energy company operating a portfolio of biomass, hydroelectric, and pumped hydro storage power-generating plants in the United Kingdom. The company's power plants initially combusted coal, but in 2013 started switching to co-firing coal and biomass (wood pellets). In 2020, the company announced plans to end all commercial power generating operations involving coal combustion and a planned switch to 100% biomass combustion.

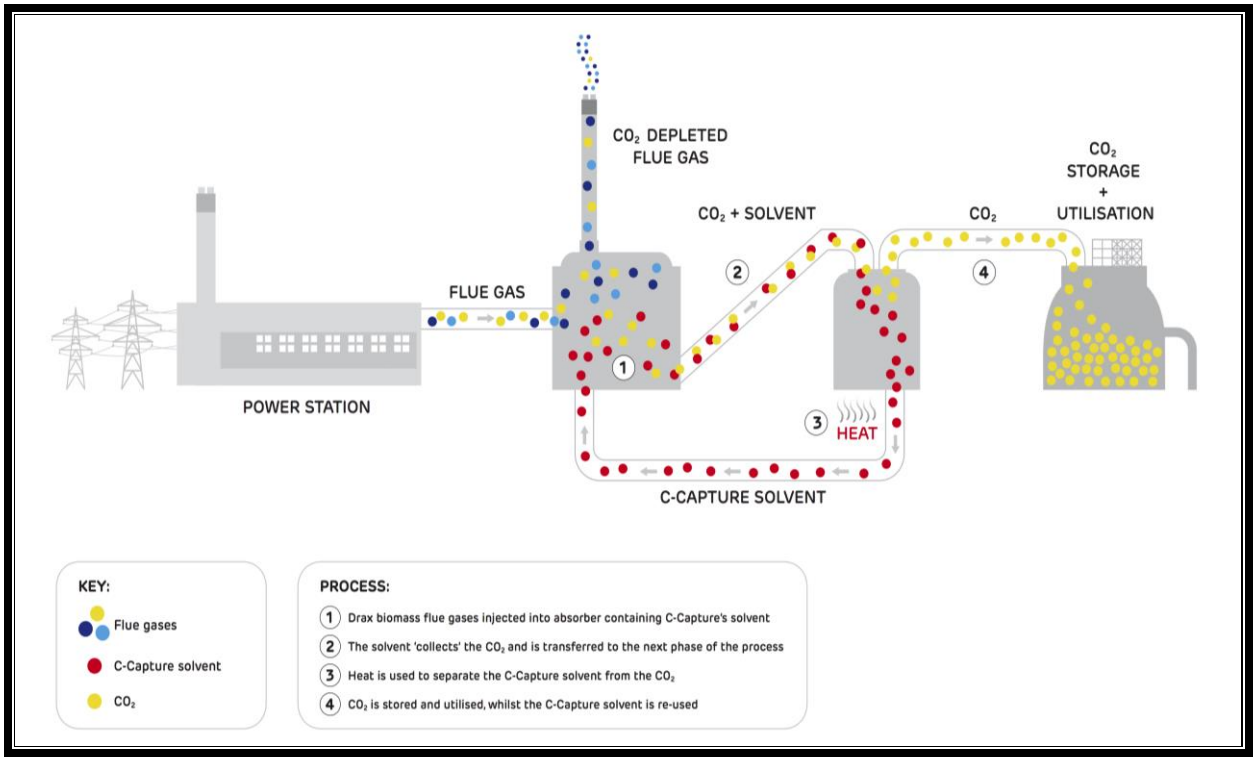
The company also announced in 2019 plans to become a carbon-negative company by 2030, requiring them to implement carbon capture and storage technology. Several years ago, they deployed a test-scale biomass energy carbon capture and storage facility at North Yorkshire, England. The key to their process is injecting a "c-capture solvent" into the process to "collect the carbon dioxide for efficient processing and ultimately storage." See **Figure 5.2**. In mid-July 2022, Drax announced submission of plans to the United Kingdom's Planning Inspectorate to develop two bioenergy carbon capture storage units at its North Yorkshire biomass power plant.[51] Pending approval, construction could start in 2024. The project will cost

[50] Negative Emissions Technologies and Reliable Sequestration: A Research Agenda. Accessed at: https://nap.nationalacademies.org/catalog/25259/negative-emissions-technologies-and-reliable-sequestration-a-research-agenda

[51] Drax Carbon Capture and Storage. Accessed at: https://www.drax.com/press_release/drax-submits-plans-to-build-worlds-largest-carbon-capture-and-storage-project/

nearly 10 billion dollars and the two units combined will capture and store at least 8 million metric tons of carbon dioxide per year. It will be the largest carbon capture and storage project in the world.

Figure 5.2 – Biomass Energy Carbon Capture and Storage at Drax Power Station[52]



5.4 SUMMARY OF BIOMASS ENERGY CARBON CAPTURE AND STORAGE

Biomass energy carbon capture and storage is a developing technology that is generating interest from companies seeking to be leaders not only in reducing the carbon-related environmental impacts of their operations, but reversing their carbon impacts by becoming "carbon negative." There are several variations of the technology, but up to this point none have been widely deployed.

The major limiting factor appears to be the high cost of implementing and operating the technology, with estimated costs ranging as high as $200 per ton of carbon dioxide permanently stored. The current costs are much higher than carbon's value in markets driven by government-imposed carbon emissions curbs (e.g., California's Cap and Trade program). For example, in 2021 the weighted average value of carbon offset transfers was about $15 per ton of carbon dioxide and about $25 per ton for allowance transfers.[53] What is less clear is the value of carbon among voluntary or incentive-based markets that are driven by corporate sustainability reporting programs such as the Microsoft and Drax examples cited in this report.

Another issue that creates uncertainty is that there is no universally accepted method for accounting carbon offsets and carbon storage. Nor are there widely accepted protocols for differentiating between high-quality and less-worthy carbon reduction and/or storage projects. For example, there currently is no well-defined mechanism in the marketplace that recognizes the full value of capturing a ton of carbon already in the atmosphere and permanently storing it underground, versus credits for storing carbon for a

[52] Image accessed at: https://www.drax.com/press_release/drax-to-pilot-europes-first-carbon-capture-storage-project-beccs/
[53] California Air Resources Board. Summary of Market Transfers Report. Accessed at: https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/program-data/summary-market-transfers-report

limited time in forests, buildings, etc., or reducing the carbon emissions of already existing infrastructures. In summary, it appears carbon capture is a potentially viable technology, but at the current time there are significant technological and economical risks associated with its deployment.

ORDINANCE NO. 1284
PRINEVILLE, OREGON

AN ORDINANCE ADOPTING CHANGES TO PRINEVILLE MUNICIPAL CODE CHAPTER 131

Whereas, the City of Prineville ("City") desires to allow individuals and families that are temporarily experiencing the effects of homelessness to camp in relatively safe and sanitary locations while they are actively seeking access to stable and affordable housing.

Whereas, the City desires to establish codes related to camping in the City to allow for legal camping during reasonable time periods, while protecting sensitive areas of the City that are disproportionately impacted by the negative effects of such activity.

Whereas, the City desires to discourage camping in areas where such activities fundamentally undermine the public's ability to use that public property for its intended purpose and creates unsafe and unsanitary living conditions, which can threaten the general health, welfare, and safety of the City and its inhabitants.

Whereas, the City encourages the active participation of all concerned persons, organizations, businesses, and public agencies to work in partnership with the City and the homeless community to address the short and long-term impacts of homelessness in the community.

Whereas, the City wishes to amend City of Prineville Municipal Code Chapter 131 Camping in Certain Places to conform with Oregon House Bill 3115.

NOW, THEREFORE, THE PEOPLE OF THE CITY OF PRINEVILLE DO ORDAIN AS FOLLOWS:

1. Purpose. It is found and declared that:

a. From time-to-time persons establishes campsites on sidewalks, public rights-of-way, under bridges, and so forth;

b. Such persons, by such actions create unsafe and unsanitary living conditions which pose a threat to the peace, health, and safety of themselves and the community;

c. Camping, lying, or sleeping on a playground or sports field fundamentally undermines the public's ability to use that public property for its intended purpose;

d. Camping, lying, or sleeping on rights-of-way, or in a manner that obstructs sidewalks, prevents the public's ability to use that public property for its intended purpose and can in some situations result in imminent threats to life;

e. These regulations are meant strictly to regulate the use of publicly owned property, and are not intended to regulate activities on private property; and

f. The enactment of this provision is necessary to protect the peace, health, and safety of the City of Prineville and its inhabitants.

2. The Prineville City Council hereby revokes Chapter 131 in its entirety and replaces it as set forth on Exhibit A, attached hereto and incorporated herein.

3. Severability. If any court of competent jurisdiction declares any Section of this Ordinance invalid, such decision shall be deemed to apply to that Section only and shall not affect the validity of the Ordinance as a whole or any part thereof other than the part declared invalid.

4. Emergency Declared. An emergency is deemed to exist and this Ordinance shall go into effect July 1, 2023.

Presented for the first time at a regular meeting of the City Council held on _____ 2023, and the City Council finally enacted foregoing ordinance this ____ day of _____, 2023.

_____
Rodney J. Beebe, Mayor

ATTEST:

_____
Lisa Morgan, City Recorder

CHAPTER 131: CAMPING IN CERTAIN PLACES

Section

131.01. Definitions.

As used in this Chapter, the following terms and phrases shall have the meaning set forth herein:

"Camp" or "Camping" means to pitch, erect, create, or occupy camp facilities for the purposes of habitation, as evidence by the use of camp paraphernalia.

"Campsite" means any place where one or more persons have established temporary sleeping accommodations by use of camp facilities and/or camp paraphernalia.

"Camp Facilities" include, but are not limited to, tents, bivouacs, huts, other temporary or portable shelters, and vehicles or recreation vehicles as defined by Oregon law.

"Camp Paraphernalia" includes, but is not limited to, tarpaulins, cots, beds, sleeping bags, blankets, mattresses, hammocks, or other sleeping material, or non-City designated cooking facilities and similar equipment.

"Park Areas" means publicly owned grounds providing passive and active recreation opportunities, including but not limited to, Ochoco Creek Park, Gervis/Library Park, Crooked River Park, Kilowatt Field/Harwood Park, Davidson Field, Gary Ward Park, Rimrock Park/Youth Fishing Pond, Pioneer Park, Yellowpine Park, Barnes Butte Recreational Area, Mountain View Park, and Crooked River Wetlands Complex.

"Parking Lot" means a developed location that is designated for parking motor vehicles, whether developed with asphalt, concrete, gravel, or other material.

"Public Property" means any real property or structure owned, leased, or managed by a public agency, including public rights-of-way and utility easements. A public agency includes, but is not limited to, the City of Prineville, Crook County, Oregon Department of Transportation, Crook County Parks and Recreation District, Crook County Cemetery Board, and Crook County School District.

"School" means a public or private institution or a child care facility.

"Store" or "Storage" means to put aside or accumulate for use when needed, to put for safekeeping, to place or leave in a location.

"Waterway" means a river, canal, or other route for the travel of water.

131.02. Camping Prohibited in Certain Places

This section's regulations are meant strictly to regulate the use of public property within the City of Prineville and are not intended to regulate activities on private property.

(A) Except as expressly authorized by the City of Prineville Municipal Code, it shall be unlawful for any person to establish or occupy a campsite at any time on the following Public Property:

(1) All Park Areas;

(2) On sidewalks in a manner reducing the clear, continuous width of less than five feet;

(3) All public property located within 1,000 feet of a school; and

(4) Within 100 feet of a waterway.

(B) Except as expressly authorized by the City of Prineville Municipal Code, it shall be unlawful for any person to camp or maintain a campsite on any public property during the hours of 7:00 a.m. to 9:00 p.m.

(C) Except as expressly authorized by the City of Prineville Municipal Code, it shall be unlawful for any person to store personal property, including camp facilities and camp paraphernalia, on any public property during the hours of 7:00 a.m. to 9:00 p.m.

(D) Except as expressly authorized by the City of Prineville Municipal Code, it shall be unlawful to knowingly leave personal property unattended on public property during the hours of 7:00 a.m. to 9:00 p.m. Personal property left unattended may be removed and disposed by the City, in accordance with Oregon law, if:

(1) The property poses an immediate threat to public health, safety or welfare; or

(2) The property has been posted with a written notice in accordance with Oregon law.

(E) Notwithstanding the provisions of this Chapter, the City Manager or designee may temporarily authorize camping or storage of personal property by written order that specifies the period of time and location:

(1) In the event of emergency circumstances;

(2) In conjunction with a special event permit; or

(3) Upon finding it to be in the public interest and consistent with City Council goals and policies.

131.03 Scheduling and Notice of Campsite Cleanup

(A) Cleanup of unlawful campsites will be scheduled on an as-needed bases by the Chief of Police or designee.

(B) Permanent signs may be posted advising that camping is prohibited. Whether or not a permanent sign is posted, a specific dated and timed notice will be posted and distributed in the area of a scheduled cleanup at least 72 hours before the cleanup.

(C) Notwithstanding subsection (A) and (B) of this section, cleanup of campsites may occur immediately and without notice if the Chief of Police or designee determines that either of the following conditions exists:

(1) When there are grounds for law enforcement officials to believe that illegal activities other than camping are occurring at an established campsite;

(2) In the event of an exceptional emergency at an established campsite, including, but not limited to, possible site contamination by hazardous materials, a public health emergency, or other immediate danger to human life or safety.

(3) If a funeral service is scheduled with less than 72 hours' notice at a cemetery at which there is a camping site, or a camping site is established at the cemetery less than 72 hours before the scheduled service, the written notice required under subsection (B) of this section may be posted at least 24 hours before the cleanup.

131.04 Removal, Storage and Retrieval of Personal Property.

(A) Any property removed by the City shall be held and disposed of pursuant to Oregon law if not claimed within 30-days after removal.

(B) Individuals may claim their property, without a fee, by contacting the Police Department within 30 days.

(C) Items that have no apparent utility or are in unsanitary condition may be immediately discarded.

(D) Weapons, controlled substances other than prescription medication and items that appear to be either stolen or evidence of a crime shall be retained and disposed of by the Police Department in accordance with applicable legal requirements for the property in question.

131.98 Nonexclusive Remedy

The remedies described in this chapter shall not be the exclusive remedies of the City for violations of this Chapter.

131.99 Penalties and Enforcement.

(1) Violation of any provision of this Chapter is punishable by a fine not less than $50.00 nor more than $250.00 for the first offense, and for the second and subsequent offenses, not less than $100.00, nor more than $1,000.00.

(2) Each day that a violation occurs will be considered a separate offense.

(3) In addition to any other penalties that may be imposed, any campsite used for overnight sleeping in a manner not authorized by this Chapter or other provisions of this code shall constitute a public nuisance and may be abated in accordance with Oregon law.

ORDINANCE 1285
PRINEVILLE, OREGON

AN ORDINANCE ADOPTING CHANGES TO PRINEVILLE MUNICIPAL CODE CHAPTER 93.59

Whereas, Chapter II, Section 4 of the City of Prineville Charter provides:

> Powers. The city has all powers that the constitutions, statutes and common law of the United States and Oregon expressly or impliedly grant or allow the city, as fully as this charter specifically enumerated each of those powers.

Whereas, State law codified as ORS 105.550 to 105.600, Abatement of Nuisance, provides the City of Prineville specific authority to abate certain public nuisance activities that affects the health, safety and welfare of its community; and

NOW, THEREFORE, THE PEOPLE OF THE CITY OF PRINEVILLE DO ORDAIN AS FOLLOWS:

1. Section 93.59 of the Prineville Municipal Code is amended to read as shown on Exhibit A, attached hereto and incorporated herein.

2. **Emergency Declared.** An emergency is deemed to exist and this Ordinance shall go into effect July 1, 2023.

Presented for the first time at a regular meeting of the City Council held on _____ 2023, and the City Council finally enacted foregoing ordinance this ____ day of _____, 2023.

_____
Rodney J. Beebe, Mayor

ATTEST:

_____
Lisa Morgan, City Recorder

93.59 Parking

A. No person shall cause any vehicle or personal property to be parked or stored in such a way as to obstruct the flow of traffic on a public right-of-way or the movement of pedestrians on a public sidewalk.

B. No vehicle or personal property located on a public right-of-way, a sidewalk or on public property shall be permitted for more than 72 consecutive hours; provided, that any basketball stand that does not interfere with the flow of traffic or pedestrians, or create a substantial safety hazard, may be located in the right-of-way for more than 72 hours. Movement of a vehicle within a 500-foot radius shall not extend the time limits for parking violations pursuant to this section.

C. Within residential neighborhoods, no commercial vehicle which exceeds 8,000 pounds gross weight, 21 feet in length or eight feet in height shall be parked in the street unless it is a vehicle that is routinely on standby and necessary to use under emergency circumstances. Semi-trailers are prohibited.

D. Whenever a vehicle is placed in a manner or location which constitutes an obstruction to traffic or hazard in public safety or is parked in a manner that violates this chapter, within the City limits of the City of Prineville, the City may cause the vehicle to be towed pursuant to provisions established in ORS 98.805, 98.810, 98.812, and 98.818. The owner of such vehicle is responsible to the City or any private towing and storage operator pursuant to the provisions of ORS 98.812 and 98.818. The City shall also have any remedies available under this chapter including, without limitation, the ability to sell a removed vehicle as abandoned property.

E. If any vehicle is impounded and stored under the provisions of this chapter or any other provision of the Prineville Municipal Code, or pursuant to any other lawful authority, said vehicle shall not be released by the person to whom possession thereof is delivered until all charges connected with the removal, towing, and storage of such vehicle have been fully paid.

F. For purposes of this section, vehicle means any device in, upon or by which any person or property is or may be transported or drawn upon a public highway and includes vehicles that are propelled or powered by any means, which includes, but is not limited to boats, trailers, motorhomes, and travel trailers.

RESOLUTION NO. 1555
PRINEVILLE, OREGON

A RESOLUTION FOR CROOK COUNTY ENTERPRISE ZONE BOUNDARY RE-DESIGNATION

Whereas, the City of Prineville ("City") and Crook County ("County") are currently sponsors of the Crook County Enterprise Zone, a rural enterprise zone pursuant to ORS 285C.400-ORS 285C.420 ("Zone").

Whereas, pursuant to Oregon law, the Zone terminates July 1, 2023, if not renewed prior to that date.

Whereas, in order for the Zone to be renewed, the application must be submitted on or before June 1, 2023.

Whereas, City and County desire to continue sponsorship of an enterprise zone to encourage new business investment, job creation, higher incomes for local residents, and greater diversity of economic activity.

Whereas, City and County have formally advised and received consultation from the Oregon Business Development Department ("OBDD") according to ORS 285C.078.

Whereas, the enterprise zone has a total area of 8.93 square miles and it meets other statutory limitations on size and configuration and is depicted on the map attached as Exhibit A and described on the attached Exhibit B, both incorporated herein.

Whereas, the proposed enterprise zone contains significant land that is reserved for industrial use, as indicated by land use zoning maps attached to the Application, consistent with comprehensive plans acknowledged by the Land Conservation and Development Commission. Such industrial sites are accessible, service or serviceable, and otherwise ready for use and further development.

Whereas, the designation of an enterprise zone does not grant or imply permission to develop land within the Zone without complying with prevailing zoning, regulatory and permitting processes and restrictions for applicable jurisdictions; nor does it indicate any intent to modify those processes or restrictions, except as otherwise and in accordance with comprehensive plans.

Whereas, the City appreciates the impacts that a designated enterprise zone would have and the property tax exemptions that eligible business firms might receive therein, as governed by ORS Chapter 285C and other provisions of Oregon law.

Whereas, all of the other municipal corporations, school districts, special service districts, other than City and County, that receive operating revenues through the levying of ad valorem taxes on real and personal property in any area of the proposed enterprise zone were

sent notice and invited to a public meeting held April 25, 2023, regarding this proposal, in order for City and County to effectively consult with these other local taxing districts.

Now, Therefore, the City of Prineville Resolves as follows:

1. Under ORS 285C.065, City proposes and applies for a re-designation of an Oregon Enterprise Zone made up of the properties shown on Exhibit A and described on Exhibit B to be named the Crook County Enterprise Zone, and requests that the Director of Business Oregon order the re-designation of this enterprise zone as a rural enterprise zone.

2. Kelsey Lucas, Prineville/Crook County Director with Economic Development for Central Oregon ("EDCO"), is authorized to submit the enterprise zone application for the City and to make any substantive or technical change to the application materials, as necessary, after adoption of this Resolution.

3. City will give priority to the use in the proposed enterprise zone, if re-designated, of any economic development or job training funds received from the federal government, consistent with ORS 285C.065(3)(d).

4. Upon re-designation, Kelsey Lucas, Prineville/Crook County Director for EDCO, is appointed as the local zone manager for the Crook County Enterprise Zone.

5. City will comply with the requirements and provisions of ORS 285C.105 and otherwise fulfill its duties under ORS 285C.050 to 285C.250.

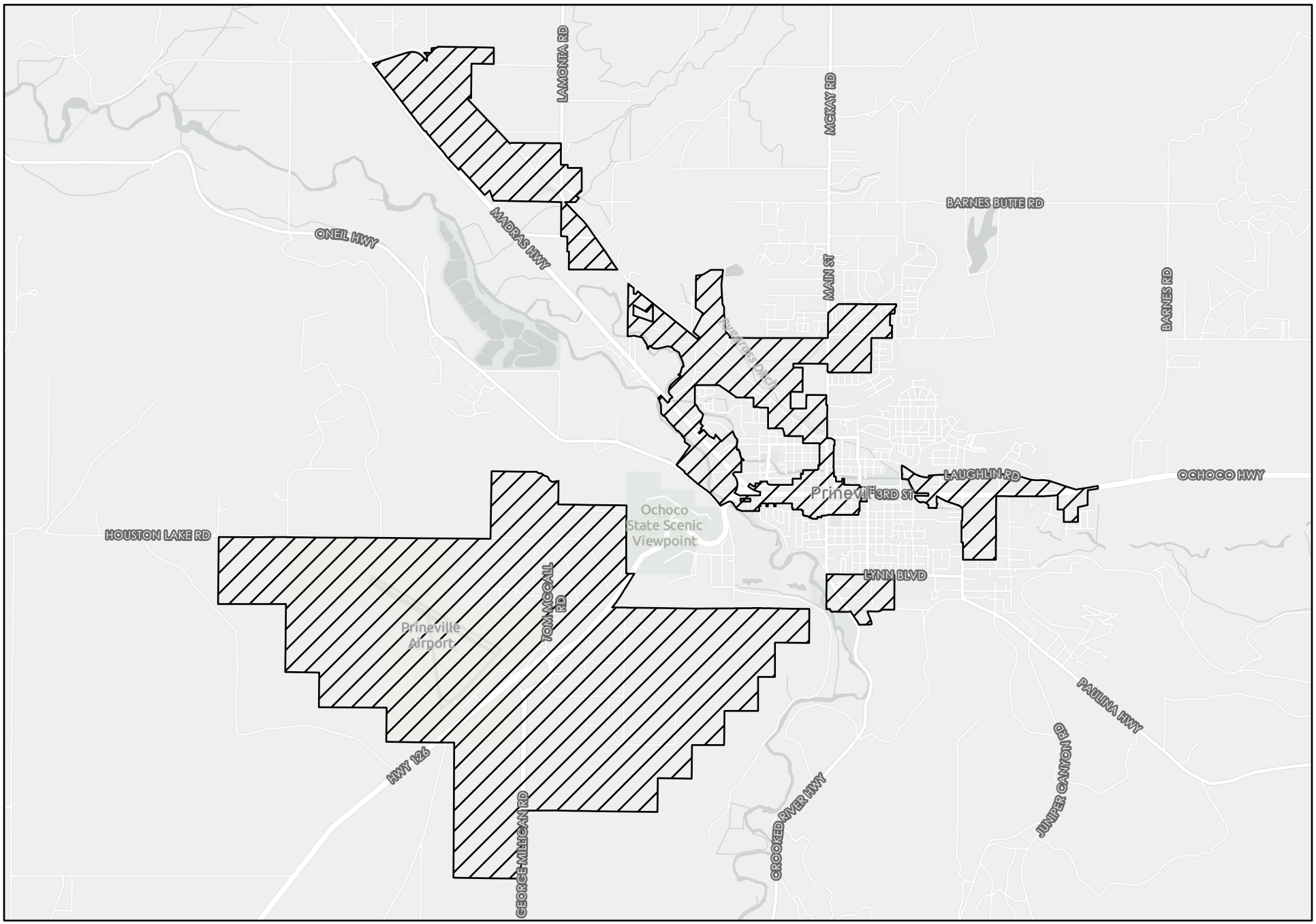
6. City commits, within six months of re-designation, to implement and to confirm for the OBDD its fulfillment of such duties, as specified in OAR Chapter 23 Division 668, including, but not limited to, preparation of a list or map of local lands and buildings owned by the state or by a municipal corporation within the enterprise zone that are not being used or designated for a public purpose and that have appropriate land use zoning, and to make efforts for making such real property available for lease or purchase by authorized business firms under ORS 285C.110.

Approved by the City Council this ____ day of May, 2023.

_____
Rodney J. Beebe, Mayor

ATTEST:

_____
Lisa Morgan, City Recorder


LAMONTA RD
MCKAY RD
BARNES BUTTE RD
ONEIL HWY
MADRAS HWY
MAIN ST
BARNES RD
LAUGHLIN RD
OCHOCO HWY
3RD ST
Ochoco
State Scenic
Viewpoint
HOUSTON LAKE RD
LYNN BLVD
Prineville
Airport
TOM MCCALL RD
PAULINA HWY
HWY 126
JUNIPER CANYON RD
CROOKED RIVER HWY
GEORGE MILLIGAN RD
Enterprise Zone
105
Miles
N

CROOK COUNTY ENTERPRISE ZONE TAXLOTS [CURRENT DESIGNATION AND PROPOSED RE-DESIGNATION]						
MAP TAXLOT	OWNER NAME	MAILING ADDRESS	CITY	STATE	ZIP	PARTIAL INCLUSION
1415140000702	WOODWARD LAND & TIMBER LLC	PO BOX 663	PRINEVILLE	OR	97754	
1415140000704	WOODWARD LAND & TIMBER LLC	PO BOX 663	PRINEVILLE	OR	97754	
1415230000200	LAUGHLIN ELLIOTT LLC	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754	
1415230000301	WILLIAMS WALT AND JUDITH R	PO BOX 6467	BEND	OR	97708	
1415230000302	WILLIAMS WALT AND JUDITH R	PO BOX 6467	BEND	OR	97708	
1415230000303	GROVES HOLDINGS LLC	PO BOX 7288	BEND	OR	97709	
1415230000304	WILLIAMS WALT AND JUDITH R	PO BOX 6467	BEND	OR	97708	
1415230000401	WILLIAMS WALT AND JUDITH R	PO BOX 6467	BEND	OR	97708	
1415230000402	GROVES HOLDINGS LLC	PO BOX 7288	BEND	OR	97709	
1415230000403	GROVES HOLDINGS LLC	PO BOX 7288	BEND	OR	97709	
1415230000405	WILLIAMS WALT AND JUDITH R	PO BOX 6467	BEND	OR	97708	
1415230000500	HONDO QUARRIES LLC	95 SW SCALEHOUSE LP #100	BEND	OR	97702	
1415230000600	RHODEN'S INVESTMENTS INC	PO BOX 460	PRINEVILLE	OR	97754	
1415230000602	CITY OF PRINEVILLE	387 NE 3RD ST	PRINEVILLE	OR	97754	
1415230000603	GALLANT LLC	1702 E TRADITION LN	LAKE HAVASU CITY	AZ	86404	
1415230000604	JNF LLC	3901 NW ELLIOTT LN	PRINEVILLE	OR	97754	
1415230000605	FONTANA WOOD PRODUCTS OF OREGON INC	PO BOX 9780	MARYVILLE	TN	37802	
1415230000606	RHODENS INVESTMENTS INC	PO BOX 460	PRINEVILLE	OR	97754	
1415230000607	ENVIROTECH SERVICES INC	910 54TH AVENUE, SUITE 230	GREELEY	CO	80634	
1415360000300	HOWARD KEVIN REAL ESTATE INC	8400 E PRENTICE AVE 9TH FLOOR	GREENWOOD VILLAGE	CO	80111	
1415360000400	OSBORNE CHARLENE	1224 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360000500	ADKINS JACOB	PO BOX 1440	PRINEVILLE	OR	97754	
1415360000600	GREGORY NATHAN ALLEN	1270 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360000700	SATHER ENTERPRISES LLC	6744 SE MEADOWLARK LN	PRINEVILLE	OR	97754	
1415360000800	SATHER ENTERPRISES LLC	6744 SE MEADOWLARK LN	PRINEVILLE	OR	97754	
1415360002300	HALL JOHN	1321 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360002400	MOORE TERRY L TRUSTEE	1900 NW GERKE RD	PRINEVILLE	OR	97754	
1415360002500	BARTLETT VICTOR	1233 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360002501	BARTLETT VICTOR	1233 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360002600	FREEMAN PAUL & JENNIFER	1229 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360002601	STUCK DEVEN F & DANIELLE M	1088 SE AKINS	PRINEVILLE	OR	97754	
1415360002700	KRIDER JAY C	PO BOX 376	PRINEVILLE	OR	97754	
1415360002900	BVG ENTERPRISES LLC	3670 SW OBSIDIAN AVE	REDMOND	OR	97756	
1415360002901	BVG ENTERPRISES LLC	3670 SW OBSIDIAN AVE	REDMOND	OR	97756	
1415360002902	BVG ENTERPRISES LLC	3670 SW OBSIDIAN AVE	REDMOND	OR	97756	
1415360002903	KRIDER JAY C & RHONDA DILLON	2584 NW GERKE RD	PRINEVILLE	OR	97754	
1415360002904	KRIDER JAY C	PO BOX 376	PRINEVILLE	OR	97754	
1415360002905	KRIDER JAY C	PO BOX 376	PRINEVILLE	OR	97754	
1415360002906	BVG ENTERPRISES LLC	3670 SW OBSIDIAN AVE	REDMOND	OR	97756	

1415360002907	BVG ENTERPRISES LLC	3670 SW OBSIDIAN AVE	REDMOND	OR	97756	
1415360002908	BVG ENTERPRISES LLC	3670 SW OBSIDIAN AVE	REDMOND	OR	97756	
1415360003000	TIBBETT LAWRENCE T	PO BOX 1629	PRINEVILLE	OR	97754	
1415360003100	JOHN E PUCKETT TRUST	993 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360003101	JOHN E PUCKETT TRUST	993 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360003200	MAPES NEAL & ELIZABETH	310 NE MARIPOSA WAY	PRINEVILLE	OR	97754	
1415360003300	APPERSON PETER	981 NW MADRAS HWY	PRINEVILLE	OR	97754	
1415360003400	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708	
1415360003401	PRINEVILLE CITY OF		PRINEVILLE	OR	97754	
1416320000301	W SCOTT LLC	3277 E WARM SPRINGS STE 200	LAS VEGAS	NV	89120	
1416320000302	W SCOTT LLC	3277 E WARM SPRINGS STE 200	LAS VEGAS	NV	89120	
1416320000303	W SCOTT LLC	3277 E WARM SPRINGS STE 200	LAS VEGAS	NV	89120	
1515000000300	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754	
1515000000301	VITESSE LLC	1 HACKER WAY	MENLO PARK	CA	94025	YES
1515000000307	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708	
1515000000312	APPLE INC	1 INFINITE LOOP MS: 36-2TX	CUPERTINO	CA	95014	
1515000000313	PACIFICORP	825 NE MULTNOMAH ST 1900	PORTLAND	OR	97232	
1515000000314	PRINEVILLE SOLAR ENERGY LLC	1 S WACKER DRIVE SUITE 1800	CHICAGO	IL	60606	
1515000000316	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754	
1515000000318	VITESSE LLC	1 HACKER WAY	MENLO PARK	CA	94025	
1515000000319						
1515000000320						
1515000001100	STATE OF OREGON DEPT OF STATE LANDS	775 SUMMER ST NE, STE 100	SALEM	OR	97301	
1515000001224	MILLICAN LLC	156 N JEFFERSON ST STE 102	CHICAGO	IL	60661	
1515000002000	HUNTER LAWNAE TRUSTEE	695 SW MILL VIEW WAY 100	BEND	OR	97702	
1515000002001	PACIFICORP	825 NE MULTNOMAH ST 1900	PORTLAND	OR	97232	
1515000002002	HOLLANDER HANNE REVOCABLE LIVING TRUST	2421 WILLIAMSON VALLEY ROAD	PRESCOTT	AZ	86305	
1515000002003	KNIGHT RICHARD K	1709 SW HUNTER RD	PRINEVILLE	OR	97754	
1515000002004	HOLLANDER HANNE	2421 WILLIAMSON VALLEY ROAD	PRESCOTT	AZ	86305	
1515000002005	CASTILLO STEVEN E	927 SE BRIARWOOD CT	BEND	OR	97702	
1515000002200	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708	YES
1515000002300	STATE OF OREGON DEPT OF STATE LANDS	775 SUMMER ST NE, STE 100	SALEM	OR	97301	
1515000004001	LEGACY RANCHES LLC	156 N JEFFERSON ST STE 102	CHICAGO	IL	60661	
1515010000100	KEE H WAYNE KEE MOLLY A & KEE KLEVELAND	2001 NW O'NEIL HWY	PRINEVILLE	OR	97754	
1515010001000	STATE OF OREGON	PRINEVILLE, OREGON 97754	UNDETERMINED CITY		0	
1515010001100	VITESSE LLC	1601 WILLOW RD	MENLO PARK	CA	94025	
1515010001101	PACIFICORP	825 NE MULTNOMAH ST 1900	PORTLAND	OR	97232	
1515010001102	VITESSE LLC	1601 WILLOW RD	MENLO PARK	CA	94025	
1515010001200	VITESSE LLC	1 HACKER WAY	MENLO PARK	CA	94025	
1515020000300	JAMES A DRAPER LIVING TRUST ET AL	7700 SW STILLMAN RD	POWELL BUTTE	OR	97753	
1515020000302	TYM-USA INC	4734 POTATO HOUSE CT	WILSON	NC	27893	

1515020000400	OREGON STATE OF BY AND THROUGH	1225 FERRY ST U100	SALEM	OR	97301
1515110000100	HUMANE SOCIETY OF THE OCHOCOS INC	PO BOX 1107	PRINEVILLE	OR	97754
1515110000200	BOONANS LLC	1360 SW TOM MCCALL RD	PRINEVILLE	OR	97754
1515110000201	PETTYJOHN REVOCABLE LIVING TRUST	11288 SW HWY 126	POWELL BUTTE	OR	97753
1515110000300	STAFFORD MARK	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
1515110000400	CITY OF PRINEVILLE	387 NE 3RD ST	PRINEVILLE	OR	97754
1516040002900	ST CHARLES HEALTH SYSTEM INC	2500 NE NEFF RD	BEND	OR	97701
1516040003000	OCHOCO LUMBER COMPANY	PO BOX 668	PRINEVILLE	OR	97754
1516040003001	PRINEVILLE REAL ESTATE HOLDINGS LLC	2320 DEVON AVE	EUGENE	OR	97408
1516040003002	OCHOCO LUMBER COMPANY	PO BOX 668	PRINEVILLE	OR	97754
1516040003003	MORGAN LAND HOLDINGS LLC	8013 SE PAULINA HWY	PRINEVILLE	OR	97754
1516040003004	CABS DEVELOPMENT LLC	1420 NW OGDEN AVE	BEND	OR	97703
1516040003005	MCGRATH CHARLES M, TRUSTEE	PO BOX 238	BEND	OR	97709
1516040003006	BIG MOG LLC	PO BOX 1583	CORVALLIS	OR	97339
1516040003100	ST CHARLES HEALTH SYSTEM INC	2500 NE NEFF RD	BEND	OR	97701
1516040007400	OCHOCO LUMBER CO	PO BOX 668	PRINEVILLE	OR	97754
1516070000100	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
1516070000101	APPLE INC	1 INFINITE LOOP	CUPERTINO	CA	95014
1516070000102	APPLE INC	1 INFINITE LOOP	CUPERTINO	CA	95014
1516080000203	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
141515D001000	WILLIAMS WALT AND JUDITH R	PO BOX 6467	BEND	OR	97708
141515D001001	BECKER JOSEPH & KARA	5110 NW MADRAS HWY	PRINEVILLE	OR	97754
141522A000100	WILLIAMS WALT AND JUDITH R	PO BOX 6467	BEND	OR	97708
141522A000101	BECKER JOSEPH & KARA	5110 NW MADRAS HWY	PRINEVILLE	OR	97754
141522A000103	BECKER JOSEPH & KARA	5110 NW MADRAS HWY	PRINEVILLE	OR	97754
141524CC00100	PEEBLES HOLDINGS LLC	PO BOX 120	PRINEVILLE	OR	97754
141524CC00101	RHODEN'S INVESTMENTS INC	PO BOX 460	PRINEVILLE	OR	97754
141524CC00200	SEAWEARD DUSTYN LEE	3161 NW RYE LANE	PRINEVILLE	OR	97754
141524CC00300	HARRIS MARY ANN TRUSTEE	903 NE HUDSPETH LN	PRINEVILLE	OR	97754
141524CC00400	CAMPBELL PAMELA	3818 NW LAMONTA RD	PRINEVILLE	OR	97754
141524CC00500	VARGAS JUAN M	3794 NW LAMONTA RD	PRINEVILLE	OR	97754
141524CC00600	SHEPPARD TRAVIS & SHEPPARD ANDREA J	8486 NW 18TH STREET	TERREBONNE	OR	97760
141524CC00700	MARCY ROBERT D	3206 NW GRASS LN	PRINEVILLE	OR	97754
141524CC00800	LONG KENNETH D	3180 NW GRASS LN	PRINEVILLE	OR	97754
141524CC00900	REYNOLDS CODY S & HULL TEDDY	3015 NW SEDGEWICK AVE	TERREBONNE	OR	97760
141524CC01000	EDWARDS DAWN M	3245 NW MCBETH CT	PRINEVILLE	OR	97754
141524CC01100	HUCK KATI L	3225 MCBETH	PRINEVILLE	OR	97754
141524CC01200	KEE LAND AND LIVESTOCK LLC	4393 NW GRIMES ROAD	PRINEVILLE	OR	97754
141524CC01300	FOX WILLIAM E JR.	21338 SW SIMON TERR	SHERWOOD	OR	97140
141525B002100	SMITH DOUGLAS J	3340 NW GUMPERT RD	PRINEVILLE	OR	97754
141525B002101	SMITH-SCHIFFERER MARIE H LIV TRUST	3339 NW GUMPERT RD	PRINEVILLE	OR	97754

141525B002102	CITY OF PRINEVILLE	387 NE 3RD ST	PRINEVILLE	OR	97754	
141525B002103	WOODWARD CLINT & ERIN	2900 CENTURY DR	PRINEVILLE	OR	97754	
141525B002104	SMITH DOUGLAS & CAROL	3340 NW GUMPERT RD	PRINEVILLE	OR	97754	
141525B002105	WOODWARD CLINT CONSTRUCTION	2900 NW CENTURY DR	PRINEVILLE	OR	97754	
141525B002108	MCCUTCHEN MARGARET TRUSTEE	960 NE CREST DR	PRINEVILLE	OR	97754	
141525B002110	GANNON TIMOTHY W	3190 NW GUMPERT RD	PRINEVILLE	OR	97754	
141525D000800	MCVICKER BRAD	2595 NW LAMONTA ROAD	PRINEVILLE	OR	97754	
141525D000900	MCVICKER BRAD	2595 NW LAMONTA ROAD	PRINEVILLE	OR	97754	
141525D001000	MCVICKER BRAD	2595 NW LAMONTA ROAD	PRINEVILLE	OR	97754	
141525D001200	LIESER STEVEN H & KATHLEEN A	2391 NW LIESER LN	PRINEVILLE	OR	97754	
141525D001400	ROHRER LIVING TRUST	3068 SW REIF ROAD	POWELL BUTTE	OR	97753	
141525D001402	SWIRES RICHARD TRUSTEE	34594 GAROUTTE RD	COTTAGE GROVE	OR	97424	
141525D001403	KVARME ALLEN B	1830 NW MADRAS HWY	PRINEVILLE	OR	97754	
141525D001404	PORFILY VENTURES	PO BOX 672	PRINEVILLE	OR	97754	
141525D001405	PORFILY VENTURES	PO BOX 672	PRINEVILLE	OR	97754	YES
141525D001406	BFOR LLC	1500 NE 3RD ST	PRINEVILLE	OR	97754	
141525D001407	PEKKOLA DENNIS	2001 AVIENDA DEL SOL	LAKE HAVASU CITY	AZ	86406	
141525D001600	GOODMAN LARRY	4900 NW O'NEIL HWY	PRINEVILLE	OR	97754	
141525D001700	NEW SYSTEM VENTURES LLC	PO BOX 340	PRINEVILLE	OR	97754	
141525D001702	KNK HOLDINGS LLC	PO BOX 376	PRINEVILLE	OR	97754	
141525D001703	BARTOLOTTA VITO & JULIE	2137 NW INDUSTRIAL PARK RD	PRINEVILLE	OR	97754	
141525D001900	NEW SYSTEM VENTURES LLC	PO BOX 340	PRINEVILLE	OR	97754	
141525D001901	PRINEVILLE CITY OF	387 NE 3RD ST	PRINEVILLE	OR	97754	
141525D001902	NEW SYSTEM VENTURES LLC	PO BOX 340	PRINEVILLE	OR	97754	
141525D001914	NEW SYSTEM VENTURES LLC	PO BOX 340	PRINEVILLE	OR	97754	
141525D001916	NEW SYSTEM VENTURES LLC	PO BOX 340	PRINEVILLE	OR	97754	
141525D002000	NEW SYSTEM VENTURES LLC	PO BOX 340	PRINEVILLE	OR	97754	
141536A000100	WILLIAMSON JOHN LLOYD JR TRUST	13044 SE SHAWNEE RD	PRINEVILLE	OR	97754	
141536A000200	GAROUTTE STEVEN JOSEPH	700 SW BENT LOOP	POWELL BUTTE	OR	97753	
141536A000300	KOMLOFSKE ROBERT L TRUSTEE	PO BOX 1547	PRINEVILLE	OR	97754	
141536A000400	KOMLOFSKE ROBERT L TRUSTEE	PO BOX 1547	PRINEVILLE	OR	97754	
141536A000500	KOMLOFSKE ROBERT L TRUSTEE	PO BOX 1547	PRINEVILLE	OR	97754	
141536A000600	DESCHUTES LABS INC	2020 NW INDUSTRIAL PARK RD	PRINEVILLE	OR	97754	
141536A000700	BARTOLOTTA VITO	2080 NW INDUSTRIAL PARK RD	PRINEVILLE	OR	97754	
141536A000900	HORDICHOK COLBY & JOHNSON JENNIFER	11362 NW KING AVE	PRINEVILLE	OR	97754	
141536A002000	COWBOY UP LLC	418 NE REPASS RD	VANCOUVER	WA	98665	
141536A002100	WOODWARD BROTHERS INC	620 NW SONORA DR	BEND	OR	97703	
141536A002200	DOUBLE D & C PROPERTIES LLC	6200 NW LAMONTA RD	PRINEVILLE	OR	97754	
141536A002300	CASE MATTHEW & MELLISA	3392 NW KNOB HILL WAY	PRINEVILLE	OR	97754	
141536A002400	HELENA CHEMICAL COMPANY	7557 RAMBLER RD STE 1000	DALLAS	TX	75231	
141536A002500	DIXIE LAND LLC	PO BOX 72	HALSEY	OR	97348	

141536A002501	DIXIE LAND LLC	PO BOX 72	HALSEY	OR	97348
141536A002600	MACKIE SCOTT	34902 NE OCHOCO HWY	PRINEVILLE	OR	97754
141536A002700	MARTINEZ JESSE L & LEANDRA	1584 NW GARDNER RD	PRINEVILLE	OR	97754
141536AA00100	ABRAHAM TRACY D	444 NE JUMPING GRASS LN	PRINEVILLE	OR	97754
141536AA00200	ABRAHAM TRACY D	444 NE JUMPING GRASS LN	PRINEVILLE	OR	97754
141536AA00400	HENRY DONALD R	13746 78TH ST NW	ZAHL	ND	58856
141536AA00500	LOVEDAY DEAN	1949 GARDNER RD	PRINEVILLE	OR	97754
141536AA00600	LOVEDAY DEAN	1949 GARDNER RD	PRINEVILLE	OR	97754
141536AA00700	HEHN CRAIG E	3380 NE QUAIL VALLEY LN	PRINEVILLE	OR	97754
141536AA00800	HENRY DONALD R	13746 78TH ST NW	ZAHL	ND	58856
141536AA00900	SHERMAN BUCK	1937 NW GARDNER RD	PRINEVILLE	OR	97754
141536AA01000	PRINEVILLE EQUIPMENT & SUPPLY LLC	1883 NW GARDNER RD	PRINEVILLE	OR	97754
141536AA01100	WESTON MICHAEL J	1555 NW MURPHY CT	PRINEVILLE	OR	97754
141536AA01101	SANBORN SHANNAN	1851 NW GARDNER RD	PRINEVILLE	OR	97754
141536AA01200	WESTON MICHAEL J	1555 NW MURPHY CT	PRINEVILLE	OR	97754
141536AA01300	ABRAHAM TRACY D	444 NE JUMPING GRASS LN	PRINEVILLE	OR	97754
141536AA01301	JOHNSON JUSTIN	1790 NW INDUSTRIAL PARK RD	PRINEVILLE	OR	97754
141536AA01302	JOHNSON JUSTIN & STACEY TRUSTEES	3523 N MAIN ST	PRINEVILLE	OR	97754
141536AA01303	CATLETT JAMES F	2203 LOS ENCINOS RD	OJAI	CA	93023
141536AA01400	REGINA PROPERTY LLC	1717 NW INDUSTRIAL PARK RD	PRINEVILLE	OR	97754
141536AA01500	REGINA PROPERTY LLC	1717 NW INDUSTRIAL PARK RD	PRINEVILLE	OR	97754
141629CA01100	ZELENKA WILLIAM	2522 NE TENNESSEE LN	PRINEVILLE	OR	97754
141629CB05800	ZELENKA WILLIAM	2522 NE TENNESSEE LN	PRINEVILLE	OR	97754
141629CC00100	MILLER GREGORY S & JANET L	2429 NE COLLEEN RD	PRINEVILLE	OR	97754
141629CC00101	SANCHEZ JESSY LEON	1200 SE 6TH ST	PRINEVILLE	OR	97754
141629CC00102	HARRISON INDUSTRIES LLC	10355 LIBERTY ROAD SOUTH	SALEM	OR	97306
141629CC00104	DENNEY IVAN EARL JR & TERRILL LEE	PO BOX 688	PRINEVILLE	OR	97754
141629CC00105	SECURE STORAGE OF PRINEVILLE LLC	1382 NW FAREWELL DR	BEND	OR	97701
141629CC00107	SECURE STORAGE OF PRINEVILLE LLC	1382 NW FAREWELL DR	BEND	OR	97701
141629CC00108	CROOK COUNTY PARKS & RECREATION DISTRICT	296 S MAIN ST	PRINEVILLE	OR	97754
141629CC00109	FRANCO MARGARET R & RAYMOND A	2355 NE BLACK BEAR CT	PRINEVILLE	OR	97754
141629CC00110	MARLEAU GEORGE J & MONNA R	2377 NE BLACK BEAR CT	PRINEVILLE	OR	97754
141629CC00111	STEPHENS DANIEL J	2366 NE BLACK BEAR COURT	PRINEVILLE	OR	97754
141629CC00112	PIEHL NAOMI A	2344 NE BLACK BEAR CT	PRINEVILLE	OR	97754
141629CC00113	FARABAUGH CATHERINE L & ARNOLD J	2533 NE TENNESSEE LN	PRINEVILLE	OR	97754
141629CC00201	DAY PROPERTY COMPANY LLC	32645 STEAMBOAT LN	BLACK DIAMOND	WA	98010
141629CC00202	TPITP LLC	64564 RESEARCH RD	BEND	OR	97703
141629CC00203	HARRY T NOTT TRUST	620 NW 10TH ST	PRINEVILLE	OR	97754
141629CC00204	MITCHEM LEVI AND MITCHEM EMILY	2390 NE COLLEEN RD	PRINEVILLE	OR	97754
141629CC00205	SCHNICK JAMIE & STEWART HEATHER LEANN	2387 NE COLLEEN RD	PRINEVILLE	OR	97754
141629CC00206	DE LA LUZ LOPEZ VARGAS MARIA & ELOY	254 SE LOMA CT	PRINEVILLE	OR	97754

141629CC00207	FRENCH JUDY J	2365 NE COLLEEN ALY	PRINEVILLE	OR	97754
141629CC00208	DEAVER GARY W & SUSAN D	2354 NE COLLEEN RD	PRINEVILLE	OR	97754
141629CC00209	CONWAY JOINT REVOCABLE TRUST	2343 NE COLLEEN RD	PRINEVILLE	OR	97754
141629CC00210	KASEWETER DIANE	2332 NE COLLEEN RD	PRINEVILLE	OR	97754
141629CC00211	HART CHRISTINA	4710 NE SMITH ROCK WAY	TERREBONNE	OR	97760
141629CC00212	PHILLIPS SHELLY AND BRIAN	2310 NE COLLEEN RD	PRINEVILLE	OR	97754
141629CC00213	EASTER SHELBY & KAY JACOB	PO BOX 132	POWELL BUTTE	OR	97753
141629CC01100	PORFILY VENTURES ETAL	PO BOX 672	PRINEVILLE	OR	97754
141629CC01300	PORFILY VENTURES ETAL	PO BOX 672	PRINEVILLE	OR	97754
141629CC01400	W SCOTT LLC	3277 E WARM SPRINGS STE 200	LAS VEGAS	NV	89120
141629CC01500	HOLMBOE JEFFREY & PENNY	11 GRAND MIRAMAR DR	HENDERSON	NV	89011
141629CC01501	CAMPBELL JOHN E	1951 NE DOBBS RD	PRINEVILLE	OR	97754
141629CC01502	WALLACE SHARON LOUISE	PO BOX 84	PRINEVILLE	OR	97754
141629CC01503	GIBNEY JUSTIN L AND MOORE JANALE J	2317 NE COLLEEN ALLY	PRINEVILLE	OR	97754
141629CC01600	EVANS THOMAS	389 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CC01601	BURKHART GLENDA RAE & GARY	2310 NE BLACK BEAR CT	PRINEVILLE	OR	97754
141629CC01602	JOHNSON CODY	2309 NE BLACK BEAR CT	PRINEVILLE	OR	97754
141629CC01603	SLATER INVESTMENT GROUP LLC	240 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141629CC01604	ALTERRA DEVELOPMENTS LLC	2538 NE DIVISION ST	BEND	OR	97703
141629CC01605	HALVORSEN LYF	PO BOX 1788	WILSONVILLE	OR	97070
141629CD00100	GUNDERSON KENT W & PATTIJON F	769 NE BLACK BEAR STREET	PRINEVILLE	OR	97754
141629CD00101	MMRS INVESTMENTS LLC	13024 BEVERLY PARK RD STE 205	MUKILTEO	WA	98275
141629CD00102	MATTIODA FAMILY TRUST	PO BOX 83	POWELL BUTTE	OR	97753
141629CD00103	LINDSEY GABE J & AMANDA R	495 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00104	BAYARD LLC 9	20555 BOWERY LN	BEND	OR	97701
141629CD00105	MATTHEWS CAROLE	17190 SE VALLEY VIEW RD	PORTLAND	OR	97267
141629CD00106	ROBINSON BRIAN & TONYA	555 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00107	MARTY LYNDA D & MYRUM DEBORAH C	575 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00108	ABRAMS RICHARD J & TINA R	591 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00109	RITTER SUSANNEARBARA TRUST/TRUSTEE	62565 DIXON LOOP	BEND	OR	97701
141629CD00110	MULLER TODD & NICOLE	13408 WESTSIDE RD	LAKEVIEW	OR	97630
141629CD00111	SALLEE DYLAN AND SANDLIN CAMILLE	649 NE BLACK BEAR STREET	PRINEVILLE	OR	97754
141629CD00112	THARP ERNEST A	580 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00113	DAVIS RANDY AND KAYLA	2290 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00114	RAVERA JOSEPH M & KIMBERLY J TRUST/TRUST	61507 MILO AVE	BEND	OR	97702
141629CD00115	RAVERA SUSAN	2660 NE HIGHWAY 20 610-503	BEND	OR	97701
141629CD00116	SEXTON KENNETH A	2240 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00117	RISON BART A & COLEEN	2165 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00118	HALL LANAI	2185 NE TIMBERWOLF LP	PRINEVILLE	OR	97754
141629CD00119	NONWEILER BLAKE & JENNIFER	20372 ROCK CANYON RD	BEND	OR	97703
141629CD00120	LEWIS JASON	2225 NE TIMBERWOLF	PRINEVILLE	OR	97754

141629CD00121	BLUE SKY HOLDINGS LLC	PO BOX 2191	REDMOND	OR	97756
141629CD00122	WERNER RONALD L & JACQUELINE L	2265 NE TIMBERWOLFLOOP	PRINEVILLE	OR	97754
141629CD00123	DUPONT EDWARD D	2285 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00124	BARRUS MIRANDA	540 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00125	LJP BEND PROPERTIES LLC	637 NW SILVER BUCKLE	BEND	OR	97703
141629CD00126	MATTHEWS MILES	508 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00127	JOHNSON CARL D	492 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00128	KENNEDY THEODORE H	476 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00129	HARRIS DERICK	747 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00130	RODRIGUEZ ERICA M & FOOTE RYAN W	723 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00131	WOOD DERECK J & NENDEL OLIVIA M	697 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00132	SHIELDS TODD N & SHIELDS MELISSA N	950 NE STEINS PILLAR DR	PRINEVILLE	OR	97754
141629CD00133	STILWELL MICHAEL & JULIE	661 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00134	BELZ KEITH L & NANCY P	2410 NE YELLOWPINE RD	PRINEVILLE	OR	97754
141629CD00135	MOORE BRIAN S	1990 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00136	ROBERTS JAMES & DANETTE	328 W 185 N	BLACKFOOT	ID	83221
141629CD00137	ROBERTS MICHAEL O & SARAH P	8213 NW OASIS LN	REDMOND	OR	97756
141629CD00138	OLSON AUSTIN J	2050 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00139	SHANE BO & KELSEY	2135 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00140	LEWISTON JUSTIN	2115 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00141	HODNETT MARK & SHEREE	2095 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00142	SCHULTZ DEBRA L	4690 NE BEAUMEAD LN	HILLSBORO	OR	97124
141629CD00143	SCHULTZ DEBRA L	4690 NE BEAUMEAD LN	HILLSBORO	OR	97124
141629CD00144	MOOS KENNETH G & DIANA G CO-TRSTS	2035 NE TIMBERWOLF LOOP	PRINEVILLE	OR	97754
141629CD00145	GOODMAN TERRY L	686 NE PISTON WAY	PRINEVILLE	OR	97754
141629CD00146	SLATER INVESTMENT GROUP LLC	240 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141629CD00147	HERNANDEZ JOSE M & MARIA A	700 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00148	JAY DIANNA L	710 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00149	WILLIAMS JASON B	736 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00150	JAY-PATRICK FLORA B ET AL	PO BOX 2019	SISTERS	OR	97759
141629CD00151	MAY NORMA	774 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00152	ALTMAN JADA MARIE	798 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD00306	D2 PROPERTIES INC AN OREGON CORP.	PO BOX 225	PRINEVILLE	OR	97754
141629CD01701	RUSSELL DAVID & SHONDA	2395 NE TENNESSEE LN	PRINEVILLE	OR	97754
141629CD01702	EQUITY TRUST CO CUST FBO CURT CHRISTOPHE	21220 YEOMAN ROAD	BEND	OR	97701
141629CD01703	BRANDSMA MICHELLE C & KEITH W	2051 NE ELK ST	PRINEVILLE	OR	97754
141629CD01704	BAYARD LLC 7	20555 BOWERY LN	BEND	OR	97701
141629CD01705	STAGNOLI DANNY J	2097 NE ELK ST	PRINEVILLE	OR	97754
141629CD01706	KUJAVA JOYCE ELLEN	2119 NE ELK ST	PRINEVILLE	OR	97754
141629CD01707	KANE NICHOLAS M	2135 NE ELK ST	PRINEVILLE	OR	97754
141629CD01708	MCKENZIE KYLE	2171 NE ELK ST	PRINEVILLE	OR	97754

141629CD01709	AMBRIZ ONECIMO	2203 NE ELK ST	PRINEVILLE	OR	97754
141629CD01710	ORTIZ CARMEN	2225 NE ELK ST	PRINEVILLE	OR	97754
141629CD01711	GILLEY ANGELA D	2247 NE ELK ST	PRINEVILLE	OR	97754
141629CD01712	BALCOM FAMILY TRUST	PO BOX 1749	REDMOND	OR	97756
141629CD01713	TODD JOANA N & GARRY W JR	134 NW CONGRESS ST	BEND	OR	97703
141629CD01714	MCKENZIE MELODY	PO BOX 1563	PRINEVILLE	OR	97754
141629CD01715	BECKER CASSIE MAE & JOSIAH MACKENZIE	433 NE BLACK BEAR ST	PRINEVILLE	OR	97754
141629CD01716	DEWHITT ROBIN AND MARIE	455 NE BLACK BEAR STREET	PRINEVILLE	OR	97754
141629CD01717	OROZCO LUCIA CECILIA	2274 NE ELK ST	PRINEVILLE	OR	97754
141629CD01718	LEE OLEN A J	22942 VINTAGE LANE	BEND	OR	97701
141629CD01719	BELZ KEITH L & NANCY P	2410 NE YELLOWPINE RD	PRINEVILLE	OR	97754
141629CD01720	MOORE RODNEY CO TRUSTEE	9991 SE RIDGEVIEW RD	PRINEVILLE	OR	97754
141629CD01721	MILLER JAMES J & DARCEE	810 SE AIRPARK DR	BEND	OR	97702
141629CD01722	ROSS ROBERT A	2110 NE ELK ST	PRINEVILLE	OR	97754
141629CD01723	BALCOM FAMILY TRUST	PO BOX 1749	REDMOND	OR	97756
141629CD01724	SILVA NEMECIO LOPEZ	472 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01725	STAMPER TYLER & WHITNEY	494 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01726	FREEMAN NILS C	516 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01727	BELZ KEITH L & NANCY P TRUSTEES	2410 NE YELLOWPINE RD	PRINEVILLE	OR	97754
141629CD01728	HERNANDEZ-LOPEZ JOEL	550 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01729	VOGT JONATHAN DAVID & KAITLYN ELIZABETH	582 NE COUGAR LP	PRINEVILLE	OR	97754
141629CD01730	HEINZ RICHARD R	604 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01731	CLARK SCOT L	7675 NW EAGLE DR	REDMOND	OR	97756
141629CD01732	MUMM JASON T & JESSICA L	648 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01733	HAMMON ZACHARY A	660 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01734	WINSLOW WILLIAM RAY	682 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01735	BARNES BUTTE INVESTMENTS LLC	7264 NW VISTA VIEW RD	PRINEVILLE	OR	97754
141629CD01736	WILLIAMS ASHLEY & JUSTIN	736 NE COUGAR LP	PRINEVILLE	OR	97754
141629CD01737	STANLEY DONALD W JR	PO BOX 1092	PRINEVILLE	OR	97754
141629CD01738	HILL CAROLYN S	767 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01739	MOORE PATRICIA R CO TRUSTEE	9991 SE RIDGEVIEW RD	PRINEVILLE	OR	97754
141629CD01740	TARWATER FRED D & PRESTON JEANNE M	661 NE COUGAR LP	PRINEVILLE	OR	97754
141629CD01741	CHAPMAN DAVID JAMES	551 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01742	LOPEZ NUNEZ OSCAR	505 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01743	REYNOLDS KEVIN A	483 NE COUGAR LOOP	PRINEVILLE	OR	97754
141629CD01744	COMINI BRENDA SUE	2026 NE ELK ST	PRINEVILLE	OR	97754
141629CD01745	BB KAPITAL	1664 W LAMBERT AVE	SISTERS	OR	97759
141629CD01746	BB KAPITAL	1664 W LAMBERT AVE	SISTERS	OR	97759
141629CD01747	BELZ KRAIG F & PATRICIA A	6727 OAKRIDGE RD	GLADSTONE	OR	90727
141629CD01748	FREAUFF PETER & ALEXIS	2025 NE WOLVERINE LP	PRINEVILLE	OR	97754
141629CD01749	MCGUIRE STEPHEN H & JOYCE L	2109 NE WOLVERINE LOOP	PRINEVILLE	OR	97754

141629CD01750	MARTIN CLINT J & JOSEPH B	6032 LEWIS AVE	ATASCADERO	CA	93422
141629CD01751	JENNINGS KARI	3500 SW 86TH AVE	PORTLAND	OR	97225
141629CD01752	MILLER LINDA M	2241 NE WOLVERINE LOOP	PRINEVILLE	OR	97754
141629CD01753	BIBLE KIMBERLY	1392 SE YARROW AVE #209	MADRAS	OR	97741
141629CD01754	BELZ KRAIG F & PATRICIA A	6727 OAKRIDGE RD	GLADSTONE	OR	90727
141629CD01755	BEARD LAWRENCE L	2178 NE WOLVERINE LOOP	PRINEVILLE	OR	97754
141629CD01756	WARKENTIN BRADLEY R	PO BOX 7735	BEND	OR	97708
141629CD01757	MALONE DAYNEN & DEL ROCIO ORTIZ MARIA	2120 NE WOLVERINE LOOP	PRINEVILLE	OR	97754
141629CD01758	MCCLUNE GERALD D	PO BOX 1633	PRINEVILLE	OR	97754
141629CD01759	TAPIA LIDUVINA	2074 NE WOLVERINE LOOP	PRINEVILLE	OR	97754
141629CD01760	TOLEDO LUIS G & ANGELA R	2052 NE WOLVERINE LOOP	PRINEVILLE	OR	97754
141629CD01761	BOND LLOYD	2028 NE WOLVERINE LOOP	PRINEVILLE	OR	97754
141629CD01762	BELZ KIRK B	2410 NE YELLOWPINE RD	PRINEVILLE	OR	97754
141629CD01763	HENSLEY FAMILY TRUST	2372 NE TENNESSEE LN	PRINEVILLE	OR	97754
141629CD01764	HARRIS BRIAN C & KESHIA R	60830 JENNINGS RD	BEND	OR	97702
141629CD01765	LESLIE THELMA HALL RT AGREEMENT	963 YOSEMITE FALLS DR	REDMOND	OR	97756
141629CD01766	CARBONE RODGER R & AUDREY M	2978 NW CENTURY DR	PRINEVILLE	OR	97754
141630C000300	PORFILY VENTURES ETAL	PO BOX 672	PRINEVILLE	OR	97754
141630C000400	PORFILY VENTURES ETAL	PO BOX 672	PRINEVILLE	OR	97754
141630C000800	PORFILY VENTURES ETAL	PO BOX 672	PRINEVILLE	OR	97754
141631A000100	SMITH LANDING LLC	627 HIGHLAND MEADOW LOOP	REDMOND	OR	97756
141631A000200	PELTIER REAL ESTATE COMPANY	PO BOX 29246	PHOENIX	AZ	85038
141631A000300	PELTIER REAL ESTATE COMPANY	PO BOX 29246	PHOENIX	AZ	85038
141631A000500	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631A000600	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631A000700	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631A000800	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631A000900	A R VIAL ASSOCIATES PC ET AL	17355 BOONES FERRY RD	LAKE OSWEGO	OR	97035
141631A001000	DAVIS RANDY	1345 NW LOCUST ST	PRINEVILLE	OR	97754
141631A001100	ENCOMPASS STORAGE LLC	5827 SW HARVEST AVE	REDMOND	OR	97756
141631A001200	CASCADE NATURAL GAS	PO BOX 24464	SEATTLE	WA	98124
141631A001300	ENCOMPASS STORAGE LLC	5827 SW HARVEST AVE	REDMOND	OR	97756
141631A001500	DARRYL STOREY CONSTRUCTION INC	532 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141631A001501	VAUGHN KAMREN	1509 NW HARWOOD ST	PRINEVILLE	OR	97754
141631A001502	SANDERS MICHAEL J & KATHIE D	833 NW OLDE IRON ST	PRINEVILLE	OR	97754
141631A001503	STOREY ROBERT P & VICTORIA	532 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141631A001504	BRANSON WILLIAM R & ROWE ODYSSEA N	891 NW OLDE IRON STREET	PRINEVILLE	OR	97754
141631A001505	STOREY ROBERT P & VICTORIA	532 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141631A001506	NESTLE JAMES A	824 NW OLDE IRON ST	PRINEVILLE	OR	97754
141631A001600	PRINEVILLE CITY OF	387 NE 3RD ST	PRINEVILLE	OR	97754
141631A001700	PRINEVILLE CITY OF	400 NE THIRD	PRINEVILLE	OR	97754

141631A001900	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631B000100	UNKNOWN OWNER		UNDETERMINED CITY		
141631B000101	CRAWFORD JOHN G V & SUSAN	3074 NE STRIPLING CT	PRINEVILLE	OR	97754
141631B000102	CRAWFORD JOHN G V & SUSAN K	3074 NE STRIPLING CT	PRINEVILLE	OR	97754
141631B000200	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631B000700	PRINEVILLE LLC	PO BOX 6030	PORTLAND	OR	97228
141631B000800	PRINEVILLE LLC	3125 NW 35TH AVE	PORTLAND	OR	97210
141631B000900	STAFFORD MASON EDWARD	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
141631B001000	CROOK COUNTY SCHOOL DISTRICT	1390 SE SECOND ST	PRINEVILLE	OR	97754
141631B001100	RHODEN PATRICIA	2910 NW LON SMITH RD	PRINEVILLE	OR	97754
141631B001101	RHODENS PUBLIC STORAGE LLC	2910 NW LON SMITH RD	PRINEVILLE	OR	97754
141631B001200	PRINEVILLE CITY OF	400 NE THIRD	PRINEVILLE	OR	97754
141631B001300	PORFILY VENTURES ETAL	PO BOX 672	PRINEVILLE	OR	97754
141631B001400	STAFFORD MARK K	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
141631B001500	STAFFORD MARK K	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
141631B001600	STAFFORD MARK K	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
141631BC00100	ERVIN GARY L	PO BOX 1446	SARATOGA	WY	82331
141631BC03200	WESTON MICHAEL J	1555 NW MURPHY CT	PRINEVILLE	OR	97754
141631BC03300	STAFFENSON TANNEY & SHELBY	1820 HISTORIC COLUMBIA RIVER HWY	TROUTDALE	OR	97060
141631BC03400	WARNER CONSTRUCTION & REMODELING INC	1555 NE THIRD ST UNIT 323	PRINEVILLE	OR	97754
141631BC03500	BOTUG LLC	60220 SUNSET VIEW DR	BEND	OR	97702
141631BC03600	GRIFFIN SAMUEL L	8361 NE MEADOW RIDGE RD	PRINEVILLE	OR	97754
141631BC03601	GRIFFIN SAMUEL L	8361 NE MEADOW RIDGE RD	PRINEVILLE	OR	97754
141631BC03602	GRIFFIN SAMUEL L	8361 NE MEADOW RIDGE RD	PRINEVILLE	OR	97754
141631BC03700	FORTEK INC	40355 JASPER LOWELL	LOWELL	OR	97452
141631BC03800	PEND OREILLE ASSOCIATES LLC	PO BOX 295	BEND	OR	97709
141631BC03900	GREENBAR PROPERTIES LLC	PO BOX 7	PRINEVILLE	OR	97754
141631BD00100	TIBBS RONALD SCOTT	PO BOX 224	PRINEVILLE	OR	97754
141631BD00200	TIBBS RONALD SCOTT	PO BOX 224	PRINEVILLE	OR	97754
141631BD00300	DAVIS CASEY R & DARCI M	1690 NW LAMONTA RD	PRINEVILLE	OR	97754
141631BD00400	DAVIS CASEY R & DARCI M	1690 NW LAMONTA RD	PRINEVILLE	OR	97754
141631BD00500	STAFFORD MARK K	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
141631BD00600	SHEPPARD TRAVIS R & ANDREA J	8486 NW 18TH ST	TERREBONNE	OR	97760
141631BD00700	SHEPPARD TRAVIS R & ANDREA J	8486 NW 18TH ST	TERREBONNE	OR	97760
141631BD00800	PRINEVILLE CITY OF	387 NE 3RD ST	PRINEVILLE	OR	97754
141631BD00900	PRINEVILLE CITY OF	387 NE 3RD ST	PRINEVILLE	OR	97754
141631BD01000	PRINEVILLE CITY OF RAILWAY	185 NE 10TH ST	PRINEVILLE	OR	97754
141631BD01100	A R VIAL ASSOCIATES PC ET AL	17355 BOONES FERRY RD	LAKE OSWEGO	OR	97035
141631BD01200	GARTNER DENNIS	4050 NE 45TH	REDMOND	OR	97756
141631BD01300	ROBISON GAGE DEAN	1310 NW PINCKARD LANE	PRINEVILLE	OR	97754
141631BD01301	QUANT SARA L	1345 NW LOCUST ST	PRINEVILLE	OR	97754

141631BD01400	BROWN JACK LEE & JANET ANN TRUSTEES	12235 SE WIESE RD	DAMASCUS	OR	97089
141631BD01500	BROWN JANET ANN & JACK LEE TRUSTEES	12235 SE WIESE RD	DAMASCUS	OR	97089
141631C009900	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708
141631C010000	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708
141631C010100	COCHRAN CATHERINE E	90136 BAKER RD	ELMIRA	OR	97437
141631C011801	CROOK COUNTY PARKS & RECREATION	296 S MAIN ST	PRINEVILLE	OR	97754
141631C011802	CROOK COUNTY PARKS & RECREATION	296 S MAIN ST	PRINEVILLE	OR	97754
141631C012000	RIMROCK TRAILS TREATMENT SERVICES	1333 NW 9TH ST	PRINEVILLE	OR	97754
141631C012005	TIMBERLINE FALLS LLC	PO BOX 4274	SALEM	OR	97302
141631C015101	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708
141631CB00800	CATHERINE E COCHRAN	90136 BAKER RD	ELMIRA	OR	97437
141631CB00900	CARAWAY PATRICIA TRUSTEE	1098 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CB01000	PIPPEN FRANCISCO NOE MORENO	996 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CB01100	HAWES MATTHEW A & LAURA E	2451 NE BOBBI PLACE	PRINEVILLE	OR	97754
141631CB02700	TIGHTWADS DISCOUNT BUILDING SUPPLY LLC	PO BOX 1774	PRINEVILLE	OR	97754
141631CB02800	KINTZ FAMILY TRUST & HANSON RONALD D	PO BOX 6958	BEND	OR	97708
141631CB02900	KINTZ FAMILY TRUST & HANSON RONALD D	PO BOX 6958	BEND	OR	97708
141631CC00100	ST VINCENT DE PAUL SOCIETY OF CROOK CNTY	PO BOX 545	PRINEVILLE	OR	97754
141631CC00101	ST VINCENT DE PAUL SOCIETY OF CROOK CNTY	PO BOX 545	PRINEVILLE	OR	97754
141631CC00200	HILL MICHAEL DEAN	960 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC00300	QUALITY SOUNDS INC	PO BOX 10	MADRAS	OR	97741
141631CC00400	SWISS PROPERTY LLC	468 NE ALDEN AVE	BEND	OR	97701
141631CC00700	FREEMAN RANDALL L	920 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC00800	FREEMAN RANDALL LYNN	920 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC00900	BOLIN GARY S	908 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC01000	BOLIN GARY S	908 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC01100	BOLIN GARY S	908 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC01200	GAVRILOFF MARTIN & MARJORIE TRUST	PO BOX 461	GRATON	CA	95444
141631CC01300	TANORI JOHN AND TANORI KIMBERLY	1329 NW DODSON RD	PRINEVILLE	OR	97754
141631CC01400	ROBERTSON MELITTA	1255 NW MARKUSON DR	PRINEVILLE	OR	97754
141631CC01500	STOREY RONALD D	15515 SW HACKER ROAD	POWELL BUTTE	OR	97753
141631CC01600	STOREY RONALD D	15515 SW HACKER ROAD	POWELL BUTTE	OR	97753
141631CC01700	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708
141631CC01800	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708
141631CC01900	SOUTH TRICOPRO LLC	12216 NE GRANT LN	PRINEVILLE	OR	97754
141631CC02000	SOUTH TRICOPRO LLC	12216 NE GRANT LN	PRINEVILLE	OR	97754
141631CC02100	SOUTH TRICOPRO LLC	12216 NE GRANT LN	PRINEVILLE	OR	97754
141631CC02200	ANGI & DAN RICHARTZ	12216 NE GRANT LN	PRINEVILLE	OR	97754
141631CC02300	JOE W LITZINGER	121 NE 3RD ST	PRINEVILLE	OR	97754
141631CC02400	CLAUDSON RICKY L	973 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC02500	CLAUDSON RICKY L	973 NW MADRAS HWY	PRINEVILLE	OR	97754

141631CC02600	CLAUDSON RICKY	973 NW MADRAS HWY	PRINEVILLE	OR	97754
141631CC02700	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708
141631CD03300	CENTRAL INSIDE ELECTRICAL JOINT APPRENTI	33309 HWY 99 E	TANGENT	OR	97389
141631CD03400	TRUAX OIL CO	PO BOX 3002	CORVALLIS	OR	97339
141631CD03500	PORTERS HOLDINGS I LLC	2689 RED ARROW DR	LAS VEGAS	NV	89135
141631CD03600	PORTERS HOLDINGS I LLC	2689 RED ARROW DR	LAS VEGAS	NV	89135
141631CD03700	PORTERS HOLDINGS I LLC	2689 RED ARROW DR	LAS VEGAS	NV	89135
141631CD03800	CENTRAL INSIDE ELECTRICAL JOINT APPRENTI	33309 HWY 99 E	TANGENT	OR	97389
141631CD03900	RICHLAND INVESTMENT PROPERTIES LLC	2920 NW ONEIL HWY	PRINEVILLE	OR	97754
141631CD04000	RICHLAND INVESTMENT PROPERTIES LLC	2920 NW ONEIL HWY	PRINEVILLE	OR	97754
141631CD04100	PORTERS HOLDINGS I LLC	2689 RED ARROW DR	LAS VEGAS	NV	89135
141631CD04500	PORTERS HOLDINGS I LLC	2689 RED ARROW DR	LAS VEGAS	NV	89135
141631CD04600	PORTERS HOLDINGS I LLC	2689 RED ARROW DR	LAS VEGAS	NV	89135
141631CD04700	PORTERS HOLDINGS I LLC	2689 RED ARROW DR	LAS VEGAS	NV	89135
141631CD04800	FITZGERALD THOMAS J TRUSTEE	12993 SW DICKSON RD	POWELL BUTTE	OR	97753
141631CD04900	SERHAN TAMARA L	23535 SE BLUE RIDGE DR	DAMASCAS	OR	97089
141631CD05000	SERHAN TAMARA L	23535 SE BLUE RIDGE DR	DAMASCAS	OR	97089
141631CD05100	CLAUDSON GAREN	1220 NW MARKUSON DR	PRINEVILLE	OR	97754
141631CD05200	CLAUDSON GAREN	1220 NW MARKUSON DR	PRINEVILLE	OR	97754
141631CD05300	ROBERTSON MELITTA	1255 NW MARKUSON DR	PRINEVILLE	OR	97754
141631CD05400	DRAPER DAVID BLAINE & REBECCA	1270 NW DODSON DRIVE	PRINEVILLE	OR	97754
141631CD05500	BARNHART BETHANY	1282 NW DODSON DRIVE	PRINEVILLE	OR	97754
141631CD05600	HICKS RICHARD E	1310 NW DODSON DR	PRINEVILLE	OR	97754
141631CD05700	HUGHES SCOTT	1275 NW DODSON DRIVE	PRINEVILLE	OR	97754
141631CD05800	POLICH MICHAEL J	7204 SW ERMINE RD	TERREBONNE	OR	97760
141631DA00100	PRINEVILLE CITY OF RAILWAY	PO BOX 1903	PRINEVILLE	OR	97754
141631DA00101	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00102	MCINTOSH SANDRA J	3790 NE MCKAY CREEK RD	PRINEVILLE	OR	97754
141631DA00103	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00106	PORFILY DONALD R	PO BOX 1170	PRINEVILLE	OR	97754
141631DA00111	PORFILY DONALD R	PO BOX 1170	PRINEVILLE	OR	97754
141631DA00112	PORFILY DONALD R	PO BOX 1170	PRINEVILLE	OR	97754
141631DA00115	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00116	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00117	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00118	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00119	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00200	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DA00300	SLB VENTURES LLC	20850 NOVA LP UNIT B	BEND	OR	97701
141631DA00400	OCHOCO IRRIGATION DISTRICT		PRINEVILLE	OR	97754
141631DA00500	PRINEVILLE CITY OF	400 NE 3RD ST	PRINEVILLE	OR	97754

141631DA00600	OCHOCO IRRIGATION DISTRICT		PRINEVILLE	OR	97754
141631DA00700	PORFILY DONALD R	PO BOX 1170	PRINEVILLE	OR	97754
141631DB00100	ET 101 LLC	3548 SEAGATE WAY STE 140	OCEANSIDE	CA	92056
141631DB00200	WREN PAUL	1425 MISSION CANYON RD	SANTA BARBARA	CA	93105
141631DB00300	CLARK GARY L & JUDY A TRUST	63080 STAG DR	BEND	OR	97701
141631DB00305	SMITHFORD INVESTMENTS LLC	1250 NW HARWOOD ST	PRINEVILLE	OR	97754
141631DB00306	SMITHFORD INVESTMENTS LLC	1250 NW HARWOOD ST	PRINEVILLE	OR	97754
141631DB00307	CLARK GARY L & JUDY A TRUST	63080 STAG DR	BEND	OR	97701
141631DB00308	SMITHFORD INVESTMENTS LLC	1250 NW HARWOOD ST	PRINEVILLE	OR	97754
141631DB00309	PRINEVILLE CITY OF	387 NE 3RD ST	PRINEVILLE	OR	97754
141631DB00310	MYRMO AND SONS INC	PO BOX 3215	EUGENE	OR	97403
141631DB00311	CASE THOMAS J	PO BOX 537	JOSEPH	OR	97846
141631DB00401	KGMR LLC	PO BOX 750	PRINEVILLE	OR	97754
141631DB00500	U S FOREST SERVICE		PRINEVILLE	OR	97754
141631DB00600	TERRY AND DEBORAH SOFICH JRLT	PO BOX 1568	PRINEVILLE	OR	97754
141631DB00900	DALE GREGORY B & CHRISTMAS ANNE B	16789 PETERSON RIDGE RD	BEND	OR	97703
141631DB00901	USOLTSEFF ANDRON & EFROSINIA	19207 ALLINSON RD NE	HUBBARD	OR	97032
141631DB00902	STOREY ROBERT P	532 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141631DB00903	STOREY ROBERT P	532 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141631DB00904	ADAIR BENJAMIN G & KAITLYN R	868 NW OLDE IRON ST	PRINEVILLE	OR	97754
141631DD00100	MAINSTATION	999 N MAIN ST	PRINEVILLE	OR	97754
141631DD00200	MAIN STATION LLC	999 N MAIN ST	PRINEVILLE	OR	97754
141631DD00300	MAIN STATION LLC	999 N MAIN ST	PRINEVILLE	OR	97754
141631DD00400	MAIN STATION LLC	999 N MAIN ST	PRINEVILLE	OR	97754
141631DD00600	BAILEY ROBERT L & AMBER D	PO BOX 370	PRINEVILLE	OR	97754
141631DD00700	PORFILY DONALD R	PO BOX 843	PRINEVILLE	OR	97754
141631DD00800	DECKER NATHAN A	PO BOX 401	PRINEVILLE	OR	97754
141631DD00900	PORFILY DON R	7788 NW COUNTRY LOOP	PRINEVILLE	OR	97754
141631DD00901	AARON LINFOOT LLC	PO BOX 1169	LINCOLN CITY	OR	97367
141631DD01000	PORFILY DONALD	PO BOX 1170	PRINEVILLE	OR	97754
141631DD01100	PORFILY DON R	7788 NW COUNTRY LOOP	PRINEVILLE	OR	97754
141631DD07000	DICKEY ROBERT A & LAURIE	63462 VOGT RD	BEND	OR	97701
141631DD07001	PRINEVILLE CITY OF	400 NE 3RD ST	PRINEVILLE	OR	97754
141631DD07100	BROPHY PATRICK	5630 NW CENTURY BLVD	HILLSBORO	OR	97124
141631DD07101	PRINEVILLE CITY OF	387 NE THIRD	PRINEVILLE	OR	97754
141631DD07200	FAIRMAN LISA A	522 NW BEAVER ST	PRINEVILLE	OR	97754
141631DD07201	SIMMONS BROS LLC	PO BOX 400	PRINEVILLE	OR	97754
141631DD07300	BROPHY PATRICK	5630 NW CENTURY BLVD	HILLSBORO	OR	97124
141631DD07400	BROPHY PATRICK	5630 NW CENTURY BLVD	HILLSBORO	OR	97124
141631DD07500	BROPHY PATRICK	5630 NW CENTURY BLVD	HILLSBORO	OR	97124
141631DD07501	PARR LUMBER COMPANY	5630 SW CENTURY BLVD	HILLSBORO	OR	97124

141631DD07600	PARR LUMBER COMPANY	5630 SW CENTURY BLVD	HILLSBORO	OR	97124
141631DD07601	PARR LUMBER COMPANY	5630 SW CENTURY BLVD	HILLSBORO	OR	97124
141631DD07700	EMICK JAMES A	698 NW BEAVER ST	PRINEVILLE	OR	97754
141631DD07800	PARR LUMBER COMPANY	5630 SW CENTURY BLVD	HILLSBORO	OR	97124
141631DD07900	PARR LUMBER COMPANY	5630 SW CENTURY BLVD	HILLSBORO	OR	97124
141631DD08000	BROPHY PATRICK	5630 NW CENTURY BLVD	HILLSBORO	OR	97124
141631DD08100	BROPHY PATRICK	5630 NW CENTURY BLVD	HILLSBORO	OR	97124
141631DD08200	REBELS ROOST RECOVERY CLUB 501C3	PO BOX 1236	PRINEVILLE	OR	97754
141631DD08201	REBELS ROOST RECOVERY CLUB 501C3	PO BOX 1236	PRINEVILLE	OR	97754
141631DD08300	PRINEVILLE PREMIER LLC	3950 FAIRVIEW INDUSTRIAL DR SE 240	SALEM	OR	97302
141631DD08400	PRINEVILLE PREMIER LLC	3950 FAIRVIEW INDUSTRIAL DR SE 240	SALEM	OR	97302
141631DD08500	TBS PROPERTIES LLC	3895 CALAROGA CIR	WEST LINN	OR	97068
141631DD08600	TBS PROPERTIES LLC	3895 CALAROGA CIR	WEST LINN	OR	97068
141631DD08700	BUCK DALLAS R, TRUSTEE	8883 SW HOUSTON LAKE RD	POWELL BUTTE	OR	97753
141631DD08800	MUILENBURG WAYNE	3663 NW GUMPERT RD	PRINEVILLE	OR	97754
141631DD08801	KIPPER JENNA	740 NW BEAVER STREET	PRINEVILLE	OR	97754
141631DD08900	CLEVERLEY MATTHEW	7314 SE NIGHT HAWK CT	PRINEVILLE	OR	97754
141631DD08901	DIXON VERNON L AND VELMA L	191 NW SEVENTH ST	PRINEVILLE	OR	97754
141631DD09000	BISHOP RAYMOND G	PO BOX 271	PRINEVILLE	OR	97754
141631DD09100	BISHOP RAYMOND	PO BOX 271	PRINEVILLE	OR	97754
141631DD09200	G & R PRINE LLC	PO BOX 1668	REDMOND	OR	97756
141631DD09201	BISHOP RAYMOND	PO BOX 271	PRINEVILLE	OR	97754
141631DD09300	G & R PRINE LLC	PO BOX 1668	REDMOND	OR	97756
141631DD09500	G & R PRINE LLC	PO BOX 1668	REDMOND	OR	97756
141631DD09600	G & R PRINE LLC	PO BOX 1668	REDMOND	OR	97756
141631DD09700	G & R PRINE LLC	10930 SW MIRA CT	TIGARD	OR	97223
141631DD09800	HAYRE CAROL & ALONZO	3830 NW BROOKFIELD LN	PRINEVILLE	OR	97754
141631DD09900	MAINSTATION	999 N MAIN ST	PRINEVILLE	OR	97754
141631DD10000	MAINSTATION	999 N MAIN ST	PRINEVILLE	OR	97754
141631DD10300	SMITH - KOMLOFSKE CORP.	PO BOX 1547	PRINEVILLE	OR	97754
141631DD10400	BAILEY ROBERT L & AMBER D	PO BOX 370	PRINEVILLE	OR	97754
141631DD10401					
141631DD10500	BAILEY ROBERT L & AMBER D	PO BOX 370	PRINEVILLE	OR	97754
141631DD10600	PORFILY DONALD R	PO BOX 843	PRINEVILLE	OR	97754
141631DD10700	PORFILY DONALD R	PO BOX 843	PRINEVILLE	OR	97754
141631DD10800	BORTOLUZZI DYLON & HEWITT JACQUELYN	275 NW 9TH ST	PRINEVILLE	OR	97754
141631DD12900	DUNHAM LEON R	734 SW 13TH ST	CORVALLIS	OR	97333
141631DD13000	HALSEY RONALD L TRUSTEE	555 NW BEAVER ST	PRINEVILLE	OR	97754
141631DD13200	STOREY ROBERT P	532 NW CLAYPOOL ST	PRINEVILLE	OR	97754
141631DD13700	CITY OF PRINEVILLE	387 NE THIRD ST	PRINEVILLE	OR	97754
141631DD13900	CITY OF PRINEVILLE	387 NE THIRD ST	PRINEVILLE	OR	97754

141632BA02000	W SCOTT LLC	3277 E WARM SPRINGS STE 200	LAS VEGAS	NV	89120
141632CC09200	PRINEVILLE CITY OF		PRINEVILLE	OR	97754
141632CC09201	RB PAMPLIN CORP AND SUBSID PP & T	PO BOX 22005	PORTLAND	OR	97269
141632CC09300	RB PAMPLIN CORP AND SUBSID PP & T	PO BOX 22005	PORTLAND	OR	97269
141632CC09400	EVERCLEAN SOFTCLOTH CARWASH LLC	1710 HARMONY LN	KLAMATH FALLS	OR	97601
141632CC09500	EVERCLEAN SOFTCLOTH CARWASH LLC	1710 HARMONY LN	KLAMATH FALLS	OR	97601
141632CC09600	COOPER NORM FAMILY TRUST	291 NW SADDLE RIDGE LP	PRINEVILLE	OR	97754
141632CC09700	COOPER NORM FAMILY TRUST	291 NW SADDLE RIDGE LP	PRINEVILLE	OR	97754
141632CC09800	COOPER NORM FAMILY TRUST	291 NW SADDLE RIDGE LP	PRINEVILLE	OR	97754
141632CC09900	SMITH MICHAEL R	PO BOX 5816	BEND	OR	97708
141632CC10000	EVERCLEAN SOFTCLOTH CARWASH LLC	1710 HARMONY LN	KLAMATH FALLS	OR	97601
141632CC10100	GILLS TEAM LLC	1425 W 2ND ST	THE DALLES	OR	97058
141632CC10200	GILLS TEAM LLC	1425 W 2ND ST	THE DALLES	OR	97058
141632CC10300	GILLS TEAM LLC	1425 W 2ND ST	THE DALLES	OR	97058
141632CC10400	BISHOP RAYMOND G	PO BOX 271	PRINEVILLE	OR	97754
141632CC10401	GILLS TEAM LLC	1425 W 2ND ST	THE DALLES	OR	97058
141632CC10500	HERNANDEZ FERNANDO & NICOLE	793 NE BELKNAP ST	PRINEVILLE	OR	97754
141632CC10600	GILLS TEAM LLC	1425 W 2ND ST	THE DALLES	OR	97058
141632CC10700	GILLS TEAM LLC	1425 W 2ND ST	THE DALLES	OR	97058
141632CC10800	FRAJOLA NATALIE J & BOWERS BARRY R	8372 ENCHANTED WAY SE #135	TURNER	OR	97392
141632CC10900	GILLS TEAM LLC	1425 W 2ND ST	THE DALLES	OR	97058
141632CC11000	BECMAR PROPERTIES LLC	3895 CALAROGA CIR	WEST LINN	OR	97068
141632CC11001	BECMAR PROPERTIES LLC	3895 CALAROGA CIR	WEST LINN	OR	97068
141632CC11200	BECMAR PROPERTIES LLC	3895 CALAROGA CIR	WEST LINN	OR	97068
141632CC11500	BECMAR PROPERTIES LLC	3895 CALAROGA CIR	WEST LINN	OR	97068
141632DC05801	KVARME ALLEN B & GAYLE L	1005 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05802	KELSON MARK & JILL	1017 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05803	CLARK MARGARETTE S & DESTRIAN J M	1023 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05804	GOIN FAMILY TRUST	1045 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05805	HIAASEN KRISTINE L	1061 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05806	ST HILAIRE LIVING TRUST	1075 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05807	TOWELL WALTON A	1087 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05808	WOLFE PRISCILLA J & SIKES TOMMY L	1096 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05809	STIREWALT CLIFFORD D & JANE R	1088 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05810	CUNNINGHAM LINDA D	1080 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05811	REEVES BRIAN R	1068 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05812	FORCIER LELAND	1046 NE CRISTA CT	PRINEVILLE	OR	97754
141632DC05813	BALCOM FAMILY TRUST	PO BOX 1749	REDMOND	OR	97756
141632DC05814	AUMILLER KYLE	1012 NE CRISTA CT	PRINEVILLE	OR	97754
151502DA00200	JERIKO DEVELOPMENT INC	63026 NE LOWER MEADOW DR STE 200	BEND	OR	97701
151502DA00300	THREE SISTERS HOLDINGS LLC	63026 NE LOWER MEADOW DRIVE #200	BEND	OR	97701

151502DA00400	CHAMPATIRAY RAJESH K & MELODIE F	22555 MCARDLE RD	BEND	OR	97702
151502DA00500	MCMEEKIN HELEN F	10602 IRONSTONE CT	REDMOND	OR	97756
151502DA00600	COMMERCE COURT LLC	5 NW MINNESOTA AVE STE 210	BEND	OR	97701
151502DA00601	EMPIRE CONST. AND DEVELOPMENT LLC	63026 LOWER MEADOW DR STE 200	BEND	OR	97701
151502DA00700	MOIR DOUGLAS N	64894 OLD BEND REDMOND HWY	BEND	OR	97701
151502DA00701	THREE SISTERS HOLDINGS LLC	63026 NW LOWER MEADOW DR STE 200	BEND	OR	97701
151502DA00800	KENNETH G MARSHALL 401(K) PSP	2697 BROADWAY ST NW	ALBANY	OR	97321
151502DC00100	TOP GUN PROPERTY HOLDINGS LLC	62365 DEER TRAIL RD	BEND	OR	97701
151502DC00200	PATEL RAKESH	PO BOX 2025	BEND	OR	97709
151502DC00300	R & J BENNETT FAMILY LLC ET AL	PO BOX 998	BEND	OR	97709
151502DC00400	DAWSON FAMILY HOLDINGS	2811 EVERGREEN BLVD	VANCOUVER	WA	98661
151502DC00500	PALMER RONALD LEE	10934 SW FLEMING RD	POWELL BUTTE	OR	97753
151502DC00600	PRINEVILLE INDUSTRIAL HOLDINGS LLC	963 SW SIMPSON AVE STE 220	BEND	OR	97702
151502DC00700	JTENNISON & CO LLC	1183 NW OLYMPIC CT	BEND	OR	97703
151502DC00701	JTENNISON & CO LLC	1183 NW OLYMPIC CT	BEND	OR	97703
151502DC00800	TOP GUN LIGHTING AND INDUSTRIAL SUPPLIES	62365 DEER TRAIL RD	BEND	OR	97701
151502DC00900	TOP GUN LIGHTING AND INDUSTRIAL SUPPLIES	62365 DEER TRAIL RD	BEND	OR	97701
151502DC01000	BALDNER MCKENZIE PHILIP	282 KATIE CT	RINCON	GA	31326
151502DC01100	CHAINRING VII LLC	4040 DOUGLAS WAY	LAKE OSWEGO	OR	97035
151502DC01200	CROSS ROGER NEAL	124 SW 7TH	REDMOND	2110	97756
151502DC01201	PAGE BRUCE	64270 HUNNELL RD	BEND	OR	97701
151502DC01300	20420 ROBAL ROAD LLC	20420 ROBAL LN	BEND	OR	97703
151502DC01400	PALMER RONALD LEE	10934 SW FLEMING RD	POWELL BUTTE	OR	97753
151502DC01500	THREE SISTERS HOLDINGS LLC	63026 NW LOWER MEADOW DR STE 200	BEND	OR	97701
151502DC01600	LAYTON COURT LLC	1516 SE HAWKS VIEW CT	VANCOUVER	WA	98664
151502DC01700	THREE SISTERS HOLDINGS LLC	63026 NE LOWER MEADOW DR 200	BEND	OR	97701
151502DC01701	THREE SISTERS HOLDINGS LLC	63026 NE LOWER MEADOW DR 200	BEND	OR	97701
151502DC01702	THREE SISTERS HOLDINGS LLC	63026 NE LOWER MEADOW DR 200	BEND	OR	97701
151502DC01800	FORAN JOHN D	3500 NW MCCREEDY DR	BEND	OR	97701
151502DD00100	AMITY MTN. DEVELOPMENT LLC	1965 E WINTERGREEN DR	GREEN VALLEY	AZ	85614
151502DD00200	AMITY MTN DEVELOPMENT LLC	3451 SW EMPIRE DR	PRINEVILLE	OR	97754
151502DD00300	AMITY MTN. DEVELOPMENT LLC	3451 SW EMPIRE DR	PRINEVILLE	OR	97754
151502DD00400	AMITY MTN. DEVELOPMENT LLC	3451 SW EMPIRE DR	PRINEVILLE	OR	97754
151502DD00500	BELL GARY	24185 SKYWAGON DR	BEND	OR	97701
151502DD00600	AMERISTAR SOLAR LLC	47637 NW CEDAR CANYON RD	BANKS	OR	97106
151502DD00700	MUCK CREEK JUNCTION LLC	3480 SW EMPIRE DR	PRINEVILLE	OR	97754
151502DD00800	EVERMORE HOLDINGS LLC	5736 E DANBURY RD	SCOTTSDALE	AZ	85254
151502DD00900	ADER HOLDINGS LLC	61535 S HWY 97 STE 5-241	BEND	OR	97702
151502DD00901	ADER HOLDINGS LLC	61535 S HWY 97 STE 5-241	BEND	OR	97702
151512B000100	HEGELE CHARLES G JR & CARLLEEN TRUSTEES	7950 N LONE PINE RD	TERREBONNE	OR	97760
151512B000200	ROSENDIN ELECTRIC INC	2777 ORCHARD PKWY	SAN JOSE	CA	95134

151512B000201	ROSENDIN ELECTRIC INC	2777 ORCHARD PKWY	SAN JOSE	CA	95134
151512B000300	WESTRIDGE INDUSTRIAL LLC	PO BOX 365	MONUMENT	OR	97864
151512B000400	STEVENS RODNEY L	20280 N 59TH AVE 222	GLENDALE	AZ	85308
151512B000500	GLOBAL ALLIED PARTNERS LLC	1011 COPLEY LN	SILVER SPRINGS	MD	20904
151512B000501	LARIMER STEPHEN	2795 SW HIGH DESERT DR	PRINEVILLE	OR	97754
151512B000502	KENNEDY CINDY	PO BOX 1226	PRINEVILLE	OR	97754
151512B000503	KENNEDY CINDY	PO BOX 1226	PRINEVILLE	OR	97754
151512B000600	WEBB MIKE	1568 SW PIPER WAY	PRINEVILLE	OR	97754
151512B000601	FAHLGREN RAY L	7543 NW VISTA VIEW RD	PRINEVILLE	OR	97754
151512B000602	TANNER JOYCE & STEVENS ROD	921 CHENOWETH LP W	THE DALLES	OR	97058
151512B000603	HEGELE CHARLES & CARLLEEN	7950 NW LONE PINE RD	TERREBONNE	OR	97760
151512B000604	FAHLGREN RAY L	7543 NW VISTA VIEW RD	PRINEVILLE	OR	97754
151512B000700	HEGELE CHARLES & CARLLEEN	7950 NW LONE PINE RD	TERREBONNE	OR	97760
151512B000701	HEGELE TRAVIS & HEGELE ROCKY	7950 N LONE PINE RD	TERREBONNE	OR	97760
151512B000702	HEGELE ROCKY & HEGELE TRAVIS	7950 N LONE PINE RD	TERREBONNE	OR	97760
151512B000703	HEGELE CHARLES & CARLLEEN	7950 NW LONE PINE RD	TERREBONNE	OR	97760
151512B000800	PRINEVILLE CITY OF	400 NE THIRD	PRINEVILLE	OR	97754
151512B000900	MARCUM INVESTMENTS LLC	5591 NW ZAMIA AVE	REDMOND	OR	97756
151512B001000	LUND HOLDINGS LLC	2734 SW HIGH DESERT DR	PRINEVILLE	OR	97754
151512B001100	THREE BEARS LLC	1617 SW BALDWIN RD	PRINEVILLE	OR	97754
151512B001200	MST PROPERTIES LLC	1659 SW BALDWIN RD	PRINEVILLE	OR	97754
151512B001300	TANKERSLEY FRANCIS H JR	9696 NE MEADOW RIDGE RD	PRINEVILLE	OR	97754
151512B001400	DAY HOWARD M	PO BOX 1680	BEND	OR	97709
151512B001500	MST PROPERTIES LLC	1659 SW BALDWIN RD	PRINEVILLE	OR	97754
151512B001501	MST PROPERTIES LLC	1659 SW BALDWIN RD	PRINEVILLE	OR	97754
151512B001600	HIGH DESERT COMMERCIAL 2615 LLC	13895 SE LOST LAKE DR	PRINEVILLE	OR	97754
151512B001700	MARCUM INVESTMENTS LLC	5591 ZAMIA AVE	REDMOND	OR	97756
151512B001800	BOTUG LLC	60220 SUNSET VIEW DR	BEND	OR	97702
151512B001801	FISHER DONALD L	12917 NW LARK MEADOWS LN	POWELL BUTTE	OR	97753
151512B001802	FISHER DONALD L	12917 NW LARK MEADOWS LN	POWELL BUTTE	OR	97753
151512B001803	FISHER DONALD L	12917 NW LARK MEADOWS LN	POWELL BUTTE	OR	97753
151512B001900	BALDWIN CENTER PARTNERSHIP LLC	21495 BEAR CREEK RD	BEND	OR	97701
151512B002000	FULBRIGHT BRENT R & BRENDA M	PO BOX 13	POST	OR	97752
151512B002100	NIGHTRIVER LLC	2816 SW CESSNA DR	PRINEVILLE	OR	97754
151512B002200	CHARRON STEVEN A SEP PROP TRUST	8670 LEAVESLEY RD	GILROY	CA	95020
151512B002201	CHARRON STEVEN A TRUSTEE	8670 LEAVESLEY RD	GILROY	CA	95020
151512B002202	CHARRON STEVEN A TRUSTEE	8670 LEAVESLEY RD	GILROY	CA	95020
151512B002300	MRP INVESTMENTS LLC	3015 106TH ST S	LAKEWOOD	WA	98499
151512B002301	MRP INVESTMENTS LLC	3015 106TH ST S	LAKEWOOD	WA	98499
151512B002400	MRP INVESTMENTS LLC	3015 106TH ST S	LAKEWOOD	WA	98499
151512B002500	DPT FAMILY HOLDINGS	12837 SW CORNETT LOOP	POWELL BUTTE	OR	97753

151512B002600	HEGELE CHARLES & CARLLEEN	7950 NW LONE PINE RD	TERREBONNE	OR	97760
151512B002601	RYCO MANUFACTURING INC AN OR CORP	2959 SW HIGH DESERT DR	PRINEVILLE	OR	97754
151512B002602	BOW RIVER PROPERTIES LLC	1133 NE PETERS RD	PRINEVILLE	OR	97754
151512B002700	THREE SISTERS HOLDINGS LLC	63026 NW LOWER MEADOW DR STE 200	BEND	OR	97701
151512B002800	THREE SISTERS HOLDINGS LLC	63026 NW LOWER MEADOW DR STE 200	BEND	OR	97701
151604AA00700	PAVLICEK JOHN J & VIVIAN JILL	4369 SW TOMMY ARMOUR CT	REDMOND	OR	97756
151604AA01000	BARNEY BRIAN & LAURA	910 NE JOHNSON CREEK RD	PRINEVILLE	OR	97754
151604AA01100	PRINEVILLE CITY OF	400 NE THIRD	PRINEVILLE	OR	97754
151604AA01200	STEARNS LAND CO LTD PARTNERSHIP	910 NE JOHNSON CREEK RD	PRINEVILLE	OR	97754
151604AB00100	OCHOCO MANUFACTURING CORP	PO BOX 66	PRINEVILLE	OR	97754
151604AB00300	JAMISON CARYL R	PO BOX 66	PRINEVILLE	OR	97754
151604AB00301	OCHOCO MANUFACTURING CORP	PO BOX 66	PRINEVILLE	OR	97754
151604AB00400	OCHOCO MANUFACTURING CORP	PO BOX 66	PRINEVILLE	OR	97754
151604AB04600	JAMISON MARK MATHEW & CARYL ANN	651 NE WYOMING DR	PRINEVILLE	OR	97754
151604AB04700	KRIDER DONALD P DBA BEAR CREEK RESOURCES	203 N MAIN ST	PRINEVILLE	OR	97754
151604AB05300	COX ROBERT C	2591 NE THIRD ST	PRINEVILLE	OR	97754
151604AB05400	COX ROBERT CARL AND SUZANNA LEE	2591 NE THIRD ST	PRINEVILLE	OR	97754
151604AB05500	JC STORAGE LLC	3670 SW OBSIDIAN AVE	REDMOND	OR	97756
151604AB05600	COX ROBERT C	4995 SE JERRY DR	PRINEVILLE	OR	97754
151604AB05700	COX ROBERT C & SUZANNA L TRUSTEES	2591 E 3RD ST	PRINEVILLE	OR	97754
151604AD06800	COCHRAN MARY E	2828 SE SLAYTON CT	PRINEVILLE	OR	97754
151604AD06900	STEARNS LAND CO LTD PARTNERSHIP	910 NE JOHNSON CREEK RD	PRINEVILLE	OR	97754
151604B000200	KUIZENGA MICHAEL JAMES & BARI NICOLE	2338 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B000300	KUIZENGA MICHAEL JAMES & BARI NICOLE	2338 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B000400	NUTTER EVELYNE J	2220 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B000500	WSR LLC				
151604B000501	WSR LLC				
151604B000502	KEMERY STEVE	PO BOX 1680	PRINEVILLE	OR	97754
151604B000600	WSR LLC				
151604B000601	WSR LLC				
151604B000700	STANDLEY DONNA	873 SE 7TH ST	PRINEVILLE	OR	97754
151604B000800	THE ROBINSON FAMILY TRUST OF 1997	PO BOX 1404	GRIDLEY	CA	95948
151604B000900	BI-MART CORPORATION INC	PO BOX 2310	EUGENE	OR	97402
151604B000901	MID OREGON FEDERAL CREDIT UNION	PO BOX 6749	BEND	OR	97708
151604B000902	THE ROBINSON FAMILY TRUST OF 1997	PO BOX 1404	GRIDLEY	CA	95948
151604B000903	JUNIPER PROPERTY MANAGEMENT LLC	PO BOX 1776	PRINEVILLE	OR	97754
151604B000904	VAUGHAN DAVID	320 NE HICKEY FARMS RD	PRINEVILLE	OR	97754
151604B001000	BUCKMASTER PAUL C & FREDA M	2010 NE LAUGHLIN ROAD	PRINEVILLE	OR	97754
151604B001100	BUSHARD VICKI C	1980 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B001200	PRINEVILLE PARTNERS LLC	PO BOX 1583	CORVALLIS	OR	97339
151604B001400	JOHNSTON CHRISTINE	2793 SE SLAYTON CT	PRINEVILLE	OR	97754

151604B001500	JOHN & TESS JEUCK LLC	505 NE GARNER ST	PRINEVILLE	OR	97754
151604B001600	JEUCK JOHN & TESS	505 NE GARNER ST	PRINEVILLE	OR	97754
151604B001700	TIBBETS JASON L	1902 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B001800	CARDIN GERALD	1907 NE THIRD ST	PRINEVILLE	OR	97754
151604B001801	CARDIN GERALD	1907 NE THIRD ST	PRINEVILLE	OR	97754
151604B001900	LEFEBVRE HELEN & MARC N	1892 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B001901	P&R BLDG LLC	1601 NE HEMLOCK AVE	REDMOND	OR	97756
151604B002000	RECTOR STEVE	1894 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B002100	P&R BLDG LLC	1601 NE HEMLOCK AVE	REDMOND	OR	97756
151604B002200	KD SMITH PROPERTIES LLC	1076 NW PEPPERMINT LANE	PRINEVILLE	OR	97754
151604B002300	SMITH KENNETH W	1076 NW PEPPERMINT LN	PRINEVILLE	OR	97754
151604B002400	ROTHS JIM & DONNA	15997 SW AQUATIC VIEW LN	POWELL BUTTE	OR	97753
151604B002500	GROFF LINDA M SUCCESSOR TRUSTEE	2620 NW RITCHES LN	PRINEVILLE	OR	97754
151604B002600	COLOVOS JOHN NICHOLAS	1255 NE TYLER ST	PRINEVILLE	OR	97754
151604B002700	REYNVAAN M	1756 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B002900	HALE THERON NASH	1746 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151604B003000	GATES EVELYN D	490 NE COMBS FLAT RD	PRINEVILLE	OR	97754
151604B003100	DEAK LOUIS FRANK	PO BOX 1042	PRINEVILLE	OR	97754
151604B003200	HEIGES LAURENCE E & VERNA MAE	6130 SW STILLMAN RD	POWELL BUTTE	OR	97753
151604B003300	STAFFENSON RESOURCES LLC	1820 HISTORIC COLUMBIA RIVER HWY	TROUTDALE	OR	97060
151604B003400	GROFF LINDA M SUCCESSOR TRUSTEE	2620 NW RITCHES LN	PRINEVILLE	OR	97754
151604B003500	PRINEVILLE PETROLEUM LLC	9600 SW CAPITOL HWY STE 200	PORTLAND	OR	97219
151604B003600	PRINEVILLE PETROLEUM LLC	9600 SW CAPITOL HWY 200	PORTLAND	OR	97219
151604B003700	PRINEVILLE PETROLEUM LLC	9600 SW CAPITOL HWY 200	PORTLAND	OR	97219
151604B003800	PRINEVILLE HOSPITALITY LLC	9600 SW CAPITOL HWY STE 200	PORTLAND	OR	97219
151604B003900	ROTHS JIM & DONNA	15997 SW AQUATIC VIEW LN	POWELL BUTTE	OR	97753
151604B004000	P&R BLDG LLC	1601 NE HEMLOCK AVE	REDMOND	OR	97756
151604B004100	ROTHS JIM & DONNA	15997 SW AQUATIC VIEW LN	POWELL BUTTE	OR	97753
151604B004200	PALMER CHRISTOPHER & BRIGITT	1873 NE 3RD ST	PRINEVILLE	OR	97754
151604B004201	ROTHS JIM & DONNA	15997 SW AQUATIC VIEW LN	POWELL BUTTE	OR	97753
151604B004300	SANTUCCI BRADLEY AND SHELLEY	960 NE DRY CREEK RD	PRINEVILLE	OR	97754
151604B004400	H2G SERVICES INC	9040 NE 31ST STREET	TERREBONNE	OR	97760
151604B004401	STANDLEY DONNA M	873 SE 7TH ST	PRINEVILLE	OR	97754
151604B004500	KFBORE LLC	3449 E COPPER POINT DR	MERIDIAN	ID	83642
151604B004600	KFBORE LLC	3449 E COPPER POINT DR	MERIDIAN	ID	83642
151604B004601	KFBORE LLC	3449 E COPPER POINT DR	MERIDIAN	ID	83642
151604B004602	NEWBURG PLACE LLC	1960 MOORE DRIVE	ROSEBURG	OR	97471
151604B007900	DUFFY SHEILA B	2525 FERN LEAF LANE	MARTINEZ	CA	94553
151605AA00100	USA BUREAU OF REC		PRINEVILLE	OR	97754
151605AA00200	PACIFICORP	825 NE MULTNOMAH ST 1900	PORTLAND	OR	97232
151605AA00300	TELOS DEVELOPMENT COMPANY LLC	445 MYERS ST SE	SALEM	OR	97302

151605AA00400	HIGH DESERT EDUCATION	145 SE SALMON AVE A	REDMOND	OR	97756
151605AA00401	JONES KELLY & SHARI	21260 LIMESTONE AVE	BEND	OR	97703
151605AA00402	HIGH DESERT EDUCATION	145 SE SALMON AVE A	REDMOND	OR	97756
151605AA00500	CASSIDY BAYOU PARTNERS LLC	1475 NE THIRD ST	PRINEVILLE	OR	97754
151605AA00600	CASSIDY BAYOU PARTNERS LLC	1475 NE THIRD ST	PRINEVILLE	OR	97754
151605AA00700	THE CARRINGTON COMPANY	PO BOX 1328	EUREKA	CA	95502
151605AA00800	R & C 42ND STREET LLC	PO BOX FF	SPRINGFIELD	OR	97477
151605AA00900	PHIL DALE PRINEVILLE HOLDINGS LLC	13 SW H ST	MADRAS	OR	97741
151605AA01000	KOMLOFSKE ROBERT TRUST ET AL	PO BOX 1547	PRINEVILLE	OR	97754
151605AA01100	SWM ENTERPRISES LLC	2397 NW KINGS BLVD PMB 173	CORVALLIS	OR	97330
151605AA01200	PAYLESS DRUG STORES N.W. INC.	PO BOX 3165	HARRISBURG	PA	17105
151605AA01300	SWM ENTERPRISES LLC	2397 NW KINGS BLVD PMB 173	CORVALLIS	OR	97330
151605AA01400	JONES KELLY & SHARI	21260 LIMESTONE AVE	BEND	OR	97703
151605AA01500	BFOR LLC	1500 NE 3RD ST STE 100	PRINEVILLE	OR	97754
151605AA01600	BFOR LLC	1500 NE 3RD ST	PRINEVILLE	OR	97754
151605AA01700	PRINEVILLE PARTNERS LLC	PO BOX 1583	CORVALLIS	OR	97339
151605AA01701	SOUTH VALLEY BANK & TRUST	425 PIKE ST	SEATTLE	WA	98101
151605AA01702	PRINEVILLE PARTNERS LLC	PO BOX 1583	CORVALLIS	OR	97339
151605AA03500	HATCH DYLAN	6414 NE OCHOCO CREEK LN	PRINEVILLE	OR	97754
151605AA03600	QUANT MARK L	1345 NW LOCUST ST	PRINEVILLE	OR	97754
151605AA03700	FINCH MATTHEW KENT & GABRIELLE LYNN J	290 SE 5TH ST APT 41	PRINEVILLE	OR	97754
151605AA03800	SHELFER GEORGE EDWARD	173 NE SPRUCE LN	PRINEVILLE	OR	97754
151605AA03900	KRAUS ADAM	1480 NE 3RD STREET	PRINEVILLE	OR	97754
151605AA04000	PRINEVILLE ASSOCIATES LLC	1076 PEPPERMINT LN	PRINEVILLE	OR	97754
151605AA04100	SMITH KATHERINE	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151605AA04101	GIORGI JOHN R TRUSTEE	71200 SE PAULINA SUPLEE HWY	PAULINA	OR	97751
151605AB00200	B & S LOGGING INC	4411 NW ELLIOT LN	PRINEVILLE	OR	97754
151605AB00300	STAFFORD WILLIS ESTATE	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151605AB00400	STAFFORD WILLIS ESTATE	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151605AB00500	LAUGHLIN ELLIOTT LLC	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151605AB00600	LAUGHLIN ELLIOTT LLC	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151605AB00700	BERMAN DONALD E & DEANNA E	1100 NE LAUGHLIN	PRINEVILLE	OR	97754
151605AB00800	CITY OF PRINEVILLE	387 NE 3RD ST	PRINEVILLE	OR	97754
151605AB00801	BERMAN DONALD E & DEANNA E	1100 NE LAUGHLIN RD	PRINEVILLE	OR	97754
151605AB00900	CITY OF PRINEVILLE	387 NE 3RD ST	PRINEVILLE	OR	97754
151605AB01700	S DAVIS ENTERPRISES LLC	3033 NE QUAIL VALLEY LN	PRINEVILLE	OR	97754
151605AB01800	YOUELL INVESTMENTS LLC	19921 133RD AVE SE	SNOHOMISH	WA	98296
151605AB01900	PRINEVILLE MEN'S WEAR	231 N MAIN ST	PRINEVILLE	OR	97754
151605AB02000	PRINEVILLE MEN'S WEAR	231 N MAIN ST	PRINEVILLE	OR	97754
151605AB02100	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708
151605BA05100	CROOK COUNTY PARKS & RECREATION	296 S MAIN ST	PRINEVILLE	OR	97754

151605BA05200	CROOK COUNTY PARKS & RECREATION	296 S MAIN ST	PRINEVILLE	OR	97754
151605BA05300	CROOK COUNTY PARKS & RECREATION	296 S MAIN ST	PRINEVILLE	OR	97754
151605BA05400	CROOK COUNTY PARKS & RECREATION	296 S MAIN ST	PRINEVILLE	OR	97754
151605BA05500	MCCORMICK RYAN DMD & JULIE	607 NE 3RD ST	PRINEVILLE	OR	97754
151605BA05600	SANTUCCI BRADLEY AND SHELLEY	960 NE DRY CREEK RD	PRINEVILLE	OR	97754
151605BA05700	BLANK ASHLEY M	701 CEDAR ST C	ANCHORAGE	AK	99501
151605BA05800	WARREN MICHAEL E SR & BARBARA A TRUSTEES	PO BOX 781	PRINEVILLE	OR	97754
151605BA06100	JAY KAREN E	599 NE 3RD ST	PRINEVILLE	OR	97754
151605BA06200	JAY KAREN E	599 NE 3RD ST	PRINEVILLE	OR	97754
151605BA06300	JAY KAREN E	599 NE 3RD ST	PRINEVILLE	OR	97754
151605BA06400	GREGSON CARL T	599 NE 3RD ST	PRINEVILLE	OR	97754
151605BA06500	JAY KAREN E & GREGSON CARL T	599 NE 3RD ST	PRINEVILLE	OR	97754
151605BA06600	JAY KAREN E	599 NE 3RD ST	PRINEVILLE	OR	97754
151605BA06800	JAY KAREN E	599 NE 3RD ST	PRINEVILLE	OR	97754
151605BA06900	JPMC LEASE ADMINISTRATION	1111 POLARIS PKWY 1J	COLUMBUS	OH	43240
151605BA07000	WASHINGTON MUTUAL BANK	PO BOX 4900	SCOTTSDALE	AZ	85261
151605BA07100	HEHN CRAIG E & LINDA M	208 NE ELM ST	PRINEVILLE	OR	97754
151605BA07101	MARTIN MICHAEL W & KERRY K	PO BOX 148	BEND	OR	97709
151605BA07200	PHILLIPS KEVIN E	591 NE 2ND ST	PRINEVILLE	OR	97754
151605BB00700	MCGUIRE JAMES P & GAYLE L	510 N MAIN ST	PRINEVILLE	OR	97754
151605BB00701	STEBER RICK	131 NE 5TH ST	PRINEVILLE	OR	97754
151605BB01000	MCGUIRE JAMES P	510 N MAIN ST	PRINEVILLE	OR	97754
151605BB01100	OCHOCO FEDERAL CREDIT UNION	6915 SE LAKE RD	MILWAUKIE	OR	97267
151605BB01200	CROOKED RIVER BREWING	420 N MAIN ST	PRINEVILLE	OR	97754
151605BB01300	GSD LLC	PO BOX 225	PRINEVILLE	OR	97754
151605BB01400	COOLER BAR LLC	PO BOX 1654	PRINEVILLE	OR	97754
151605BB01500	SEVERANCE TRAVIS & KIM	4300 NE WITTMER RD	PRINEVILLE	OR	97754
151605BB01600	JTB INVESTMENTS LLC	905 SW CRESTVIEW RD	PRINEVILLE	OR	97754
151605BB01700	JTB INVESTMENTS LLC	905 SW CRESTVIEW RD	PRINEVILLE	OR	97754
151605BB01800	CLARK ROBERT E & CO-TRUSTEE	65081 HIGHLAND RD	BEND	OR	97701
151605BB01900	386 MAIN STREET LLC	4472 W ANTLER AVE	REDMOND	OR	97756
151605BB01999	PRINEVILLE CITY OF		PRINEVILLE	OR	97754
151605BB02000	380 MAIN STREET LLC	PO BOX 1863	PRINEVILLE	OR	97754
151605BB02100	SIX DIGITS LLC	64517 JOE NEIL RD	BEND	OR	97701
151605BB02200	SIX DIGITS LLC	64517 JOE NEIL RD	BEND	OR	97701
151605BB02300	BARNEY PRINES STEAKHOUSE AND SALOON	121 NE 3RD ST	PRINEVILLE	OR	97754
151605BB02301	G & M PROPERTIES	3219 CASCADIA AVE S	SEATTLE	WA	98144
151605BB02400	PRINEVILLE CITY OF		PRINEVILLE	OR	97754
151605BB02500	PRINEVILLE CITY OF		PRINEVILLE	OR	97754
151605BB02600	PRINEVILLE CITY OF		PRINEVILLE	OR	97754
151605BB02700	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754

151605BB02800	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151605BB02900	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151605BB03000	UPRIVER PROPERTIES LLC	PO BOX 457	REDMOND	OR	97756
151605BB03100	MEHRABI ONIKO V	216 N MAIN ST	PRINEVILLE	OR	97754
151605BB03200	ADELBERT LLC	PO BOX 520	BEND	OR	97709
151605BB03300	ADELBERT LLC	110 NE GREENWOOD AVE	BEND	OR	97701
151605BB03500	CROOK COUNTY HISTORICAL SOCIETY INC	246 N MAIN ST	PRINEVILLE	OR	97754
151605BB03700	PRINEVILLE SENIOR CENTER CHARITABLE TRUS	PO BOX 553	PRINEVILLE	OR	97754
151605BB03900	MOHAN MICHAEL	106 N MAIN ST	PRINEVILLE	OR	97754
151605BB04000	PRINEVILLE SENIOR CENTER CHARITABLE TRUS	PO BOX 553	PRINEVILLE	OR	97754
151605BB04001	PRINEVILLE SENIOR CENTER CHARITABLE TRUS	PO BOX 553	PRINEVILLE	OR	97754
151605BB04100	PRINEVILLE SENIOR CENTER CHARITABLE TRUS	PO BOX 553	PRINEVILLE	OR	97754
151605BB04200	PRINEVILLE SENIOR CENTER CHARITABLE TRUS	PO BOX 553	PRINEVILLE	OR	97754
151605BB04300	UNITED STATES		PRINEVILLE	OR	97754
151605BB04301	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605BB04700	SEARCY HAROLD DAVID	389 NE ORCHARD LN	PRINEVILLE	OR	97754
151605BB04800	GOOD BIKE CO LLC	284 NE 3RD ST	PRINEVILLE	OR	97754
151605BB04900	BATES STEVEN L	590 SE JUNIPER ST	PRINEVILLE	OR	97754
151605BB05000	KERLEY CENTRAL OR LLC	PO BOX 5517	SALEM	OR	97304
151605BB05100	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605BB05200	FORRESTER STEVE & KIM A TRUSTEES	2884 NW PONDEROSA LN	PRINEVILLE	OR	97754
151605BB05400	ADVANTAGE DENTAL CLINICS LLC	442 SW UMATILLA AVENUE	REDMOND	OR	97756
151605BB05401	POWERS JAMES W	1150 NE OREGON AVE	PRINEVILLE	OR	97754
151605BB05500	ARMSTRONG DAVID B	2781 NE SUNSET VIEW LN	PRINEVILLE	OR	97754
151605BB05600	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605BB05700	RODNEY K AND JONNE A PIERSON REVOCABLE T				
151605BB05800	MAYFIELD DAVID L & MARY D	4642 CROWN LN NE	ALBANY	OR	97321
151605BB05900	FRANTZ PROPERTY LLC	PO BOX 2185	TERREBONNE	OR	97760
151605BB06000	U S NATIONAL BANK OF ORE THE	PO BOX 460169	HOUSTON	TX	77056
151605BB06100	JEUCK JOHN	505 NE GARNER ST	PRINEVILLE	OR	97754
151605BB06200	JEUCK JOHN	227 NE 3RD ST	PRINEVILLE	OR	97754
151605BB06600	CROOK COUNTY FIRE & RESCUE	500 NE BELKNAP	PRINEVILLE	OR	97754
151605BB06700	CROOK COUNTY FIRE & RESCUE	500 NE BELKNAP	PRINEVILLE	OR	97754
151605BB06800	CROOK COUNTY FIRE & RESCUE	500 NE BELKNAP	PRINEVILLE	OR	97754
151605BB06900	FRATERNAL ORDER OF EAGLES #255		PRINEVILLE	OR	97754
151605BB07000	FRATERNAL ORDER OF EAGLES		PRINEVILLE	OR	97754
151605BB07500	PRINEVILLE CITY OF	400 NE 3RD ST	PRINEVILLE	OR	97754
151605BB07501	CROOK COUNTY	400 NE THIRD	PRINEVILLE	OR	97754
151605BB07600	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151605BB08100	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605BB08500	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754

151605BB08600	CHERRY HILL PARK INC	5455 PORTLAND RD NE	SALEM	OR	97305
151605BB08700	CHERRY HILL PARK INC	5455 PORTLAND RD NE	SALEM	OR	97305
151605BB08900	BROWN PAMELA ANN HENRY	1312 W ORANGETHORPE AVE	FULLERTON	CA	92833
151605BB09000	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151605BB09100	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151605BB09300	JOHNSON MARY J GRANTOR & ESPINOLA JANET	405 EAST 1ST STREET	PRINEVILLE	OR	97754
151605BB09400	ESPINOLA HUNTER ANTHONY	405 E 1ST ST	PRINEVILLE	OR	97754
151605BB09500	ZERBE DANIEL	804 NW 57TH ST	REDMOND	OR	97756
151605BB09700	DEVLIN KAREN C & DANIEL T	19145 KLIPPEL ROAD	BEND	OR	97703
151605BB09701	WAGNER INGEBORG K	475 E 1ST ST	PRINEVILLE	OR	97754
151605BB10100	PRINEVILLE CITY OF		PRINEVILLE	OR	97754
151605BB10200	BENNETT CHRISTIE M	395 NE ELM ST	PRINEVILLE	OR	97754
151605BB10400	EDGERLY BRETT & CHEYENNE	455 NW WEST HILLS ROAD	PRINEVILLE	OR	97754
151605BB10500	PROPERTY TAX	PO BOX 628010	MIDDLETON	WI	53562
151605BB10600	7-ELEVEN INC #20376	PO BOX 711	DALLAS	TX	75221
151605BB10601	MMPW VENTURE LLC	PO BOX 714	SPRINGFIELD	OR	97477
151605BB10700	SKILLERN INVESTMENTS LLC	PO BOX 714	SPRINGFIELD	OR	97477
151605BB10701	SKILLERN INVESTMENTS LLC	PO BOX 714	SPRINGFIELD	OR	97477
151605BB10800	EDGERLY BRETT & CHEYENNE	455 NW WEST HILLS ROAD	PRINEVILLE	OR	97754
151605BB10900	EDGERLY BRETT & CHEYENNE	455 NW WEST HILLS ROAD	PRINEVILLE	OR	97754
151605BC00100	GAINES ROBERTA	125 SE ELM ST	PRINEVILLE	OR	97754
151605BC00200	CRONEN DARYL C	PO BOX 1471	BEND	OR	97709
151605BC00400	STAFFORD CANDACE S	406 E 1ST ST	PRINEVILLE	OR	97754
151605BC00500	CURRIER SHELLIE J	396 E FIRST ST	PRINEVILLE	OR	97754
151605BC00600	CHURCHILL-DICKS JAMES R	324 E FIRST ST	PRINEVILLE	OR	97754
151605BC00700	CONDRON GOLDA TRUSTEE	790 NE CREST RD	PRINEVILLE	OR	97754
151605BC00800	SAINT JOSEPH CATHOLIC CHURCH	PO BOX 1315	PRINEVILLE	OR	97754
151605BC00900	SAINT JOSEPH CATHOLIC CHURCH	PO BOX 1315	PRINEVILLE	OR	97754
151605C012100	TOCHER GARI LYNN TRUSTEE	PO BOX 2147	PRINEVILLE	OR	97754
151605C012101	LANE PATRICK J	231 N MAIN ST STE 204	PRINEVILLE	OR	97754
151605C012200	ACEVEDO ALMA D ET AL	396 SE LYNN BLVD	PRINEVILLE	OR	97754
151605C012300	BONGERS WILLIAM & INGRID	960 NE JONES RD	BEND	OR	97701
151605C012301	ACEVEDO ALMA D ET AL	396 SE LYNN BLVD	PRINEVILLE	OR	97754
151605C012303	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605C012500	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151605C012600	TOCHER GARI LYNN TRUSTEE	PO BOX 2147	PRINEVILLE	OR	97754
151605C012700	CROOK COUNTY PARKS & RECREATION DISTRICT	296 S MAIN ST	PRINEVILLE	OR	97754
151605C012800	CROOK COUNTY PARKS & RECREATION DISTRICT	296 S MAIN ST	PRINEVILLE	OR	97754
151605C012801	CROOK COUNTY PARKS & RECREATION DISTRICT	296 S MAIN ST	PRINEVILLE	OR	97754
151605C012803	CROOK COUNTY PARKS & RECREATION DISTRICT	296 S MAIN ST	PRINEVILLE	OR	97754
151605C012804	CROOK COUNTY PARKS & RECREATION	296 S MAIN ST	PRINEVILLE	OR	97754

151605C012900	CROOK COUNTY	300 NE 3RD ST ROOM 10	PRINEVILLE	OR	97754
151605C012901	ROGERS KANE A	13833 HAGERS FERRY RD	HUNTERSVILLE	NC	28078
151605C013000	GRAY ROBERT & MABEL	1273 S MAIN ST	PRINEVILLE	OR	97754
151605C013100	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605C013200	CROOK COUNTY FAIRGROUNDS	PO BOX 507	PRINEVILLE	OR	97754
151605C013300	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605C013400	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605C013500	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605C013600	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605C013700	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151605C013800	CROOK COUNTY	300 NE THIRD ST	PRINEVILLE	OR	97754
151606AA00100	ACEVEDO ANGELICA	102 NW 2ND ST	PRINEVILLE	OR	97754
151606AA00200	PRINEVILLE LODGE #1814 BPOE		PRINEVILLE	OR	97754
151606AA00300	BEMIS JILL M DC	124 NW 2ND ST	PRINEVILLE	OR	97754
151606AA00400	PRINECAPSTONE LLC	698 NW YORK DR	BEND	OR	97703
151606AA00500	EVEREST THOMAS A & BONNIE J	2940 NW WEST HILLS LOOP	PRINEVILLE	OR	97754
151606AA00600	PRINEVILLE LODGE #1814		PRINEVILLE	OR	97754
151606AA00900	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151606AA01200	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151606AA01400	CROOK COUNTY	300 NE 3RD ST	PRINEVILLE	OR	97754
151606AA01500	DPK RESOURCES INC	203 NORTH MAIN STREET	PRINEVILLE	OR	97754
151606AA01600	GILLMOR ROSE M	1537 NE DEEDIE CT	PRINEVILLE	OR	97754
151606AA01700	PARKER LISA	390 NW 2ND ST	PRINEVILLE	OR	97754
151606AA01800	PARKER LISA	390 NW 2ND ST	PRINEVILLE	OR	97754
151606AA01900	GILLMOR ROSE M	1537 NE DEEDIE CT	PRINEVILLE	OR	97754
151606AA02000	WRIGHT MICHAEL ADAM	367 W 1ST ST	PRINEVILLE	OR	97754
151606AA02100	WIECHERT BETTY J	305 W 1ST ST	PRINEVILLE	OR	97754
151606AA02200	MUSIL STEVEN L	8890 NW GERKE RD	PRINEVILLE	OR	97754
151606AA02201	MCALISTER SHANNON	2410 SW 87TH AVE	PORTLAND	OR	97225
151606AA02300	LANDIS DIANE	480 NW 2ND ST	PRINEVILLE	OR	97754
151606AA02400	BUNCH CARLA	114 LLEWELLYN AVE	CAMPBELL	CA	95008
151606AA02500	HANES COBY L	7887 NW NEWELL LN	PRINEVILLE	OR	97754
151606AA02600	MCDONALD'S REAL ESTATE COMPANY	1960 KINGFISHER CIR	REDMOND	OR	97756
151606AA02800	HANES COBY L	7887 NW NEWELL LN	PRINEVILLE	OR	97754
151606AA02900	HANES COBY L	7887 NW NEWELL LN	PRINEVILLE	OR	97754
151606AA03000	DH GROUP LLC	318 NW THIRD ST	PRINEVILLE	OR	97754
151606AA03100	COLVIN OIL I LLC	2520 FOOTHILL BLVD	GRANTS PASS	OR	97256
151606AA03200	QWEST CORPORATION	1801 CALIFORNIA ST 25TH FLR	DENVER	CO	80202
151606AA03201	QWEST CORPORATION	1801 CALIFORNIA ST 25TH FLR	DENVER	CO	80202
151606AA03600	DELOITTE TAX LLP	PO BOX 2609	CARLSBAD	CA	92018
151606AA03700	SPROUSE ROBERT A II	2212 NW PINNACLE DR	PORTLAND	OR	97229

151606AA03800	CRAWFORD WERNER PROPERTIES LLC	250 NW CLAYPOOL ST	PRINEVILLE	OR	97754
151606AA03900	SLATER DEVELOPMENT GROUP LLC	240 NW CLAYPOOL ST	PRINEVILLE	OR	97754
151606AA04100	STAFFENSON RESOURCES LLC	1820 HISTORIC COLUMBIA RIVER HWY	TROUTDALE	OR	97060
151606AA04300	LANE JAMES E AND CATHERINE M TRUSTEES	231 N MAIN ST STE 204	PRINEVILLE	OR	97754
151606AA04400	LANE JAMES E AND CATHERINE M TRUSTEES	231 N MAIN ST STE 204	PRINEVILLE	OR	97754
151606AA04500	COBALT PROPERTY MANAGEMENT GROUP	333 SW UPPER TERRACE DR	BEND	OR	97702
151606AA04600	A F & A M LODGE #76		PRINEVILLE	OR	97754
151606AA04700	LAMBERT PROPERTIES LLC	187 NW 2ND ST	PRINEVILLE	OR	97754
151606AA04900	SMITH BROOKE AND TIMOTHY STEVEN	211 N MAIN STREET	PRINEVILLE	OR	97754
151606AA05000	SMITH TIMOTHY STEVEN JR & BROOKE	211 N MAIN STREET	PRINEVILLE	OR	97754
151606AA05002	SMITH BROOKE AND TIMOTHY STEVEN	211 N MAIN STREET	PRINEVILLE	OR	97754
151606AA05003	KRIDER ESTES ELLEN	203 N MAIN ST	PRINEVILLE	OR	97754
151606AA05100	FRY RAE M	229 N MAIN ST	PRINEVILLE	OR	97754
151606AA05300	1868 PROPERTIES LLC	PO BOX 249	PRINEVILLE	OR	97754
151606AA05301	BRADY MARIA	347 BLACK BUTTE DR	SISTERS	OR	97759
151606AA05400	KELLY HELEN MARIE AND KELLY MICHAEL SEAN	11378 JL RANCH RD	POWELL BUTTE	OR	97753
151606AA05500	RICHES & RAGS LLC	5950 NW PUCKETT RD	PRINEVILLE	OR	97754
151606AA05600	RICHES & RAGS LLC	5950 NW PUCKETT RD	PRINEVILLE	OR	97754
151606AA05700	STAFFORD MARK	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151606AA05800	LAVA LAND PROPERTIES LLC	60877 SW DEER CREEK PL	BEND	OR	97702
151606AA05900	HUDSON & CHADWICK LLC	8150 SW DESERT SAGE LN	POWELL BUTTE	OR	97753
151606AA06000	JUDD ANNA C & JOSHUA A	38916 SANDY HEIGHTS ST	SANDY	OR	97055
151606AA06100	MOORE BRIAN S AND SHERRA G	PO BOX 1730	PRINEVILLE	OR	97754
151606AA06200	SIMMONS OFFICE COMPLEX LLC	PO BOX 400	PRINEVILLE	OR	97754
151606AA06300	RITCHES LLC	127 NW 3RD ST STE B	PRINEVILLE	OR	97754
151606AA06400	STAFFORD MARK	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151606AA06500	STAFFORD MARK	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151606AA06600	STAFFORD MARK	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151606AA06700	LYNN MARTIN	600 SW COLUMBIA SUITE 6150	BEND	OR	97702
151606AA06800	LYNN MARTIN	600 SW COLUMBIA SUITE 6150	BEND	OR	97702
151606AA06900	LILE ARKLE P & GLENDA	PO BOX 960	PRINEVILLE	OR	97754
151606AA07000	3MKA LLC	297 NW 3RD ST	PRINEVILLE	OR	97754
151606AA07100	LYNN MARTIN	600 SW COLUMBIA SUITE 6150	BEND	OR	97702
151606AA07200	SHAW STEVEN	PO BOX 1980	REDMOND	OR	97756
151606AA07300	RGW PROPERTIES LLC	6218 SE RUGER RD	PRINEVILLE	OR	97754
151606AA07400	RGW PROPERTIES LLC	6218 SE RUGER RD	PRINEVILLE	OR	97754
151606AA07500	ERICKSON A W	PO BOX 14868	PORTLAND	OR	97293
151606AA07600	ERICKSON A W	PO BOX 14868	PORTLAND	OR	97293
151606AA07700	ERICKSON A W	PO BOX 14868	PORTLAND	OR	97293
151606AA07800	FAHLGREN KENNETH A TRUSTEE	1176 NE BARNES ROAD	PRINEVILLE	OR	97754
151606AA07801	FAHLGREN KENNETH A TRUSTEE	1176 NE BARNES ROAD	PRINEVILLE	OR	97754

151606AA07900	PREGNANCY RESOURCE CENTERS OF CENTRAL OR	369 NE REVERE AVENUE #102	BEND	OR	97701
151606AA08000	FAHLGREN KENNETH A TRUSTEE	1176 NE BARNES ROAD	PRINEVILLE	OR	97754
151606AA08100	ERICKSON A W	PO BOX 14868	PORTLAND	OR	97293
151606AA08300	ERICKSON FOOD MARKET	PO BOX 14868 A W ERICKSON	PORTLAND	OR	97214
151606AA08500	GALLANT LLC	PO BOX 666	PRINEVILLE	OR	97754
151606AA08501	JONAS TRAVIS	225 SE RESORT CT	PRINEVILLE	OR	97754
151606AA08700	JANZ ROBERT H TRUSTEE	4990 S LANDING DR 302	PORTLAND	OR	97239
151606AA08701	NEW LIFE BIBLE CHAPEL INC	510 NW 4TH ST	PRINEVILLE	OR	97754
151606AA08800	STET LLC	PO BOX 737	PRINEVILLE	OR	97754
151606AA08900	JONAS TRAVIS & MICHELLE	225 SE RESORT CT	PRINEVILLE	OR	97754
151606AA09200	CASTOR DENNIS	466 NW 5TH ST	PRINEVILLE	OR	97754
151606AA09201	KEE LAND AND LIVESTOCK LLC	4393 NW GRIMES ROAD	PRINEVILLE	OR	97754
151606AA09300	MUNSON LORRIE & MIKE	492 NW 5TH ST	PRINEVILLE	OR	97754
151606AA09400	SANDER CHARLES	491 NW 4TH STREET	PRINEVILLE	OR	97754
151606AA09500	NEUHAUS JULIA	485 NW 4TH STREET	PRINEVILLE	OR	97754
151606AA09600	WOODERSON BRETT	5468 MT BAKER DR	POWELL BUTTE	OR	97753
151606AA09700	PIERCE STEVEN & STAFFORD MARLA TRUSTEES	992 NE OCHOCO AVE	PRINEVILLE	OR	97754
151606AA09800	MILLER DAVID R & DARLENE K	PO BOX 1741	SISTERS	OR	97759
151606AA09900	MYERS DAVID & VALDA FAMILY TRUST	PO BOX 1548	PRINEVILLE	OR	97754
151606AA10000	MKS LLC	4411 NW ELLIOTT LN	PRINEVILLE	OR	97754
151606AA10100	BRYANT ENTERPRISES LLC	PO BOX 457	REDMOND	OR	97756
151606AA10101	BRYANT ENTERPRISES LLC	PO BOX 457	REDMOND	OR	97756
151606AA10200	SODA CREEK HOLDINGS LLC	20361 SE CHANDLER EGAN WAY	BEND	OR	97702
151606AA10300	ROHRER CYNTHIA K & DANIEL F JR	266 NW 5TH ST	PRINEVILLE	OR	97754
151606AA10400	CRUMMY VIOLA	469 NW BEAVER ST	PRINEVILLE	OR	97754
151606AA10500	MARINO CHERI	2843 SE HILL ST	PRINEVILLE	OR	97754
151606AA10600	JUNTUNEN KIM M	291 NW 4TH ST	PRINEVILLE	OR	97754
151606AA10700	LYNN MARTIN	600 SW COLUMBIA SUITE 6150	BEND	OR	97702
151606AA10800	HOLLIS RON	2566 NE BUCKBOARD LN	PRINEVILLE	OR	97754
151606AA10900	GROAH DANNY & LINDA TRUSTEES	8620 RAMBLER DR NE	SILVERTON	OR	97381
151606AA11000	CROOK COUNTY	300 NE 3RD ST ROOM 10	PRINEVILLE	OR	97754
151606AA11100	CROOK COUNTY	300 NE 3RD ST ROOM 10	PRINEVILLE	OR	97754
151606AA11200	HOLLIS RON	2566 NE BUCKBOARD LN	PRINEVILLE	OR	97754
151606AA11300	HOLLIS RON	2566 NE BUCKBOARD LN	PRINEVILLE	OR	97754
151606AA11400	IVERSON BRYAN & RAMSAY SCOTT	PO BOX 249	PRINEVILLE	OR	97754
151606AA11500	CROOK CO P#29 AMERICAN LEGION	405 N MAIN ST	PRINEVILLE	OR	97754
151606AA11600	CROOK COUNTY POST 29 AM LEG	405 N MAIN ST	PRINEVILLE	OR	97754
151606AA11601	VETERANS CLUB	405 N MAIN ST	PRINEVILLE	OR	97754
151606AA11700	GROVER MISTIE & JEREMY	2358 NE QUAIL VALLEY DR	PRINEVILLE	OR	97754
151606AA11800	DICKEY ROBERT A & LAURIE	63462 VOGT RD	BEND	OR	97701
151606AA11900	DICKEY ROBERT A & LAURIE	63462 VOGT RD	BEND	OR	97701

151606AA12000	DICKEY ROBERT A & LAURIE	63462 VOGT RD	BEND	OR	97701
151606AA12100	DICKEY ROBERT A & LAURIE	63462 VOGT RD	BEND	OR	97701
151606AA12200	GOMBER BENJAMIN MAX	297 NW 5TH ST	PRINEVILLE	OR	97754
151606AA12300	MURRAY-WEAVER TREVIS & MORGAN NATALIE	267 NW 5TH ST	PRINEVILLE	OR	97754
151606AA12400	KEE KLEVELAND K	4393 NW GRIMES RD	PRINEVILLE	OR	97754
151606AA12500	CITY OF PRINEVILLE	387 NE THIRD ST	PRINEVILLE	OR	97754
151606AA12600	CITY OF PRINEVILLE	387 NE THIRD ST	PRINEVILLE	OR	97754
151606AA12700	CITY OF PRINEVILLE	387 NE THIRD ST	PRINEVILLE	OR	97754
151606AB01200	HELTON ROBERT J	498 NW FIFTH	PRINEVILLE	OR	97754
151606AB01400	JOHN C LIVINGSTON REVOCABLE TRUST	63580 GOLD SPUR WAY	BEND	OR	97703
151606AB02500	NEW LIFE BIBLE CHAPEL INC	510 NW 4TH ST	PRINEVILLE	OR	97754
151606AB02600	NEW LIFE BIBLE CHAPEL INC	510 NW 4TH ST	PRINEVILLE	OR	97754
151606AB02700	HOME FEDERAL BANK	PO BOX 30918	BILLINGS	MT	59116
151606AB02800	HOME FEDERAL BANK	PO BOX 30918	BILLINGS	MT	59116
151606AB02900	BANK OF THE CASCADES	PO BOX 30918	BILLINGS	MT	59116
151606AB03000	HOME FEDERAL BANK	PO BOX 30918	BILLINGS	MT	59116
151606AB03100	BANK OF THE CASCADES	PO BOX 30918	BILLINGS	MT	59116
151606AB03200	TRIPLE LINK INVESTMENTS LLC	3015 NW O'NEIL HWY	PRINEVILLE	OR	97754
151606AB03300	STET LLC	PO BOX 737	PRINEVILLE	OR	97754
151606AB03400	RODBY PAUL & KATHRYN	1960 KINGFISHER CIR	REDMOND	OR	97756
151606AB03500	SOS FAMILY LLC	1301 ESPLANADE AVE	KLAMATH FALLS	OR	97601
151606AB03501	SOS FAMILY LLC	1301 ESPLANADE AVE	KLAMATH FALLS	OR	97601
151606AB03700	TAYLOR ENTERPRISES INC	1960 KINGFISHER CIR	REDMOND	OR	97756
151606AB03800	ORR RAYE NELL & BOBBY R CO-TRUSTEE	1347 KAELYN CT	ORLAND	CA	95963
151606AB05400	MIYAZAKI SHERRI AND CLIFFORD	567 NW 2ND ST	PRINEVILLE	OR	97754
151606AB05500	HUTCHINSON BRIAN L	258 SE GREGORY DR	WINSTON	OR	97496
151606AB05600	FIVENINENINE LLC	801 NE ELM ST	PRINEVILLE	OR	97754
151606AB05700	LYNCH GREGORY P & LESLIE	1400 NE BARNES BUTTE RD	PRINEVILLE	OR	97754
151606AB06000	LYNCH BETTY ANNE	625 NW 2ND ST	PRINEVILLE	OR	97754
151606AB06100	BAXTER CHET JAY & JODI L	25490 ALFALFA MARKET RD	BEND	OR	97701
151606AB06200	SHOMION-BULLER HARRISON LOUIS	651 NW 2ND ST	PRINEVILLE	OR	97754
151606AB06300	MUIR SARAH ALYSON	675 NW 2ND STREET	PRINEVILLE	OR	97754
151606AB06400	DEAN ALISON E	PO BOX 745	PRINEVILLE	OR	97754
151606AB06500	HOLLIDAY PAUL C JR	699 NW SECOND ST	PRINEVILLE	OR	97754
151606AB06700	M & C DOHERTY LLC	13330 NE LAWSON RD	PRINEVILLE	OR	97754
151606AB06800	97754 REAL ESTATE LLC	7920 N QUAMISH DR	SPOKANE	WA	99208
151606AB07000	FAWBUSH JERI	600 NW 3RD ST	PRINEVILLE	OR	97754
151606AB07500	PORTERFIELD BRODY & HOPE MARIE	6283 NE BIRDSONG LN	PRINEVILLE	OR	97754
151606AB07600	MCALLISTER RICHARD	707 NW 2ND ST	PRINEVILLE	OR	97754
151606AB07700	SCANLON RONALD E	721 NW 2ND ST	PRINEVILLE	OR	97754
151606AB07800	GIBSON JASON I	735 NW 2ND ST	PRINEVILLE	OR	97754

151606AB07900	RALLS ALTA MAY	745 NW 2ND ST	PRINEVILLE	OR	97754
151606AB08000	MORGAN JOHN	3040 SE MORGAN BUTTE RD	PRINEVILLE	OR	97754
151606AB08100	HALL RICHARD L	765 NW 2ND ST	PRINEVILLE	OR	97754
151606AB08200	KELLAR TYLER AND ASHLEE	787 NW 2ND STREET	PRINEVILLE	OR	97754
151606AB08300	PRICE KRIS DANIEL & PRICE JESSICA	799 NW 2ND ST	PRINEVILLE	OR	97754
151606AB08400	PRICE KRIS DANIEL & PRICE JESSICA	799 NW 2ND ST	PRINEVILLE	OR	97754
151606AB08500	MINTER GLEN A	2607 BRIDGEPORT WAY W STE 1M	UNIVERSITY PLACE	WA	98466
151606AB08600	STET LLC	PO BOX 737	PRINEVILLE	OR	97754
151606AB08800	HAMMACK GILBERT M & JUDY F	850 NW 13TH ST	REDMOND	OR	97756
151606AB08900	HAMMACK GILBERT M & JUDY F	850 NW 13TH ST	REDMOND	OR	97756
151606AB09000	MORGAN JOHN	3040 SE MORGAN BUTTE RD	PRINEVILLE	OR	97754
151606AB09200	MORGAN JOHN	3040 SE MORGAN BUTTE RD	PRINEVILLE	OR	97754
151606AB09300	ANDERSON JANA L	PO BOX 1613	MCCALL	ID	83638
151606AB09400	HORNBACK MICHAEL & BRITTNEY	708 NW 3RD ST	PRINEVILLE	OR	97754
151606AB09500	TA INVESTORS LIMITED PARTNERSHIP	715 NW 3RD ST	PRINEVILLE	OR	97754
151606AB09600	PEER ROGER G & ELIZABETH J	1100 NE HUDSPETH LN	PRINEVILLE	OR	97754
151606AB09700	PEER ROGER G & ELIZABETH J	1100 NE HUDSPETH LN	PRINEVILLE	OR	97754
151606AB09800	HOWARD MARTY JR	747 NW THIRD ST	PRINEVILLE	OR	97754
151606AB09801	TWISS EVERT & SUZIE TRUSTEES	PO BOX 737	PRINEVILLE	OR	97754
151606AB10000	KELSO GREG	765 NW 3RD ST	PRINEVILLE	OR	97754
151606AB10100	RHODEN JERED AND RACHEL & RHODEN ENTERPR	9845 NW RYEGRASS WAY	PRINEVILLE	OR	97754
151606AB10300	KROPACEK LIVING TRUST	1964 SE MCKENZIE PL	PRINEVILLE	OR	97754
151606AB10400	KEPHART JAMES B & MANN AMELIA A	790 NW 4TH STREET	PRINEVILLE	OR	97754
151606AB10500	MALONE-DENTON KARRY L	8780 19TH ST 418	ALTA LOMA	CA	91701
151606AB10800	DRAPER FAMILY HOLDINGS LLC	750 NW 4TH ST	PRINEVILLE	OR	97754
151606AB10900	TRIPLE LINK INVESTMENTS LLC	3015 NW O'NEIL HWY	PRINEVILLE	OR	97754
151606AB11100	TA INVESTORS ET AL	715 NW THIRD ST	PRINEVILLE	OR	97754
151606AB11200	HOME FEDERAL BANK	PO BOX 30918	BILLINGS	MT	59116
151606AB11300	INSPIRIT PROPERTIES LLC	70 SW CENTURY DR STE 100-242	BEND	OR	97702
151606AB11400	INSPIRIT PROPERTIES LLC	70 SW CENTURY DR STE 100-242	BEND	OR	97702
151606AB11500	GOODMAN LARRY D	4900 NW O'NEIL HWY	PRINEVILLE	OR	97754
151606AB11600	GOODMAN LARRY D	4900 NW O'NEIL HWY	PRINEVILLE	OR	97754
151606AB11700	GOODMAN LARRY	4900 NW O'NEIL HWY	PRINEVILLE	OR	97754
151606AB11900	BURGER JERRY INSURANCE AGENCY LLC	687 NW 3RD ST	PRINEVILLE	OR	97754
151606AB12100	OUR SAVIOR'S LUTHERAN CHURCH		PRINEVILLE	OR	97754
151606AB12500	TRIPLE LINK INVESTMENTS LLC	3015 NW O'NEIL HWY	PRINEVILLE	OR	97754
151606AB12700	TRIPLE LINK INVESTMENTS LLC	3015 NW O'NEIL HWY	PRINEVILLE	OR	97754
151606AB13700	WARKENTIN BRADLEY R	PO BOX 7735	BEND	OR	97708
151606AB13701	VILES DANIEL	701 NW 4TH ST	PRINEVILLE	OR	97754
151606AB13900	HAMON RON	PO BOX 812	PRINEVILLE	OR	97754
151606AB14000	HAMON RON	PO BOX 812	PRINEVILLE	OR	97754

151606AB14100	BUDD RICHARD R	314 N CHRUCH ST	SILVERTON	OR	97381	
151606AC00199	CITY OF PRINEVILLE	387 NE THIRD ST	PRINEVILLE	OR	97754	
151606AD00100	RAMOS ANTHONY	101 S MAIN ST	PRINEVILLE	OR	97754	
151606AD00200	WOODWARD LUCY J	PO BOX 663	PRINEVILLE	OR	97754	
151606AD01300	WOODWARD LUCY J	PO BOX 663	PRINEVILLE	OR	97754	
151606AD01400	CITY OF PRINEVILLE	387 NE 3RD ST	PRINEVILLE	OR	97754	
151606AD01500	STAHANCYK JODY L	2400 SW 4TH AVE	PORTLAND	OR	97201	
151606AD01600	1ST STREET FRIENDS LLC	2400 SW 4TH AVE	PORTLAND	OR	97201	
151606AD01700	KEE H WAYNE KEE MOLLY A & KEE KADENCE A	2001 NW O'NEIL HWY	PRINEVILLE	OR	97754	
151606AD01800	STAHANCYK JODY L	2400 SW 4TH AVE	PORTLAND	OR	97201	
151606AD01801	SANDPIPER LLC	3074 NE STRIPLING CT	PRINEVILLE	OR	97754	
151606AD01900	STAHANCYK JODY LEE	2400 SW 4TH AVE	PORTLAND	OR	97201	
151606AD02000	HUNTINGTON HENRY C	304 W FIRST ST	PRINEVILLE	OR	97754	
151606AD02002	WEGER ALBERTA FLOY	1754 SE MELROSE DRIVE	PRINEVILLE	OR	97754	
151606AD02100	STANDLEY DONNA	873 SE 7TH ST	PRINEVILLE	OR	97754	
151606AD02200	KING MICHELLE S	150 SW DEER ST	PRINEVILLE	OR	97754	
151606BA00600	SPURLING ELVIN AND SANDY	317 NW LOCUST ST	PRINEVILLE	OR	97754	
151606BA00601	SPURLING ELVIN E	317 NW LOCUST ST	PRINEVILLE	OR	97754	
151606BA00700	SOLOMON AMANDA M	10517 SE QUAIL RIDGE DR	HAPPY VALLEY	OR	97086	
151606BA00800	FOUDY WILLIAM J JR	5100 RIDGE RD	EDINA	MN	55436	
151606BA00900	LEATHERS LIMITED PARTNERSHIP	255A DEPOT STREET	FAIRVIEW	OR	97024	
151606BA01100	REGINA PROPERTY LLC	1717 NW INDUSTIRAL PARK ROAD	PRINEVILLE	OR	97754	YES
151606BA01200	PRINEVILLE PREMIER LLC	3950 FAIRVIEW INDUSTRIAL DR SE 240	SALEM	OR	97302	
151606BA01300	PRINEVILLE PREMIER LLC	3950 FAIRVIEW INDUSTRIAL DR SE STE 24(	SALEM	OR	97302	
151606BA01400	KOMLOFSKE ROBERT L TRUSTEE	PO BOX 1547	PRINEVILLE	OR	97754	
151606BA01500	KOMLOFSKE ROBERT L TRUSTEE	PO BOX 1547	PRINEVILLE	OR	97754	
151606BA01600	KOMLOFSKE ROBERT L TRUSTEE	PO BOX 1547	PRINEVILLE	OR	97754	
151606BA01700	WEATHERLY RUSSELL G TRUSTEE	6218 SE RUGER RD	PRINEVILLE	OR	97754	
151606BA01800	EDCY FAMILY TRUST AMENDED 03/12/20 ET AL	208 ST FRANCIS CT	EL DORADO HILLS	CA	95762	
151606BA01801	EDCY FAMILY TRUST AMENDED 03/12/20 ET AL	208 ST FRANCIS CT	EL DORADO HILLS	CA	95762	
151606BA01802	EDCY FAMILY TRUST AMENDED 03/12/20 ET AL	208 ST FRANCIS CT	EL DORADO HILLS	CA	95762	
151606BA01900	WOODERSON BRETT L	834 SE AIRPARK DR	BEND	OR	97702	
151606BA02000	BOSTROM JENNIFER	905 NW 2ND ST	PRINEVILLE	OR	97754	
151606BA02100	TORRES LORENZO ET AL	PO BOX 552	TILLAMOOK	OR	97141	
151606BA02200	RUSTLERS INN PRINEVILLE LLC	PO BOX 1900	YUCCA VALLEY	CA	92286	
151606BA02300	RUSTLERS INN PRINEVILLE LLC	PO BOX 1900	YUCCA VALLEY	CA	92286	
151606BA02400	REMINGTON WILLIAM A JR & LISSA	8800 SW GEORGE MILLICAN RD	PRINEVILLE	OR	97754	
151606BA02500	WILKINS HOLDINGS LLC	976 NW 3RD ST	PRINEVILLE	OR	97754	
151606BA02600	WILKINS HOLDINGS LLC	976 NW 3RD ST	PRINEVILLE	OR	97754	
151606BA02700	WILKINS HOLDINGS LLC	976 NW 3RD ST	PRINEVILLE	OR	97754	
151606BA02800	CAPELL CARMEN A	760 NW ROANOKE AVENUE	BEND	OR	97701	

151606BA02900	BYUS DARLA	PO BOX 2298	PRINEVILLE	OR	97754	
151606BA03000	BYUS DARLA	PO BOX 2298	PRINEVILLE	OR	97754	
151606BA03100	K GRIFFEE LLC	6510 NE 213TH AVE	VANCOUVER	WA	98682	
151606BA03200	TALSMA KALIA S & ABBETT KAMEREN LEE	951 NW 2ND ST	PRINEVILLE	OR	97754	
151606BA03300	FLETCHER ANTHONY	945 NW 2ND STREET	PRINEVILLE	OR	97754	
151606BA03400	MORISETTE MANUFACTURING INC	1417 MURPHY CT	PRINEVILLE	OR	97754	
151606BA03401	RUSTLERS INN PRINEVILLE LLC	PO BOX 1900	YUCCA VALLEY	CA	92286	
151606BA03501	PRINEVILLE CITY OF		PRINEVILLE	OR	97754	
151606BA03600	HURLOCKER SHEILA	910 NW 2ND ST	PRINEVILLE	OR	97754	
151606BA03700	HURLOCKER SHEILA	910 NW 2ND ST	PRINEVILLE	OR	97754	
151606BA03800	RIO VISTA TOWNHOMES LLC	1200 WESTLAKE AVE N STE 310	SEATTLE	WA	98109	
151606BA03900	TIBBETT CHRLS & LAWRENCE & GARCIA GABRIE	4200 LYNWOOD DR	CHULA VISTA	CA	91910	
151606BA04000	TIBBETT CHRLS & LAWRENCE & GARCIA GABRIE	4200 LYNWOOD DR	CHULA VISTA	CA	91910	
151606BA04100	TIBBETT CHRLS & LAWRENCE & GARCIA GABRIE	4200 LYNWOOD DR	CHULA VISTA	CA	91910	
151606BA04200	BRANIN DENNIS	26965 W MOHAWK LN	BUCKEYE	AZ	85596	
151606BA04300	BRANIN DENNIS	26965 W MOHAWK LN	BUCKEYE	AZ	85596	
151606BA04400	CHEN JIAYI	987 NW 2ND STREET	PRINEVILLE	OR	97754	
151606BA04500	PRINEVILLE CITY OF	387 NE 3RD	PRINEVILLE	OR	97754	
151606BA04501	CHEN JIAYI	987 NW 2ND STREET	PRINEVILLE	OR	97754	
151606BB00100	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708	
151606BB00101	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708	
151606BB00200	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708	
151606BB00600	LS PROPDROP LLC	PO BOX 5350	BEND	OR	97708	
141524CC00102	RHODEN'S INVESTMENTS INC	PO BOX 460	PRINEVILLE	OR	97754	YES

RESOLUTION 1556
PRINEVILLE, OREGON

A RESOLUTION CONSENTING TO CROOK COUNTY ORDINANCE 338 AMENDING TITLE 9 OF CROOK COUNTY CODE, ADOPTING A NEW CHAPTER TO REDUCE INCIDENTS OF TRUANCY FROM CROOK COUNTY PUBLIC SCHOOLS

Whereas, the Crook County Court passed Ordinance No. 338, an Ordinance Amending Title 9 of the Crook County Code, Adopting a New Chapter to Reduce Incidents of Truancy from Crook County Public Schools ("Ordinance").

Whereas, to be applicable within the City of Prineville, Ordinance must be consented to by the City Council pursuant to ORS 203.040.

Now, Therefore, the City of Prineville Resolves as follows:

1. The City Council of Prineville hereby consents to Ordinance 338, attached to this Ordinance and incorporated herein, allowing Crook County jurisdiction regarding students in Kindergarten through 12th grades, enrolled in a full-time public school located within the incorporated City of Prineville.

Approved by the City Council this ____ day of May, 2023.

_____
Rodney J. Beebe, Mayor

ATTEST:

_____
Lisa Morgan, City Recorder

Crook County Official Records
Commissioners' Journal
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CJ2023-026
04/19/2023 3:38:58 PM

2023-026

I, Cheryl Seely, County Clerk for Crook County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.

Cheryl Seely - County Clerk

IN THE COUNTY COURT OF THE STATE OF OREGON
FOR THE COUNTY OF CROOK

AN ORDINANCE AMENDING TITLE 9 OF THE CROOK COUNTY CODE, ADOPTING A NEW CHAPTER TO REDUCE INCIDENTS OF TRUANCY FROM CROOK COUNTY PUBLIC SCHOOLS

ORDINANCE 338

WHEREAS, Oregon state law requires all minors enrolled in Kindergarten through 12th grades to attend school on a regular basis; and

WHEREAS, the Oregon Department of Education, via Oregon Administrative Rule 581-020-0631defines chronic absenteeism as missing 10 percent or more of school days; and

WHEREAS, chronic absenteeism has been shown to dramatically reduce student academic achievement, reduce graduation rates, increase student mental health issues, and increase incarceration rates; and

WHEREAS, as a metric, school districts are held accountable to maintain a high number of students enrolled in school who are not considered chronically absent; and

WHEREAS, attendance at school is the necessary basis for the most fundamental education for children, and such education is necessary for the continuing growth and progress of a healthy society, economy, and community; and

WHEREAS, the educational entities that comprise the Crook County School District desire to have a county-wide truancy program that endows law enforcement and school officials with the authority to issue infraction citations and take other action with regard to students and a student's parent, guardian or other responsible adult who fails to comply with school attendance requirements of State laws or rules.

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NOW, THEREFORE, the Crook County Court ordains as follows:

Section One: A new chapter is added to the Crook County Code to read as follows:

Chapter 9.05
Truancy from Crook County Schools

Sections:

9.05.010 Title

This chapter shall be known as "Truancy from Crook County Schools."

9.05.015 Authority and Purpose

(1) The Crook County Court has authority to regulate matters of County concern within the County, under the provisions of the Constitution of the State of Oregon and the revised statutes of the State of Oregon.

(2) This chapter applies to students in Kindergarten (K) through 12th grades, enrolled in a full-time public school located within Crook County, including the incorporated City of Prineville, the city council of which has consented pursuant to ORS 203.040.

(3) This chapter does not apply to students attending private schools located within Crook County.

(4) The purpose of this chapter is to create rules for enforcement procedures intended to reduce the incidents of truancy within public schools in Crook County. It is in the best interest of a student to attend school regularly and complete the educational courses of study.

9.05.020 Jurisdiction

The Crook County Circuit Court has jurisdiction and venue over infractions and proceedings in this chapter.

9.05.025 Definitions

(1) "Chronically Absent" or "Chronic Absenteeism" means a Student is not attending School for 10 percent or more School days in a School year.

(2) "Law Enforcement Official" means Crook County Sheriff Deputy, Prineville Police Officer, School Resource Officer, or any person that meets the definition of Peace Officer under ORS 161.015(4).

(3) "Public School in Crook County" or "School" means a full-time school operated by Crook County School District.

(4) "Responsible Adult" means a person at least eighteen (18) years of age, who is the parent, guardian, or other authorized adult to have the care or custody of a Student.

(5) "School Official" means any personnel appointed or designated by a School or the Crook County School District, including but not limited to principal, vice-principal, superintendent, resource officer, or truancy enforcement specialist.

(6) "Student" means a minor between the ages of 5-17 or an 18 year old person who has not completed the 12th grade and is enrolled in a Public School in Crook County.

9.05.030 Prohibited Conduct

(1) Except as otherwise provided herein, Students are required to attend School regularly. It is unlawful for a Student to be Chronically Absent from School as described in this chapter.

(2) Every Responsible Adult having the custody or care of a Student shall make every reasonable effort to assist the Student to comply with this chapter, and shall send the Student to School and maintain the Student in School so that the Student is not Chronically Absent.

(3) This chapter does not limit or supersede any provisions of Oregon law, which exempts certain children from compulsory school attendance (ORS 339.030); neither does this ordinance limit the duties, powers, and responsibilities of public school officials.

9.05.035 Proceedings

(1) A Law Enforcement Official or School Official may issue a citation to a Student and Responsible Adult for violating this chapter as set out in section 9.05.030, above.

(2) Prior to issuing a citation, a School Official shall provide the Student and Responsible Adult with written notification to include the following:

(a) The Student is required to attend School, and the Student is deemed Chronically Absent in violation of this chapter and Oregon Administrative Rule.

(b) The failure of a Responsible Adult to send the Student to School and maintain the Student in School so that the Student does not miss greater than 10 percent of School days is a violation of this chapter.

(c) The Student and Responsible Adult may be cited to the Crook County Circuit Court for Chronic Absenteeism under this chapter.

(d) The Student and Responsible Adult must attend a conference with a designated School Official on a specified date and time where expectations for the Student's regular attendance at School will be outlined.

(e) The Student and Responsible Adult have the right to request an evaluation if the Student is not on an individualized education program (IEP). If the Student is on an IEP, the right to request a review of the IEP.

(3) Following the notification and process in 9.05.035(2), above, if the Student remains Chronically Absent in violation of this chapter or the Student or Responsible Adult fails to attend the conference described in 9.05.035(2)(d), an infraction citation will be issued. The citation will direct the Student, if the Student is in grades 4 through 12, and the Responsible Adult to appear at the Crook County Circuit Court on a date and time certain.

(4) If a Responsible Adult fails to appear at the date and time on the citation, the Circuit Court shall continue the matter and issue an order to show cause for the Responsible Adult to appear. A warrant will be issued for the Responsible Adult who fails to appear at the show cause proceeding.

9.05.040 Penalties

(1) Order to Attend School. Upon finding a violation of this chapter, the Circuit Court shall order the Student to attend School and not miss 10 percent or more of School days; and order the Responsible Adult to send the Student to School and maintain the Student in School so that the Student misses fewer than 10 percent of School days.

(2) Conditions. In addition to the order to attend School, the Circuit Court will impose conditions the Student, Responsible Adult, or both must meet or comply with for violating this chapter. Conditions imposed by the Circuit Court may include, but are not limited to:

(a) Set future dates and times for the Student and Responsible Adult to personally appear and provide progress reports demonstrating the Student's proof of attendance, current grades, other School-related information requested by the Circuit Court, and compliance with other conditions, if any.

(b) At the expense of the Responsible Adult, order the Student, the Responsible Adult, or both, to complete age-appropriate and relevant classes, groups, or programs in Crook County or online, including but not limited to: a parent mentor program; support groups that promote mental, behavioral, and emotional wellness; Wraparound; job assistance; community and mental

health services; truancy intervention classes; and academic classes for the Student after School or on the weekend.

(3) Civil Penalty. Impose a civil penalty on the Responsible Adult for an initial infraction up to $500 for the first offense, and $500 for each subsequent offense.

(4) The Circuit Court, School Official, or a Law Enforcement Official will, when the circumstances warrant, refer a Responsible Adult to the Crook County District Attorney's Office for prosecution in Crook County Circuit Court under ORS 163.577(1)(c).

9.05.045 Separate Offense

Each violation of this chapter shall be deemed a separate offense.

9.05.050 Severability

In the event that any part of this chapter shall be held by a court of competent jurisdiction to be invalid or unenforceable, the remaining sections shall be unaffected and remain in full force and effect.

Section Two: If any court of competent authority invalidates a portion of this Ordinance 338, the remaining portions will continue in full force and effect.

Section Three: Ordinance 338 being immediately necessary for health, welfare, and safety of the people of Crook County, and emergency is hereby declared to exist, and this Ordinance 338 shall become effective upon signing.

First Reading: 4/5/23

Second Reading: 4/19/23

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Dated this 19th day of April, 2023

Judge Seth Crawford

Commissioner Jerry Brummer

Commissioner Brian Barney

Vote:	Aye	Nay	Excused
Seth Crawford	___	___	_____
Jerry Brummer	___	___	_____
Brian Barney	___	___	_____