



Oregon

Kate Brown, Governor

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Department of State Lands

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State Land Board

STATE LAND BOARD

May 9, 2017

10:00 am – 12:00 pm

Oregon Department of State Lands

Land Board Room

775 Summer St NE

Salem, Oregon

Kate Brown

Governor

Dennis Richardson

Secretary of State

Tobias Read

State Treasurer

AGENDA

2016 State Land Board Awards Presentation

Prior to the Land Board meeting, the Board will present the 2016 State Land Board Awards.

Consent Items

1. a. Request for approval of the minutes of the February 14, 2017 State Land Board meeting.
- b. Request for approval to initiate the review and determination of the direct sale of 0.4 acres of state-owned new lands in Coos County.

Action Items

2. Request for approval of the release of 46 acres of mineral and geothermal rights in Wheeler County.
3. Request for approval of the release of 1 acre of mineral and geothermal rights in Jackson County.
4. Request for approval to grant a 20-year easement for a fiber optic communication cable across state-owned submerged and submersible lands in the Territorial Sea in Tillamook County.
5. Status report on the Elliott State Forest Ownership Transfer Opportunity.

Note - Because of a full agenda, public comments on this item may be limited to 2 minutes or less. A total of 30 minutes will be allotted for the Elliott agenda item. Written comments are encouraged, and may be sent to elliottproject@state.or.us, by 5pm on Friday, May 5, 2017, or brought to the meeting for inclusion in the record. To speak at the meeting, you must sign up at the information table located outside the Land Board Room.

Continued on next page

Action Items (continued)

6. Annual report on Common School Fund investments and distributions.

Informational Items

7. Oregon Department of Forestry's annual report on the management of Common School Forest Lands.
8. Annual report on the Common School Fund Real Property program for fiscal year 2016.
9. Other.

This meeting will be held in a facility that is accessible for persons with disabilities. If you need assistance to participate in this meeting due to a disability, please notify Lorna Stafford at (503) 986-5224 or lorna.stafford@state.or.us at least two working days prior to the meeting.

Public Testimony - The State Land Board places great value on information received from the public. The Board accepts both oral and written comments on **consent and action agenda items only**.

When providing testimony, please:

- Provide written summaries of lengthy, detailed information
- Recognize that substance, not length, determines the value of testimony or written information
- Endorse rather than repeat the testimony of others

Written comments may be submitted before or during the meeting for consideration by the Board. To speak at the meeting, you must sign in on the sheet provided at the information table located near the meeting room's entrance. The Board cannot accept testimony on a topic for which a public hearing has been held and the comment period has closed.



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State Land Board

M E M O R A N D U M

Kate Brown
Governor

Date: May 9, 2017

Dennis Richardson
Secretary of State

To: Governor Kate Brown
Secretary of State Dennis Richardson
State Treasurer Tobias Read

Tobias Read
State Treasurer

From: Jim Paul
Director

Subject: 2016 Land Board Awards

Background Information

This is the 13th year of presenting State Land Board Awards. Since 2004, the board has given 29 awards for exceptional wetland, stream and partnership projects, and to one exemplary lessee.

The geographic representation of award winners spans the state: Wallowa County, the Central Coast, Charleston/Coos Bay, Wilsonville, Eugene, Klamath County, Brownsville, North Central Oregon, Deschutes County, Astoria, Columbia County, Portland Metro, Mt. Hood National Forest, Corvallis and Oakland, Oregon.

Awards have gone to watershed councils, private landowners, a port, small nonprofits, mitigation bankers, large environmental organizations, cities, and county law enforcement organizations. Most awards honored projects that were supported by an array of partnerships and funding sources.

The awards this year feature the work of Pacific Northwest glass artist Ann Cavanaugh.

We are presenting two **Stream Project Awards** for projects completed in 2016:

The **Catherine Creek Fish Habitat Restoration Project** was developed to restore floodplain processes and functions along a one-mile reach of Catherine Creek in northeast Oregon. The co-sponsors of the project – the Confederated Tribes of the Umatilla Indian Reservation (landowner) and the Union Soil and Water Conservation

District – worked with a variety of regional organizations to enhance spawning and rearing habitat for spring-summer Chinook salmon, summer steelhead, bull trout, and resident fish and wildlife.

The project had several sustainable stewardship goals, including:

- Protection of 545 acres through land acquisition and establishment of a permanent natural resource conservation easement.
- Purchase, protection and instream dedication of 1.075 cfs of Catherine Creek senior water right to contribute to improved summer based flow conditions for aquatic resources.
- Development of a stewardship funding agreement to provide long-term management resources, and a management plan for permanent natural resource protections.
- Establishment of monitoring protocols that include habitat surveys and photo points.

The project area is located in a property acquired through the Confederated Tribes of the Umatilla Indian Reservation (CTUIR)/Bonneville Power Administration Accord for fish conservation. This property presented the largest and most significant opportunity to expand, create and enhance core spawning and rearing habitat for fish. By restoring floodplain and watershed processes, riparian vegetation and connectivity among habitats, the project will help ensure sustainable “first foods” for tribal members, as well as provide improved ecosystem services for the watershed and community.

The Catherine Creek project planning team was composed of biologists from the CTUIR, Oregon Department of Fish and Wildlife, Bureau of Reclamation, and Union Soil and Water Conservation District. Funding partners included Bonneville Power Administration (through the Grande Ronde Model Watershed), Bureau of Reclamation, Natural Resources Conservation Service, Oregon Watershed Enhancement Board, and Western Rivers Conservancy.

The **Wallowa River/6 Ranch Habitat Restoration Project II** restored 1,800 lineal feet of the Wallowa River in northeast Oregon to a more historic and natural condition, with functioning wetlands, activated floodplain and a stable stream channel. The Wallowa County Salmon Habitat Recovery Plan had identified this stretch of the river as deficient for habitat, water quality and stream function.

A public-private partnership was formed to implement the project, involving the 6 Ranch landowner; technical assistance from the Grande Ronde Model Watershed, the Oregon Department of Fish and Wildlife, the Nez Perce Tribe and the Natural Resources Conservation Service; and funding and design assistance from the Bonneville Power Administration, the Oregon Watershed Enhancement Board and the U.S. Fish and Wildlife Service.

The project involved a willing ranch owner with a vision for restoring healthy river habitats. According to landowner Liza Jane McAlister, 6 Ranch's goals for this and other large-scale restoration projects are "responsible stewardship, preservation of western ranching traditions and production of healthy food."

The design of the project uses an unconventional grazing management plan that will use high-intensity, short-duration grazing to control invasive Reed Canary Grass and promote desirable grasses and shrub species. The concept, not common in the stream restoration community, will allow the landowner and project partners to demonstrate that ranching and restoration can co-exist.

APPENDIX

A. Remarks



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State Land Board

The State Land Board met in regular session on February 14, 2017, in the Land Board Room at the Department of State Lands, 775 Summer Street NE, Salem, Oregon.

Present were:

Kate Brown
Dennis Richardson
Tobias Read

Governor
Secretary of State
State Treasurer

Kate Brown
Governor

Dennis Richardson
Secretary of State

Land Board Assistants

Jason Miner
Steve Elzinga
Chelsea Brossard

Governor's Office
Secretary of State's Office
State Treasurer's Office

Tobias Read
State Treasurer

Department Staff

Jim Paul Bill Ryan Cyndi Wickham Julie Curtis Chris Castelli
Linda Anderson Lorna Stafford Sabrina Foward Anne Friend

Department of Justice

Matt DeVore
Chris Matthews

Governor Brown called the meeting to order at 10:10 a.m. The topics discussed and the results of those discussions are listed below.

Governor Brown congratulated and welcomed the two new Board members, Secretary of State Dennis Richardson and State Treasurer Tobias Read. Secretary Richardson introduced his staff, Steve Elzinga, who assists him on government and legislative matters. Treasurer Read introduced his assistant, Chelsea Brossard, the Treasurer's Policy Director.

Governor Brown also noted that it was Oregon Statehood Day.

CONSENT AGENDA

1. a. **Request for approval of the minutes from the December 13, 2016 State Land Board meeting.**
 - b. **Request for approval to initiate the review and determination of the potential sale of approximately 40 acres of state-owned filled lands in Multnomah County.**

Director Paul reviewed the items on the consent agenda. He explained that on item 1b, if approved, the Department will begin the due diligence process to determine whether or not to make a recommendation to the Board for the sale of the parcel. If a sale is recommended, the item will come back before the Board for final approval.

Treasurer Read made a motion to approve the consent agenda. There were no objections to his motion. The consent agenda was approved.

Action Items

2. Request for approval to grant a 20-year easement for a fiber optic communication cable across state-owned submerged and submersible lands in the Territorial Sea in Tillamook County.

Director Paul explained that an easement would be issued to Microsoft Infrastructure, LLC to install a new trans-pacific undersea fiber optic cable system linking the United States to Asia. Microsoft proposes to pay \$300,000 to satisfy the just compensation requirement for the use of state-owned land and for the initial 20-year term of the easement. The Department received one comment during public review. The comment was from the Oregon Department of Fish and Wildlife (ODFW) regarding the timing of the proposed construction, which would occur during the typical migration period of the grey whale, a state endangered species. Microsoft Infrastructure LLC has addressed ODFW's concerns, which were included in the Board's meeting materials.

Terry Thompson, representing the Oregon Fishermen's Cable Committee (OFCC) provided comments to the Board. He told the Board that Oregon's fishing industry and the undersea cable industry have a great relationship. The two groups work together to bury cables in order to fish over them. Since OFCC's inception, there has never been a cable break off the Oregon coast. He said that trawlers from the Columbia River and Newport laid out the route for the Microsoft cable. He added that Microsoft has become a board member of the OFCC, which is a positive thing for Oregon.

Treasurer Read made a motion to approve the granting of a 20-year easement to Microsoft Infrastructure, LLC for a fiber optic communication cable across state-owned submerged and submersible lands within and adjacent to the territorial sea landing near Pacific City in Tillamook County.

There were no objections to the motion. The item was approved.

3. Request for approval to quitclaim approximately 1.54 acres of submerged and submersible land to The Marine Salvage Consortium in Multnomah County.

Director Paul provided information on the history of ownership of the parcel. He explained that looking back over prior transactions with the property, it was never clarified that the parcel was transferred from state ownership to the subsequent owner, who later transferred it to another entity. Director Paul said that the proposed quitclaim will clarify and formalize acknowledgement of legal ownership of the submerged and submersible lands between the line of ordinary low water and the line of ordinary high water at this location. He added that staff and attorneys working on the Portland Harbor Superfund cleanup effort agree that an exchange of quitclaim deeds will mutually benefit both parties.

Treasurer Read made a motion to approve the granting of a quitclaim deed to The Marine Salvage Consortium to clear title of the state's ownership of the submerged and submersible lands at the surveyed 1973 Mean Ordinary Low Water Line.

There were no objections to the motion. The item was approved.

Informational Items

4. Elliott Property Ownership Transfer Opportunity Status Report.

Senate President Peter Courtney provided comments to the Board. He told the Board that he believes the Elliott State Forest should remain in public ownership. He said public ownership is

the only way to guarantee the necessary protections of the sensitive and fragile elements that exist in the Elliott. He suggested that if any bonding is to be involved, that the Board considers revenue bonds. He explained that revenue bonds have to identify a source of funding to pay for the bonds. He acknowledged that the issue is a very difficult and sensitive one and that using lottery bonds may not be possible due to budget constraints.

Secretary Richardson asked if revenue bonds were used to purchase the forest, what source of revenue would be used to pay off the bonds?

President Courtney provided logging and developing parks as possible options. He said all potential revenue sources should be explored.

Director Paul discussed the work that has been done since the December 13, 2016 Land Board meeting. Staff worked with the proposers to clarify the gaps, ambiguities and uncertainties and have confirmed that the proposal is sufficient to demonstrate responsiveness to the protocol. He stated that the next step is initiating negotiations with the proposers and moving forward with the protocol, unless the Board directs the Department otherwise.

Governor Brown asked, if the Board moves forward under the protocol, is the one proposal their only option available?

Director Paul said that under the terms of the protocol, including the supplements, the next steps, unless directed otherwise, would be to proceed with negotiations towards a purchase and sale agreement with the intent of executing the sale. The protocol, as currently written, does not call for the sale coming before the Board again.

Governor Brown asked Director Paul what changes have occurred since the decision was made to enter into the protocol.

Director Paul noted that it has been 18 months since the protocol was adopted and another 18 months of work prior to that. He mentioned two changes that occurred. One was the market value for the forest. In August 2015, the best estimate was between \$280 million and \$410 million. Staff used a median value of \$360 million in documentation, prior to the appraisal. In July of 2016, a thorough appraisal process was completed. A timber cruise of over 18,000 plots was conducted. In addition, three independent appraisers conducted appraisals on the property and provided them to an appraisal consultant who reviewed the three appraisals and determined a single appraised, fair market value for the property. The appraised value came to \$220.8 million. This value was somewhat lower than previously expected.

Another change is the potential to use up to \$100 million in bonding for the purchase. Up to this point, there was no mention of bonding as a possible part of the solution.

Governor Brown added that there was a net revenue gain in 2016, which is also a change from recent years.

Director Paul said that there are preliminary numbers out for 2016. The Department of Forestry's annual report will be presented at the April 11, 2017 meeting. He said estimates show that there is a positive revenue stream for fiscal year 2016 of \$1.3 million.

Governor Brown said she wanted to be sure that Oregonians have the opportunity to have their voices be heard about the outcome of the Elliott during the process. She reiterated her appreciation to Lone Rock Timber Management, the Cow Creek Band of Umpqua Indians, the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians and The Conservation

Fund. She said that after hearing from Oregonians over the past couple of years, it is clear that it is in the best interest of Oregonians to ensure public ownership of the Elliott State Forest for future generations. She said the appraised value was surprisingly low and that retaining the forest as a state asset is the proper exercise of the fiduciary responsibility of the state. She said public access is critical for Oregonians. She said that the Board hoped to have more than one proposal to consider. In addition, she has heard in recent conversations that the terms of the protocol were too restrictive and the timeline was too short. Governor Brown added that the importance of state-owned land has increased as the future of federal public lands has come into question. And, Oregon is still not on track to meet its climate goals. Governor Brown said she supports the Elliott State Forest remaining in public ownership with either the state or the tribes owning or partnering to own the land. Governor Brown reiterated her proposal of up to \$100 million in state bonding capacity to protect critical habitats, including riparian areas, steep slopes and old growth stands. The investment would go toward the Common School Fund to decouple a portion of the forest from the Fund. She proposes to enter into negotiations with the federal services to obtain a habitat conservation plan for the remainder of the forest to allow for sustainable timber harvesting. She said the average harvest under this proposal would be about 20 million board feet per year over the long term. Governor Brown added that she is committed to working with the tribes to partner with them to manage their ancestral lands, while protecting the Common School Fund.

Governor Brown stated that she believes the Board should end the protocol while continuing conversations with tribes, Lone Rock and others about the future of the forest.

Treasurer Read asked Director Paul about the projected revenue gain for 2016, and to what he would attribute it to.

Director Paul explained that at the start of fiscal year 2016 when the protocol was approved, staff began discussions with the Department of Forestry regarding the management of the forest moving forward. At that time, there were a discreet number of timber sales that were still possible to carry out under the current management approach. Prior to the decision to move forward with the protocol, projected revenues hovered around zero and the potential sales were spread out over a longer period of time. Director Paul speculated that since the protocol was put in place, the timber sales were compressed into a shorter period of time allowing for more revenue to be generated. He said that a date was set about a year ago to have all timber sale activity completed by March 2017. He added that revenue of \$1.3 million can equate to just one or two timber sales on the Elliott.

Treasurer Read asked Director Paul to elaborate on how the gaps, uncertainties and ambiguities were resolved.

Director Paul explained that clarification regarding public access, older forest structure, riparian area protections and enforceable mechanisms was needed. Regarding public access, the proposers have included an addendum to their proposal that ensures public access on at least half of the forest in perpetuity. And, he said that the proposers have verbally expressed intent to provide access above and beyond that. Regarding older forest structure, the original proposal discussed the ability to review where older forest structures are protected and the potential for those areas to move over time. The proposers have provided additional information showing that they will define older forest structure, in a measurable way, so that it can be shown at any point in the future, that there is always twenty-five percent of older stands on the forest. Regarding riparian areas, it was unclear what these would look like beyond the required 100 feet under the Forest Practices Act (FPA). The proposers have confirmed that buffers would exceed FPA requirements up to 120 feet. Regarding the enforceable mechanisms, agreement was reached in concept of the state having the ability in the future to step in, if appropriate, to

take action to ensure easements are enforceable. The concept will be developed further as negotiations progress.

Treasurer Read said the question is how to protect the public interest while meeting the Board's fiduciary obligation to the Common School Fund. He said the question of public ownership is a proxy of public interest, which includes public access and conservation. He said it also includes the Board's obligation to manage trust lands in a way that benefits schoolchildren now and into the future and to right some historic wrongs in terms of restoring land to the state's native peoples. He asked if there is a way to balance these competing interests. He noted that he was not a part of prior Boards' decision-making and is now asked to assess that process. He said the Board affirmed the process previously believing that it was the best way to attempt to reach that balance. He said he feels strongly that the proposal is responsive and he cannot cast it aside. He believes it is the best and most realistic proposal in front of the Board. Treasurer Read said he supports moving forward with the protocol but with some proposed additions.

Governor Brown asked if the Board has the ability to change the current protocol.

Governor Brown called a recess in order for staff and Board members to individually consult with legal counsel.

Governor Brown called the meeting back to order at approximately 12:15 p.m.

Assistant Attorney General Matt DeVore told the Board that they can amend the protocol, but noted that it was a lengthy process to develop the protocol in the first place. He said his concern is that without knowing what the amendment is, there is the potential that it could be inconsistent with the protocol. He suggested that, if an amendment is agreed to, there also be a statement included that gives the director the authority to use his discretion to reconcile any possible inconsistencies or contradictions within the protocol.

Governor Brown asked for an estimate of how long it took to develop the protocol.

Mr. DeVore told the Board it took months to develop.

Treasurer Read made a motion to continue with the protocol with amendments to include in any negotiated purchase and sale agreement:

1. The ability for the state to repurchase by June 30, 2018, or up to 90 days after a transfer was completed, up to \$25 million in acreage land from the LLC for key conservation habitat. And, if the legislature approves those funds, the acreage would allow continued access for recreation, hunting, angling and other forms of public access. It could be in the form of a state park or wildlife management area and would require additional direction from the legislature, if they decide to appropriate those funds.
2. Inclusion of Forest Stewardship Council (FSC) principles and criteria as a component of the purchase and sale agreement; and prioritize that inclusion in the management of older tree stands. The Department will work with the proposers to clarify the protections that exist for old growth stands that are older than 250 years. And, in order to keep the Common School Fund whole, the Department can use any unexpended funds from the \$25 million of bonding to secure additional enhancements of the existing conservation measures that are already part of the protocol.
3. A right of first refusal for the five federally recognized western Oregon tribes for any lands that the LLC might decide to sell after the transfer.

Secretary Richardson discussed the history of the Common School Fund and the purpose of the Elliott State Forest. He explained that the Elliott is a land trust for the purpose of supporting education and the members of the Land Board are the Trustees over the Trust. He added that the Board's responsibility is to ensure an undivided loyalty to the Common School Fund and to public education. He said he would not have voted to sell the Elliott because he thinks the established price is too low. He remarked that there were forty-nine organizations that expressed interest in submitting a proposal, but only one was submitted. He said the proposers spent over \$500,000 over the last 18 months complying with the protocol and the Department has spent over \$3.5 million. He said he believes it would be unethical to cancel the protocol at this time. He said he feels he is in a very difficult position because he is not in favor of selling the forest and would not have voted for selling it. But, as a trustee of the Common School Fund he feels the Board should follow through with the protocol as previously agreed upon by the Land Board and to fulfill the fiduciary duty of the Board. He added that, if the \$220.8 million had been invested over the past three years, it would have generated \$54 million for the Common School Fund.

Secretary Richardson said he appreciated Treasurer Read's attempt to balance and protect the assets in the forest with his proposed modification to the protocol.

Governor Brown asked what the Board's legal obligation to the protocol was at this time.

Director Paul asked Assistant Attorney General Chris Matthews to address the question.

Mr. Matthews told the Board that there has not yet been an offer of sale made. The process to date has been to identify a potential ownership transferee. The next steps include the Department making an offer of sale and negotiation of a purchase and sale agreement. It is made clear in the protocol that, until the time that both the State and proponents sign a mutually negotiated purchase and sale agreement, which has not been created yet, the Land Board may terminate the protocol at any time.

Governor Brown said that she was opposed to amending the protocol on the fly. She said the protocol took several months to develop with extensive legal consultation and careful consideration. She suggested that the Board end the protocol in order to discuss other proposals being offered. She said she believes there needs to be a public option on the table.

Treasurer Read clarified that the protocol does not prevent the legislature from taking action between now and the time when a purchase and sale agreement might be completed so that a public ownership option might be considered.

The Board took public comment on the issue.

Governor Brown asked the proposers if they would like to address the Board.

Chief Warren Brainard with the Coos, Lower Umpqua and Siuslaw Indians told the Board that he understands the difficult decision they have before them. He said that because these lands are their traditional home land, the tribes are interested in anything that goes on in the area and they will continue to participate no matter what is decided upon.

Treasurer Read restated his previous motion. He added that he is not happy with this action, but it is his best attempt to try to balance what he views is his obligation as a fiduciary to the trust.

Governor Brown added that the amendment also provides the director with the discretion to address any contradictions the amendments may have with the existing protocol.

Governor Brown asked for a vote.

Treasurer Read and Secretary Richardson both voted yes. Governor Brown voted no. The motion was approved.

Governor Brown said that she does not believe the Board should be bound to a single proposal and she directed the Department and Director Paul to consider a public ownership option going forward and to present the results at the next State Land Board meeting.

Secretary Richardson made a motion to override the direction since it was contrary to the motion that was just passed by the Board.

Governor Brown said it was not contrary and asked if there was a second to the motion. There was no second to the motion.

Governor Brown adjourned the meeting at 1:05 p.m.

Kate Brown, Governor

James T. Paul, Director



Oregon

Kate Brown, Governor

Department of State Lands

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State Land Board

State Land Board

Kate Brown

Governor

Regular Meeting

May 9, 2017

Agenda Item 1b

Dennis Richardson

Secretary of State

Tobias Read

State Treasurer

SUBJECT

Request for approval to initiate the review and determination of the sale of state-owned filled lands, created in 1988 through Removal-Fill Permit 3341 in Coos County to the adjacent riparian property owner.

ISSUE

Whether the State Land Board should authorize the Department to initiate the review and determination of the potential sale of approximately 0.4 acres of state-owned filled lands (Appendix A).

AUTHORITY

Oregon Constitution, Article VIII, Sections 2 and 5; pertaining to the Common School Fund and land management responsibilities of the State Land Board.

ORS 273.055; relating to the power to acquire and dispose of real property.

ORS 273.171; relating to the duties and authority of the Director.

ORS 273.281 relating to the payment for state lands.

ORS 274.915; relating to the sale, lease or trade of submersible and submerged lands.

OAR 141-068; relating to the identification, notification, sale and exchange, clearing title, or reservation of historically filled lands, and approval to create, sell, exchange or reserve new lands.

SUMMARY

In 1988, the Department requested State Land Board approval for the filling and sale of 0.4 acres of submerged state-owned land (Appendix B). The proposed sale was to Crescent City Marine Ways and Drydock, Inc., for lands that went beyond this entity's

deeded tideland ownership in Township 25 South, Range 12 West, Sections 30 & 31, Tax Lot 400. This request to create and sell new lands was approved under Removal-Fill Permit 3341 by the Land Board on July 29, 1988.

In 2016, the waterway lease held by Sause Bros. adjacent to their upland riparian ownership was due for renewal, which included the lands created under the 1988 Removal-Fill permit. As a result of the renewal process, Department staff discovered that these filled lands created in 1988 were never in-fact purchased by Crescent City Marine Ways and Drydock, Inc.

The applicant (Sause Bros.) was also unable to produce a record of conveyance of the filled lands, so the Department informed the applicant that the lands needed to either be purchased or leased under a Special Use Lease. In January 2016, Sause Bros. submitted an application for purchase of these filled lands with a survey of the associated area per the Department's request.

Upon approval of this agenda item, the Department would initiate the formal due diligence process to compile the information needed towards a potential future decision on whether or not to sell this filled land parcel. As part of this due diligence, letters are sent to any other adjacent landowners and lessees (if any) to inform them of the potential sale. Local, state and federal agencies and tribal interests will also be notified. Any significant concerns identified as a result of the public review notices will be thoroughly evaluated and thoughtfully considered prior to moving forward with a recommendation on the sale process.

After comments are received from the public and other agencies, and following other additional due diligence work, the Department will determine whether or not to recommend the sale of this parcel. If such a recommendation is made, it will be brought to the State Land Board at a future public meeting.

RECOMMENDATION

The Department recommends that the State Land Board authorize the Department to initiate the review and determination of the potential sale of approximately 0.4 acres of state-owned filled lands in Coos County.

APPENDICES

- A. Map of the parcel
- B. 1988 Land Board agenda item

State of Oregon
Department of State Lands



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

EXHIBIT A - Sause Bro's Inc.

58761-LS New Lands Sale Application
T25S, R12W, Sec's 30 & 31, Tax Lot 400
0.4 Acres
Coos County

	New Lands Sale Area
	Tax Lot 400

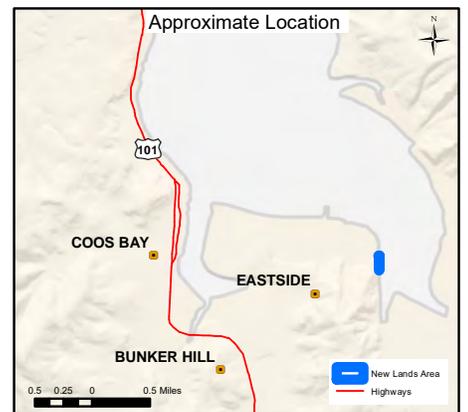
This map depicts the approximate location and extent of a Department of State Lands, Land Management Division authorization for use. This product is for informational purposes only and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

0.02 0.01 0 0.02 Miles



Map Projection:
Oregon Statewide Lambert
Datum NAD83
International Feet

State of Oregon
Department of State Lands
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September 15, 2016





Division of State Lands

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OREGON STATE
LAND BOARD

NEIL GOLDSCHMIDT
Governor

BARBARA ROBERTS
Secretary of State

ANTHONY MEEKER
State Treasurer

S T A T E L A N D B O A R D

Regular Meeting
July 29, 1988

Agenda Item 3 j

SUBJECT

Request to fill state-owned submerged land in Coos County.

ISSUE

Whether the Land Board should approve the request of Crescent City Marine Ways and Drydock Company, Inc. ("Crescent City") to create and purchase 0.40 acres of new lands in Coos Bay by filling upon state-owned submerged land and what the purchase price of the new lands should be.

AUTHORITY

ORS 274.905 - 274.940, providing for Land Board approval of requests to create and purchase new lands on state-owned submerged and submersible lands.

SUMMARY

Crescent City requests Land Board approval to create a fill of 0.40 acres at the confluence of South Coos Bay and Catching Slough near Eastside east of the town of Coos Bay. See map attached as Appendix A. The requested fill is to improve the waterfront so that barges can be moved along a bulkhead in conjunction with a barge construction and repair facility. The project would involve placement of approximately 15,000 cubic yards of material pursuant to the division's removal-fill permit no. 3341 (Appendix B).

Crescent City is a Sause Bros. Ocean Towing Company subsidiary. Stockholders of Sause Bros. also own Willamette Leasing Company, which is the upland (riparian) owner of record at the site to be filled. Although Crescent City will be constructing the fill, the parties involved have requested that the deed be issued to Willamette Leasing Company, which is apparently paying for the fill. See Appendix C.

Division staff have calculated a reasonable purchase price for this 0.40 acres of new lands to be approximately \$3,700.00, with the final purchase price to be determined upon survey after completion of the fill. The valuation method is shown in Appendix D. Crescent City has agreed to this value.

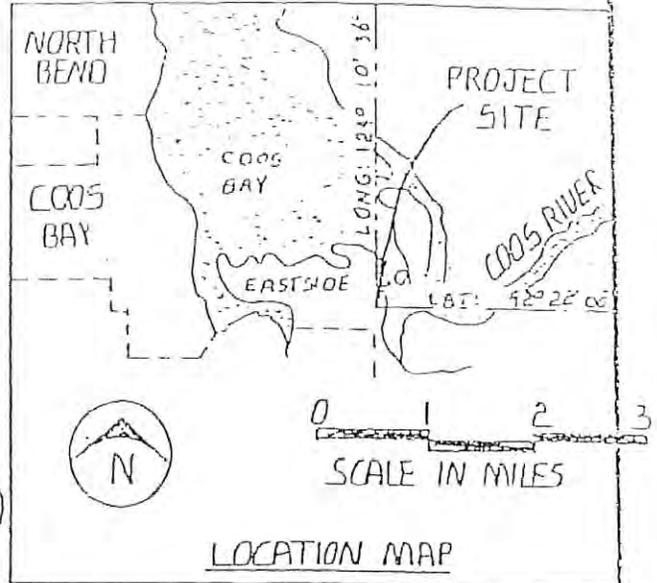
RECOMMENDATION

The division recommends that the Land Board approve Crescent City's request to fill and purchase 0.40 acres of new land and that the Land Board issue a deed for the new lands in exchange for payment of approximately \$3,700.00, with the final purchase price to be determined upon survey after completion of the fill.

APPENDICES:

- A. Map
- B. State Fill Permit No. 3341
- C. Letter from Crescent City Marine Ways & Drydock Company, Inc.
- D. Value Determination Worksheet

PORT OF COOS BAY

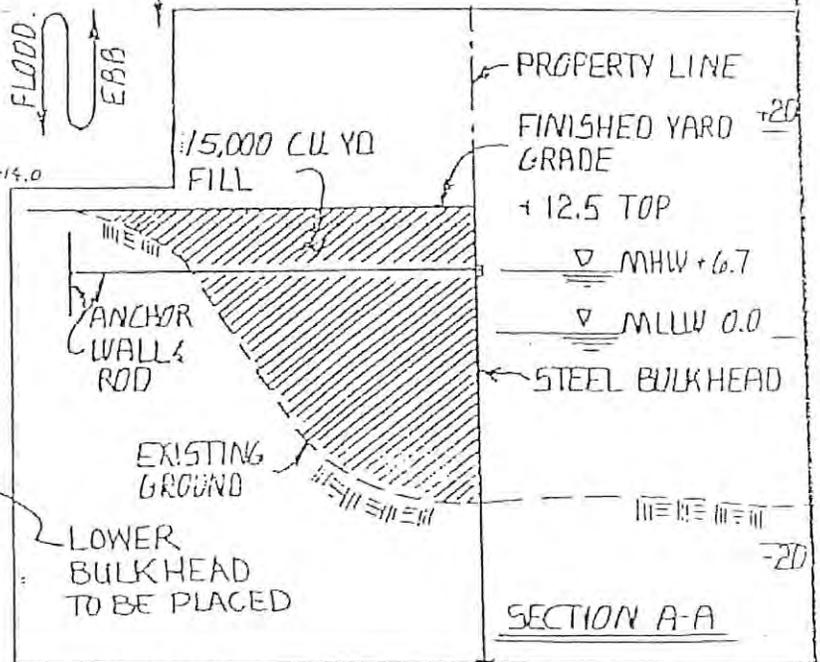
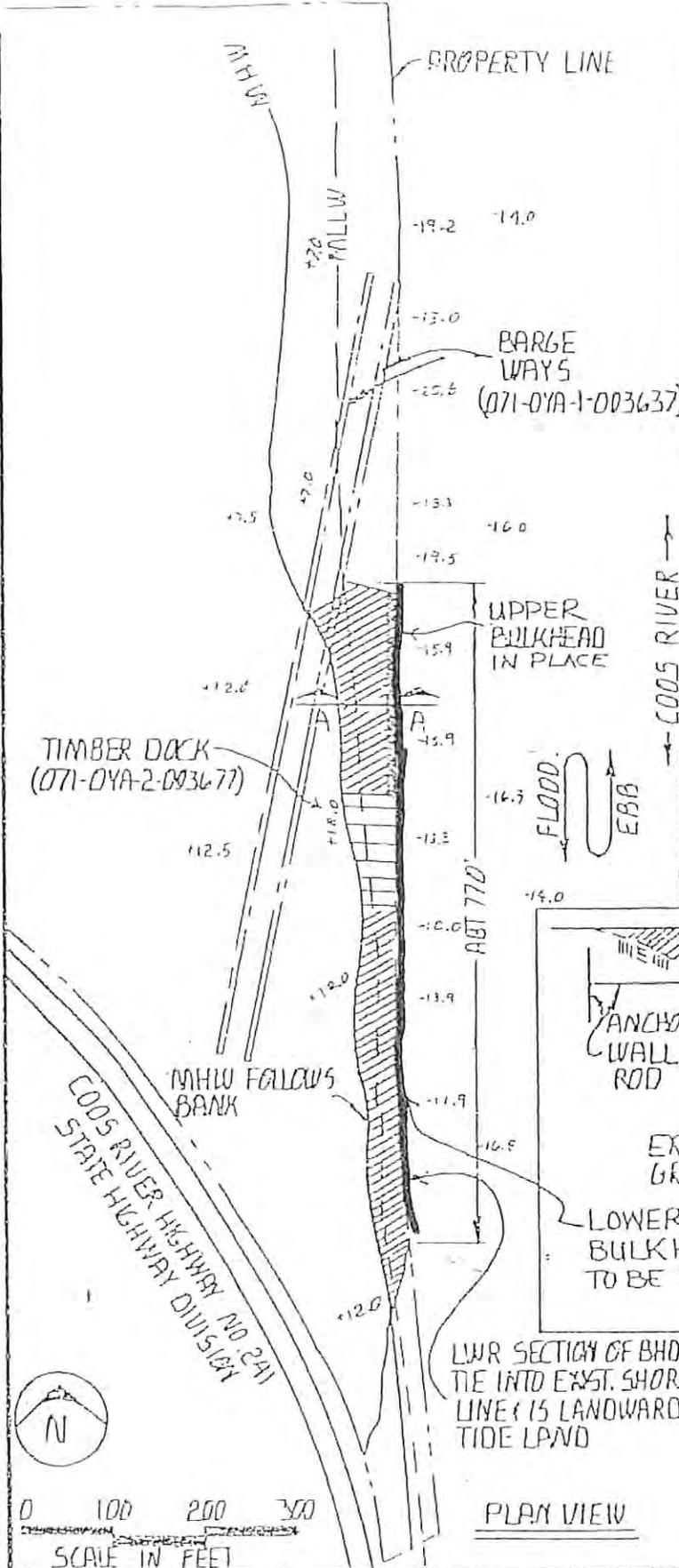


PURPOSE: BARGE CONSTRUCTION & REPAIR FACILITY

DATUM: MLLW

ADJACENT PROPERTY OWNERS:

1. PORT OF COOS BAY
2. STATE HIGHWAY DIVISION



PROPOSED BULKHEAD
COOS RIVER (MILE 2.0)
COUNTY OF COOS, STATE OF OREGON
APPLICATION BY CRESCENT CITY MARINE
WAYS & DRYDOCK CO.
DATE 11 JULY 1980 (REV. 3 DEC. 1986)
SHEET 1 OF 1



Oregon

Kate Brown, Governor

Department of State Lands

775 Summer Street NE, Suite 100

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State Land Board

State Land Board

Kate Brown

Governor

Regular Meeting

May 9, 2017

Agenda Item 2

Dennis Richardson

Secretary of State

Tobias Read

State Treasurer

SUBJECT

Request from Carl Kintz to acquire the subsurface mineral and geothermal rights on approximately 46 acres of property located in Wheeler County.

ISSUE

Whether the State Land Board should authorize the release of approximately 46 acres of mineral and geothermal rights held by the State Land Board located in Wheeler County (Tax Lot 1301, T7&8S, R25E, W.M., Sections 33 and 4).

AUTHORITY

Oregon Constitution, Article VIII, Sections 2 and 5; pertaining to the Common School Fund and land management responsibilities of the State Land Board.

OAR 141-067-0320; relating to procedures for the sale, exchange, or release and transfer of mineral and geothermal resources.

SUMMARY

On August 15, 2016, the Department received an application from Carol L. Dumler for the release of approximately 46 acres of mineral and geothermal rights held by the State Land Board below her surface ownership (Appendix A). This mineral release request received initial State Land Board approval to conduct due diligence in October of 2016. The surface ownership has since sold to Carl Kintz, who is still interested in purchasing the minerals.

This state-owned mineral ownership is part of a larger 900-acre contiguous block of state-owned minerals. The Department obtained a mineral assessment of all 900 acres, and the Department of Geology and Mineral Industries (DOGAMI) subsequently wrote a mineral release report (Appendix B) for the approximately 46 acres requested, assessing the mineral and geothermal resource potential. DOGAMI has found that

there is no or low potential for significant mineral or geothermal resources existing on the site and sees no conflicts or concerns in releasing these mineral rights to the surface owner. On this basis, the Department recommends the release and transfer of the mineral and geothermal resources in the long-term, best interest of the Trust (Common School Fund).

The total cost of the DOGAMI assessment for this parcel was \$2,850, half of which is to be paid for by the applicant (\$1,425). Additionally, the Department typically levies a \$10.00/acre charge for release through quitclaim deed (Appendix C) of mineral and geothermal rights valued for this property at \$460.

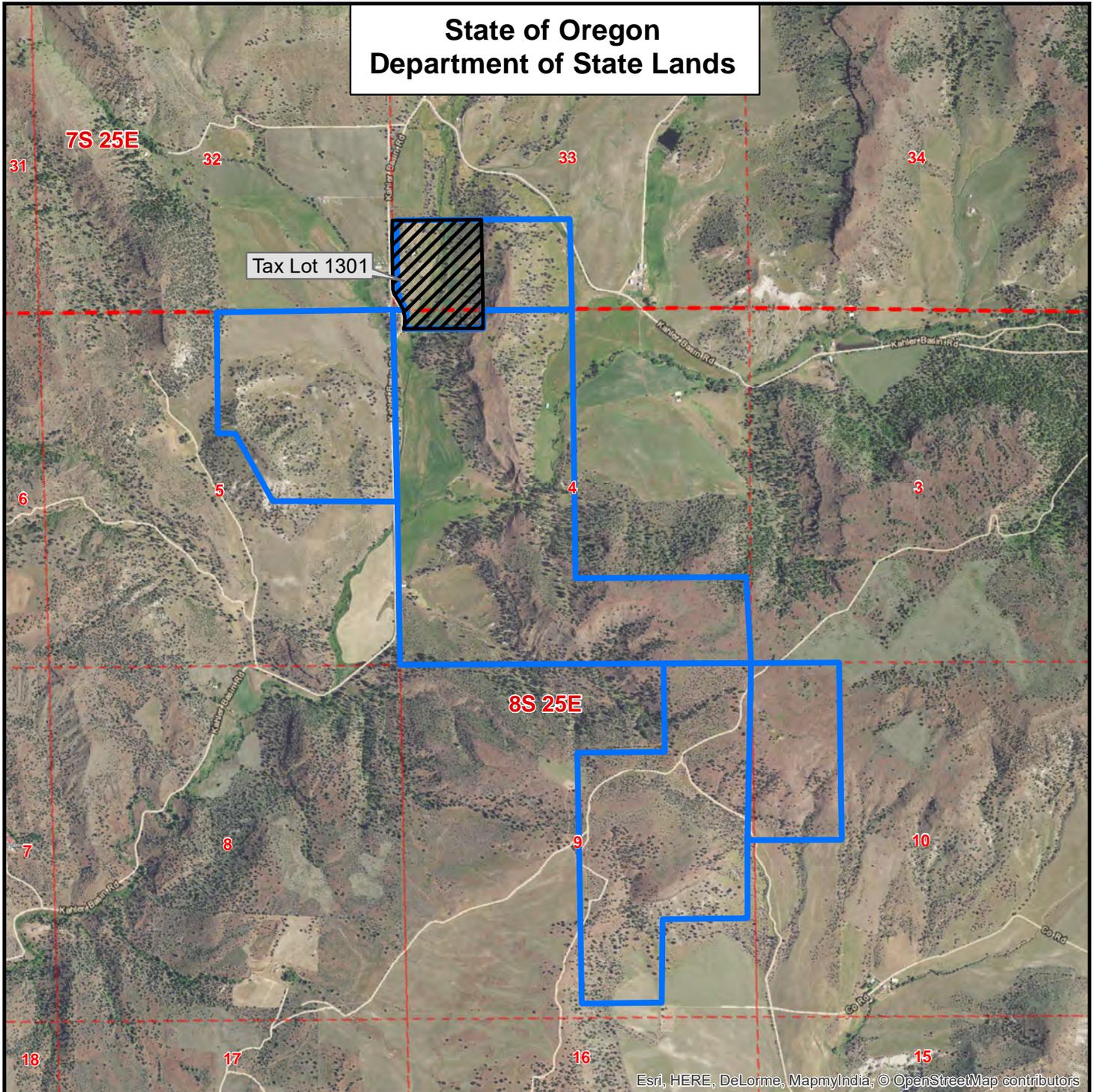
RECOMMENDATION

The Department recommends that the State Land Board find that the release and transfer of mineral and geothermal resources for this property is in the long-term, best interest of the Trust, and authorize the release of mineral and geothermal rights for this property located in Wheeler County (Tax Lot 1301, T7&8S, R25E, W.M., Sections 33 and 4) for the amount of \$460.

APPENDICES

- A. Site map
- B. DOGAMI report
- C. Draft quitclaim deed

State of Oregon
Department of State Lands



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

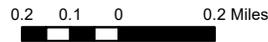
EXHIBIT A

59377-LS Mineral Sale
T7S, R25E, Sec. 33, Tax Lot 1301
46 Acres
Wheeler County

-  Mineral Requested
-  DSL Owned Minerals
-  Townships
-  Sections

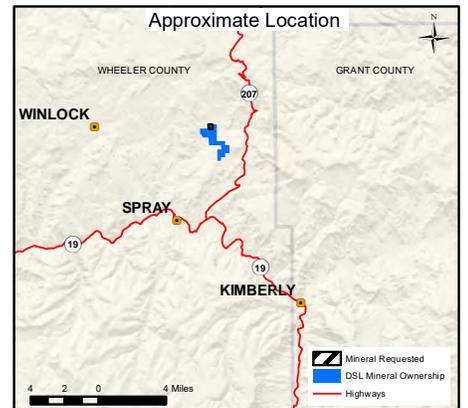


This map depicts the approximate location and extent of a Department of State Lands, Land Management Division authorization for use. This product is for informational purposes only and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.



Map Projection:
 Oregon Statewide Lambert
 Datum NAD83
 International Feet

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www.oregon.gov/DSL
 September 15, 2016



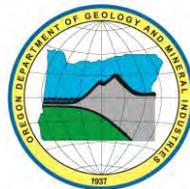
State of Oregon
Oregon Department of Geology and Mineral Industries
Brad Avy, Director and State Geologist

MINERAL RELEASE REPORT
TAX LOT 1301 (59377-LS)
WHEELER COUNTY, OREGON

by Clark A. Niewendorp¹

for

Amber Ross, Property Manager
Oregon Department of State Lands



2017

¹Oregon Department of Geology and Mineral Industries, 800 NE Oregon Street, Suite 965, Portland, OR 97232

DISCLAIMER

The Oregon Department of Geology and Mineral Industries is not liable for any claimed damage from the use of this information.

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TABLE OF CONTENTS

Summary	2
1.0 Introduction	4
1.1 Instructions	4
1.2 Layout of Report	4
2.0 Physical Setting	5
3.0 Results	10
3.1 Status of Mineral Surveys	10
3.2 Mining Claims/Leases	10
3.3 Mineral Setting	11
3.4 Known Mineral Occurrences	11
3.4.1 Study Area	13
3.4.2 Parcel	Error! Bookmark not defined.
3.5 Mineral Resource Interpolation.....	15
4.0 Literature Sources	17
5.0 Methods and Limitations	19
5.1 Levels of Resource Potential (modified from Goudarzi, 1984)	20
5.2 Levels of Certainty of Assessment (Goudarzi, 1984)	20

LIST OF FIGURES

Figure 2-1. Vicinity map for the Parcel (red fill).	6
Figure 2-2. Map of active roads in the Parcel.....	7
Figure 2-3. Map of land ownership in the study area	8
Figure 2-4. Topographic map index for the Parcel	9
Figure 3-1. Simplified geologic map of the study area	12
Figure 3-2. Mineral occurrences in the study area.....	14

LIST OF TABLES

Table 2-1. The physical characteristics of the Parcel.	5
Table 2-2. Topographic maps covering study area including the Parcel.....	6
Table 3-1. Minerals occurrences within the study area and in and on the Parcel.....	11
Table 3-2. Mineral resource potential in the Parcel	16

SUMMARY

This report conveys the mineral resource assessment of Tax Lot 1301 (called Parcel), described as ±46-acres in T. 7 S., R. 25 E., Sec. 33, Wheeler County, Oregon. Previously, the Oregon Department of Geology and Mineral Industries (DOGAMI) submitted a mineral assessment report (Niewendorp, 2016) to the Oregon Department of State Lands (DSL) covering 900-acres of DSL owned minerals in Wheeler County, and where the above Parcel occurs. The parcel of land is privately owned but the ownership of the mineral rights belongs to the State of Oregon. The purpose of this review is to determine if the transfer of ownership (Release) of state-owned mineral rights to the private landowner (59377-LS) meets the requirements of OAR 141-073-0100. The mineral right covered by this report includes metallic (precious and base metals) and industrial mineral resources, including rock for aggregate and building stone, sand and gravel, coal, oil and gas, uranium and thorium, and geothermal resources.

The previous mineral resource assessment was completed on October 14, 2017. An email from DSL was received December 27, 2016 with authorization to proceed with the transfer evaluation. The format of this report and its contents follows the requirements of the 2013 DOGAMI-DSL Interagency Agreement (DSL #14-111-90004).

This review is a low-level, qualitative assessment, designed to provide DSL with general information about the mineral resource potential of the Parcel. A geographically specific and technically detailed assessment was beyond the scope for this work. The type and number of mineral occurrences within the study area, an approximately 10 mi (16 km) radius area that is centered on the Parcel, are summarized below:

Type of Commodity	Mineral Occurrences	
	Study Area	Parcel
Aggregate (sand and gravel; stone, crushed and block; borrow/fill/topsoil)	52	0
Industrial mineral (clay, silica sand, and limestone material)	0	0
Metals/minerals (chromite bearing-beach placer)	0	0
Coal	0	0
Uranium and thorium	0	0
Geothermal features	10 wells, 0 springs	0 wells, 0 springs
Oil and gas wells (abandoned)	0	0

The Parcel's mineral resource potential is summarized below:

Type of Commodity	Resource Potential[‡]	Level of Certainty^{**}
Sand and gravel (borrow/fill/topsoil)	no	—
Construction material (crushed/block stone)	low*	A
Limestone	no	—
Clay	no	—
Pumice	no	—
Silica sand	no	—
Bentonite	no	—
Metals (precious, base metals)	no	—
Coal	no	—
Uranium and thorium	no	—
Geothermal	low*	A
Oil and gas	low*	A
Other industrial minerals (gemstone materials, perlite, zeolite, manganese, titanium, zirconium)	no	—

*Potential for yet undiscovered resources.

‡See Section 5.1 for description of levels of resource potential

**See Section 5.2 for descriptions of levels of certainty

While the Parcel has a low potential, level of certainty A (Goudarzi, 1984; see Sections 5.1 and 5.2 in the report) for a resource as aggregate (crushed/block stone), the following other commodities have no mineral resource potential: industrial minerals, metals; coal, and uranium, and thorium. The Parcel also has a low resource potential for oil and gas. Likewise, the resource potential for geothermal is considered low.

Therefore, based on available geologic data, DOGAMI sees no conflicts or concerns related to the mineral release.

1.0 INTRODUCTION

This report describes the mineral resource assessment of Tax Lot 1301 (called the Parcel) in Wheeler County, Oregon. The Parcel covers ±46 acres within Section 33 in T. 7 S., R. 25 E.

1.1 Instructions

An email from Department of State Lands (DSL) was received December 27, 2016 with authorization to proceed. The format of this report and its contents follows the requirements of the 2013 DOGAMI-DSL Interagency Agreement (DSL #14-111-90004). The resource assessment was completed on January 13, 2017.

1.2 Layout of Report

For the convenience of the reader, this report is divided into the following five sections:

- Section 1 is the introduction. It contains the project's instructions and the layout of report.
- Section 2 is a description of the Parcel's physical and geologic setting.
- Section 3 is the desk assessment part and describes the Parcel's potential mineral resources.
- Section 4 is a list of references; all of which were consulted as a part of this review but may not be cited in the text body because they contain no information on the Parcel.
- Section 5 contains a brief description of the methods and limitations of the study, along with two reference tables: Levels of Resource Potential and Levels of Certainty. These tables provide a dual scheme that expresses (1) the favorability of a geologic environment for a resource occurrence and (2) it gives the resource a confidence rating for which the level of resource potential was assigned.

2.0 PHYSICAL SETTING

The Parcel, which is located in central Oregon, is about five air miles (8 km) northeast from the town of Spray, Wheeler County and just over 7 air miles (11 km) east of the hamlet of Winlock. Figure 2.1 shows the outline of the Parcel draped on a topographic base. This map gives an indication of the Parcel's relationship with the area's topography and cultural features. Table 2.1 below describes the physical characteristics of the Parcel.

Table 2-1. The physical characteristics of the Parcel.

Size	±46 acres
Topography	stream valley and westerly ridge slope
Shape	Rectangular
Frontage	Kahler Creek Road
Zoning	Exclusive Farm Use 80 (from Oregon Explorer; http://oregonexplorer.info/content/oregon-zoning-map)

As can be seen in Figures 2.1 and 2.2, the Parcel's shape is rectangular. Differences in elevation within the Parcel ranges from 2,600 ft (792.48 m) in the bottom land along Henry Creek to about 2,800 ft (853.44 m) along the western side of the Parcel, a relief of about 200 feet (60.96 m). Cultural resources on the Parcel includes one homestead and several outbuildings/barns.

Wheeler County has a semi-desert climate with hot summers and cold winters. The January low temperature is approximately 23° F and the July high is 87° F. Precipitation is low; average rainfall and snowfall per year are about 13 in and 17 in, respectively. The Cascade Range and Ochoco Mountains act as topographic barriers and together exert a strong easterly rain-shadow over this part of central Oregon. Bottom lands are farmed. There are some sage brush and a few juniper trees on the ridges and highlands; most gullies contain brush.

The geomorphic expressions of various sedimentary and volcanic rocks in the study area appear as irregular, linear ridges and elevated mountainous plateaus (Figure 2.1). In contrast, the bottom land in stream valleys are flat to hilly. An interesting feature is a ridge in and parallel to the northern portion of the Parcel. This ridge is capped by a thin lava flow tilted towards the west—a hogback.

The drainage of the area is headed for the John Day River via two southward flowing tributaries: Dead Horse Creek and Henry Creek. As can be seen in Figure 2.1, Henry Creek flows through the middle of the Parcel. There are no apparent springs in or immediately adjacent to the Parcel.

The Parcel is physically accessible by Kahler Basin Road, an improved road off of the Heppner-Spray Highway (Oregon Route 207). Access is also possible from the Heppner-Spray Highway by a segment of County Road and then to an unnamed road that loops back to Kahler Basin Road (Figure 2.2). An electrical power line lies along Kahler Basin Road.

The land ownership within the study area is shown in Figure 2.3 and the topographic maps covering the study area, including the Parcel, are listed in Table 2.2. The outline of these topographic maps in relation to the Parcel are shown in Figure 2.4. As mentioned earlier, the Parcel is privately owned but the state owns the mineral rights.

Figure 2-1. Vicinity map for the Parcel (red fill).

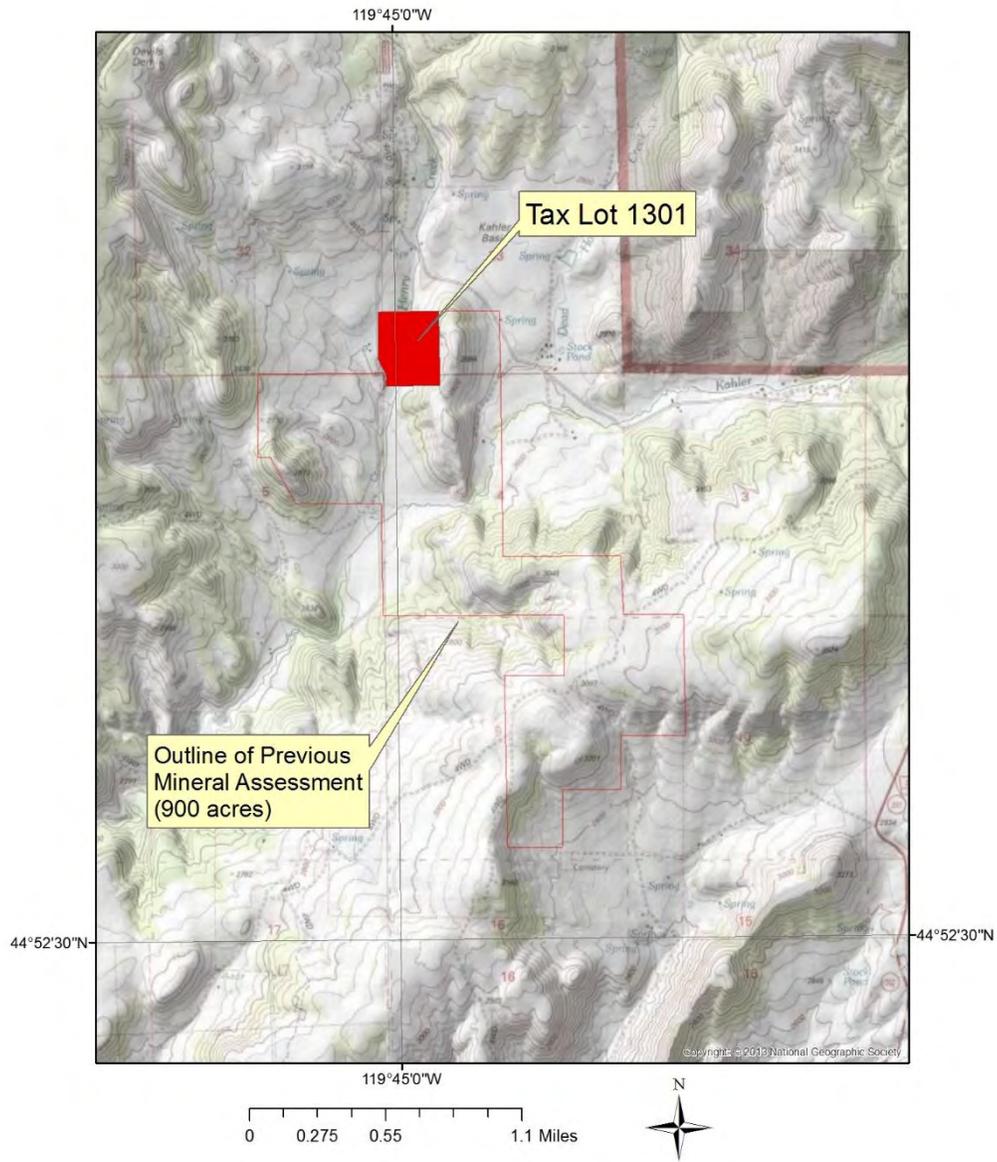


Table 2-2. Topographic maps covering the study area including the Parcel.

1:24,000-Scale Quadrangles		1:100,000-Scale Quadrangles
Lone Rock	Wheeler Point	Heppner
Masiker Mountain	Lefevre Prairie	Monument
Collins Butte	Spray	
Johnson Heights	Chapin Creek	
Whitetail Butte	Kimberly	
Big Rock Flat	Mount Misery	
Bologna Basin	Turner Mountain	

Figure 2-2. Map of roads in or near the Parcel. Solid purple line = State Highway, Gravel and paved roads = brown lines, Parcel = red fill.

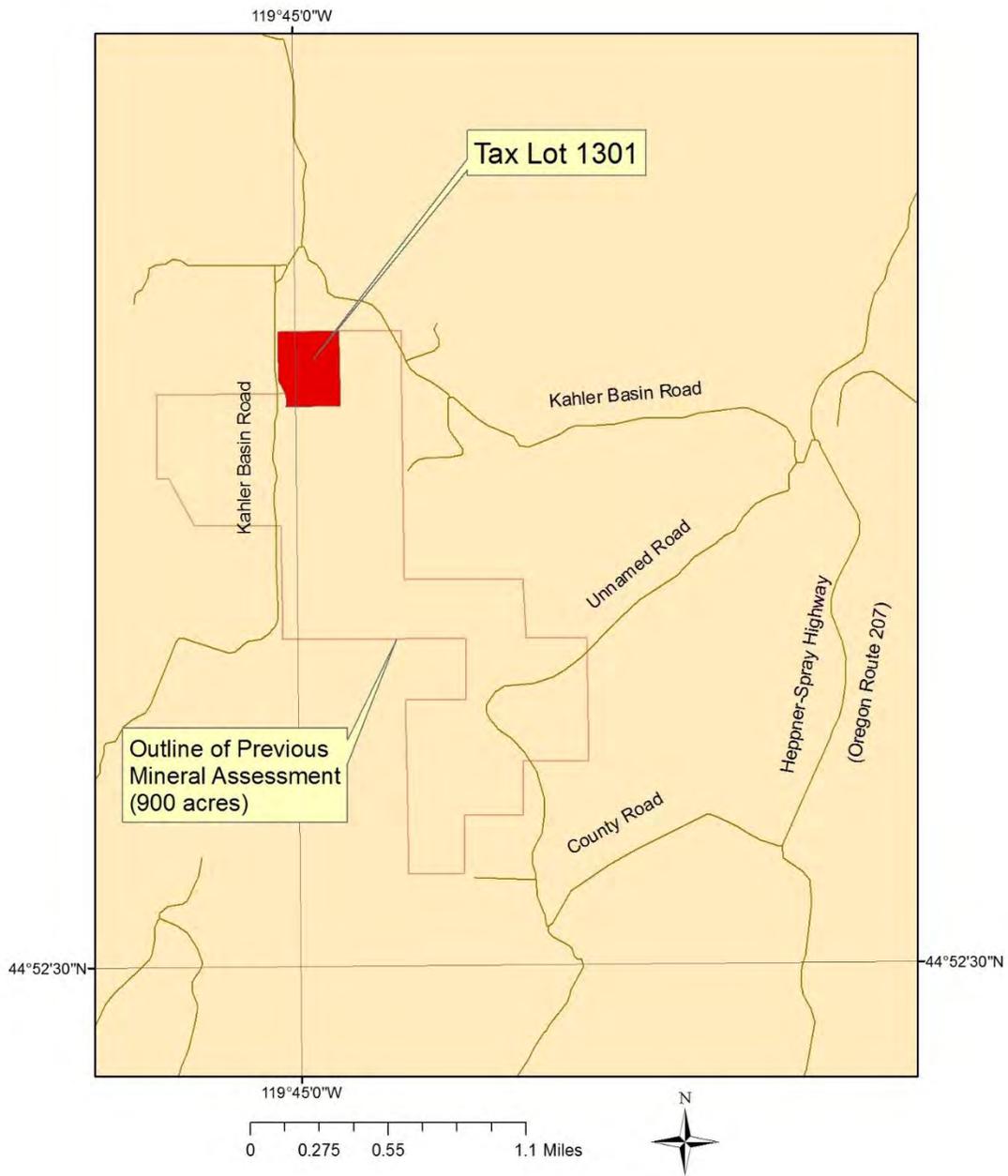


Figure 2-3. Map of land ownership in the study area.

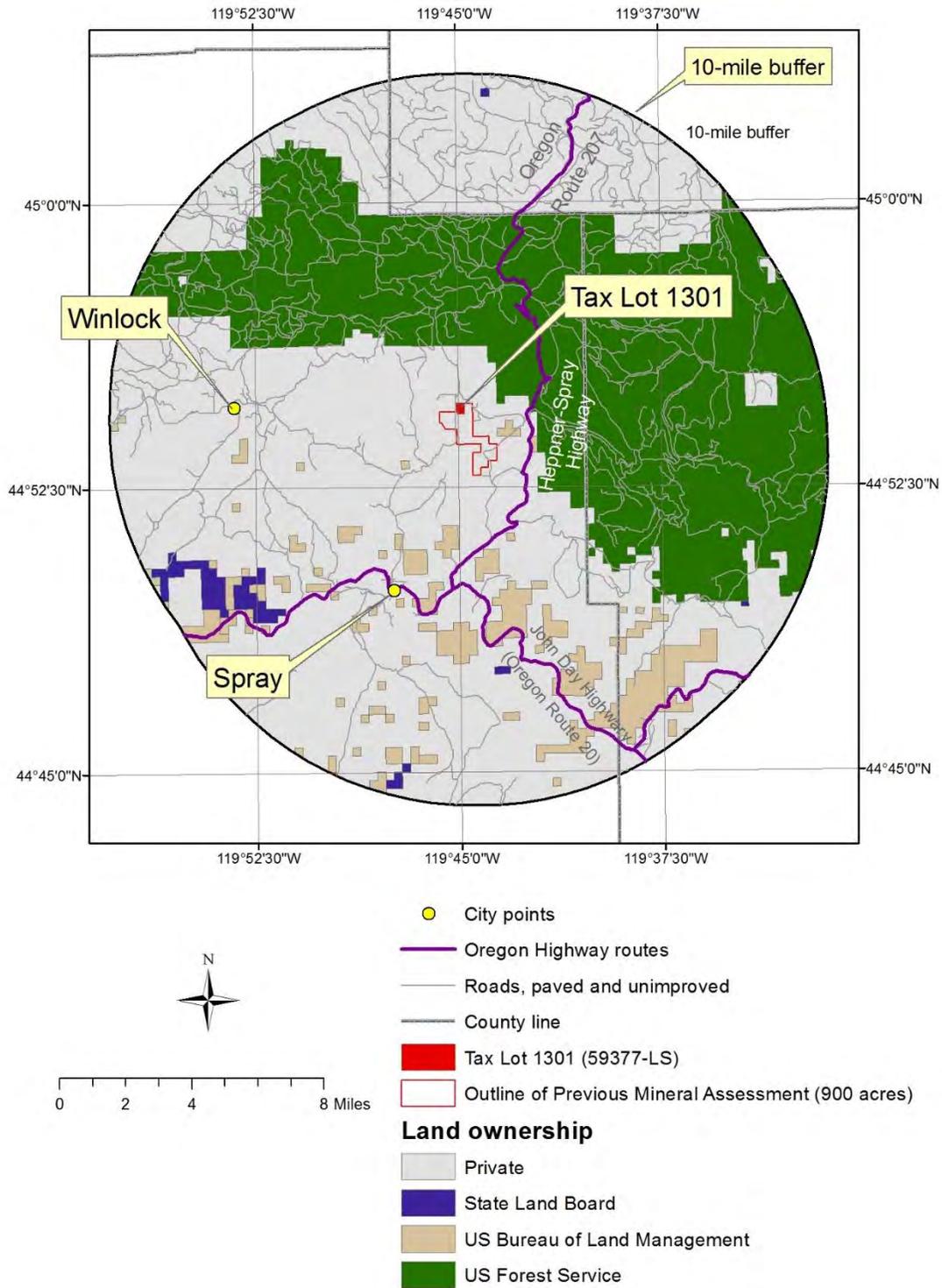
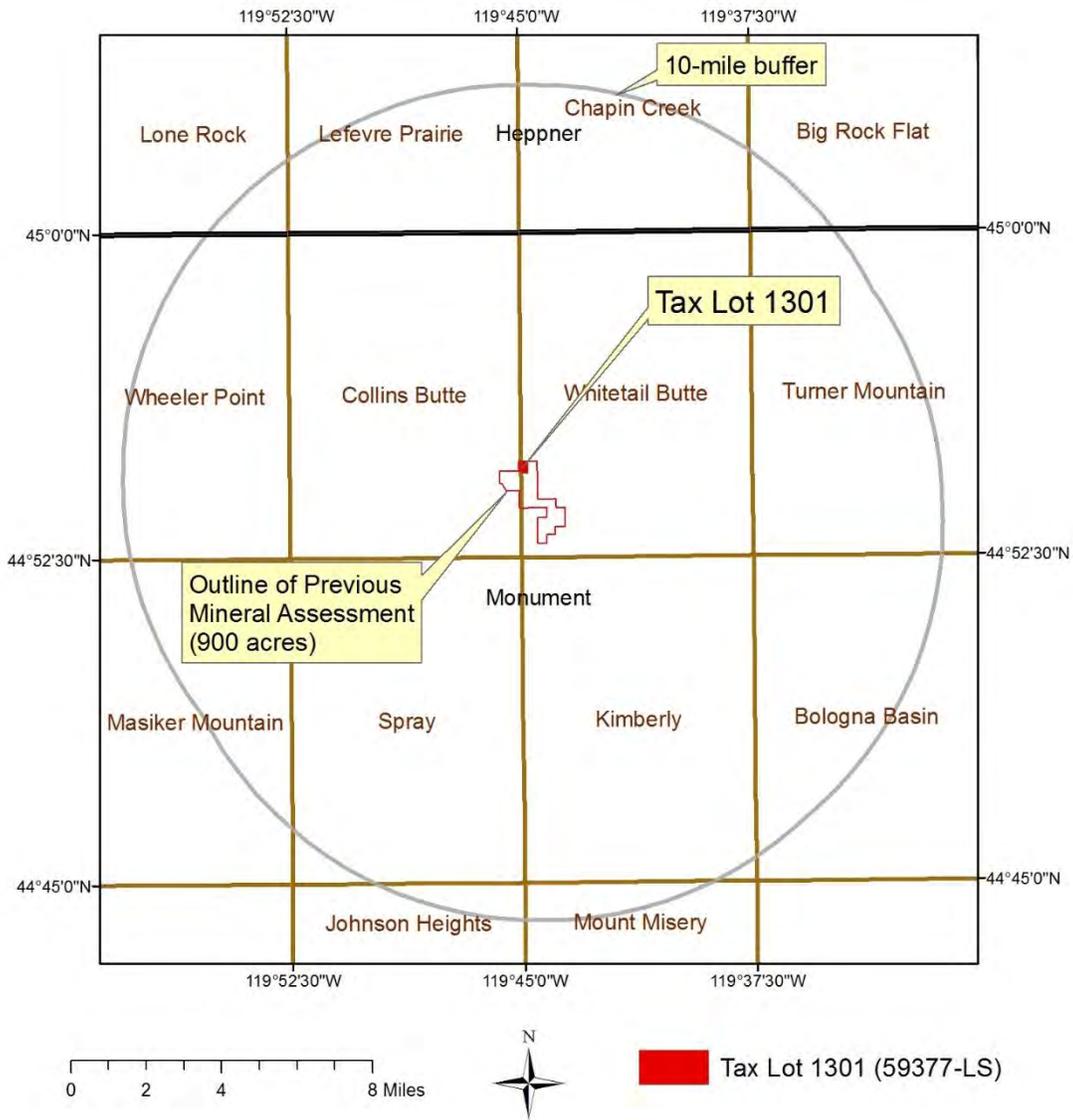


Figure 2-4. Topographic map index for the Parcel. 1:24,000-scale quadrangles = brown outline (brown text is quadrangle name), 1:100,000-scale quadrangles = black outline (black text is quadrangle name), and Parcel = red fill.



3.0 RESULTS

This section presents the results of the mineral scoping of the Parcel. While the focus of this assessment is the Parcel, the larger study area to be considered is an approximately 10 mi (16 km) radius area that is centered on the Parcel. A study area of this size provides a greater level of information about the identified occurrence of minerals and the Parcel's mineral setting.

Where this report indicates a potential mineral resource might exist, it is important to understand what a "resource" is and means. According to the U.S. Bureau of Mines and U.S. Geological Survey (USGS) Circular 381, "Principles of a Resource/Reserve Classification System," "resource" means, "[a] concentration of naturally occurring solid, liquid, or gaseous material in or on the Earth's crust in such form and amount that economic extraction of a commodity from the concentration is currently or potentially feasible" (p. 1). An identified resource is a "[r]esource whose location, grade, quality, and quantity are known or estimated from specific geologic evidence" (p. 1).

A resource or identified resource does not infer or imply a "reserve base" or "reserve" exists. A "reserve base" is "[t]hat part of an identified resource that meets specific minimum physical and chemical criteria related to current mining and production practices, including those for grade, quality, thickness, and depth" (p. 2). The meaning of a "reserve" is "[t]hat part of the reserve base which could be economically extracted or produced at the time of determination" (p. 2).

The non-fuel mineral commodities evaluated for this assessment include aggregate, industrial minerals (clay, silica sand, pumice, and limestone), and metals (precious, base, and related oxides). Mineral fuel commodities evaluated are coal, uranium/thorium, geothermal, oil, and gas. Occurrences of other commodities (gem material, dimension stone, other clays (bentonite), perlite, zeolites, manganese, titanium, zirconium, etc.) will be reported as industrial minerals when encountered as part of this evaluation.

The term "aggregate" includes gravel (and by association sand) and all consolidated stone used for construction and roads. Stone may be further classified as crushed—rock that has been broken into smaller fragments—and blocks. Also, no distinction is made between a mineral occurrence and mineral deposit. The term "mineral occurrence" applies to both and is used to refer to a concentration of a mineral that could be considered valuable by someone somewhere or that is of scientific or technical interest.

3.1 Status of Mineral Surveys

The U.S. Geological Survey (or the former U.S. Bureau of Mines) has not examined the Parcel as part of a previous mineral survey. However, DOGAMI has studied the Parcel as part of a previous mineral survey (Niewendorp, 2017). No mining districts exist in or near the study area.

3.2 Mining Claims/Leases

DOGAMI does not maintain records pertaining to public claims or private mineral leases. The Bureau of Land Management (BLM) does make some records of mining claims on Federal lands easily available to the public on its LR2000 website (www.blm.gov/lr2000/index.htm). Only certain types of mineral discoveries can be claimed; these minerals are broadly known as "locatable" (possessing a distinct and special value) and include such things as precious metals, gems, high-value industrial minerals, uranium,

etc. Locatable minerals generally do not include construction aggregate, common industrial minerals, oil, gas, coal, or geothermal resources.

There are no mining claims on Federal land in or adjacent to the study area.

3.3 Mineral Setting

The geology of the study area, as compiled from work by White (1964), Brown (1966), Walker (1973), Robison (1975), and Swanson and others (1981), is seen in Figure 3.1. Their work has since been compiled by Smith and Roe (2015) into a statewide digital geologic compilation map. Because of the scale of this mapping (1:250:000 to 1:62,500), its use for this mineral scoping is problematic, and at best provides a crude characterization of the Parcel's geology and mineral setting.

The formations exposed in the study area are given in order of their ages, beginning with the oldest: (1) to the northeast of the Parcel near the edge of the 10-mi buffer is where the Herren formation crops out. This formation is a sequence of Paleogene to Eocene arkosic sandstone and shales. These rocks are associated with coal beds to the northeast of the study area near Arbuckle Mountain in Umatilla County; (2) the Clarno Formation is a sequence of Eocene rocks with variable lithology which includes continental volcanism. The sedimentary parts of the Clarno Formation, especially the carbonaceous shales and lacustrine beds have the potential to be source rocks for gas and/or oil, while the coarser clastics and perhaps some volcanic rocks may be considered potential reservoirs. The contact between the underlying Clarno Formation and the overlying John Day Formation is arbitrary. (3) The John Day Formation is a sequence of middle Eocene to Oligocene largely pyroclastic rocks (tuffs and rhyolitic lavas) with sedimentary rocks; and (4) the youngest rocks are the early to middle Miocene Columbia River Basalt Group (CRBG) and related flows. Quaternary deposits of alluvium and landslide fill modern stream valleys and drainages. The dominant structures of the study area are northwest-trending faults.

In general, the Parcel contains rocks belonging to the John Day Formation and CRBG. The latter covers most of the southern half of the Parcel and the CRBG also caps ridges in the northern half. No known or currently mapped faults cross the Parcel.

3.4 Known Mineral Occurrences

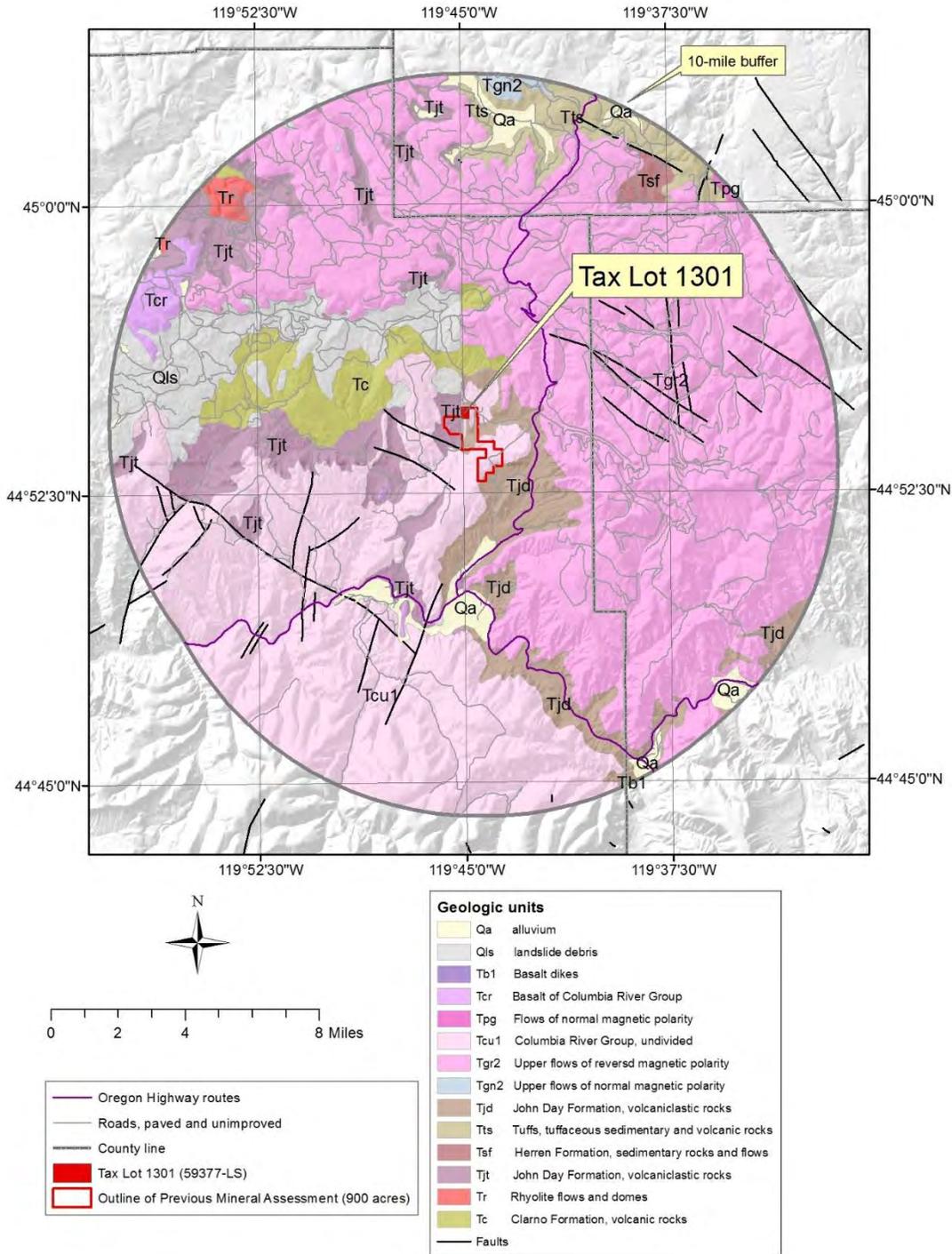
The known mineral occurrences, geothermal features, and oil and gas exploration wells in the study area, including any within the Parcel, are tabulated below in Table 3.1. These mineral occurrences are shown in Figure 3.2.

Table 3-1. Minerals occurrences within the study area and in and on the Parcel.

Type of Commodity	Study Area*	Parcel*
Aggregate (sand and gravel; stone, crushed and block; borrow/fill/topsoil)	52	0
Industrial mineral (clay, silica sand, and limestone material)	0	0
Metals/minerals (chromite bearing-beach placer)	0	0
Coal, Uranium, and thorium	0	0
Geothermal features	10 wells, 0 springs	0 wells, 0 springs
Oil and gas wells	0	0

*Mineral occurrence information queried from Niewendorp and Geitgey (2010).

Figure 3-1. Simplified geologic map of the study area. The map base is a 10-m hillshade; the geology is modified from Smith and Roe (2015).



A brief description of the known mineral occurrences in the study area and the Parcel is provided below.

3.4.1 Study Area

The inventory of mineral occurrences in the study area, including the Parcel, relied in large part on data derived from past exploration activity, including records of mining claims on federal lands (if applicable) and DOGAMI's digital mineral inventory database (Mineral Information Layer for Oregon [MILO]). Other datasets used in the inventory are as follows:

- Geothermal Information Layer for Oregon (GTILO-2).
- Geoanalytical Information Layer for Oregon (GILO-2; an internal DOGAMI database).
- Oil and Gas (an internal DOGAMI database).
- MLRR (Mineral Land Reclamation and Regulation program of DOGAMI) databases.
- LR2000, the Bureau of Land Management's (BLM) electronic database for claims (inactive, closed). This information is used as evidence of mineral occurrences and surface management.

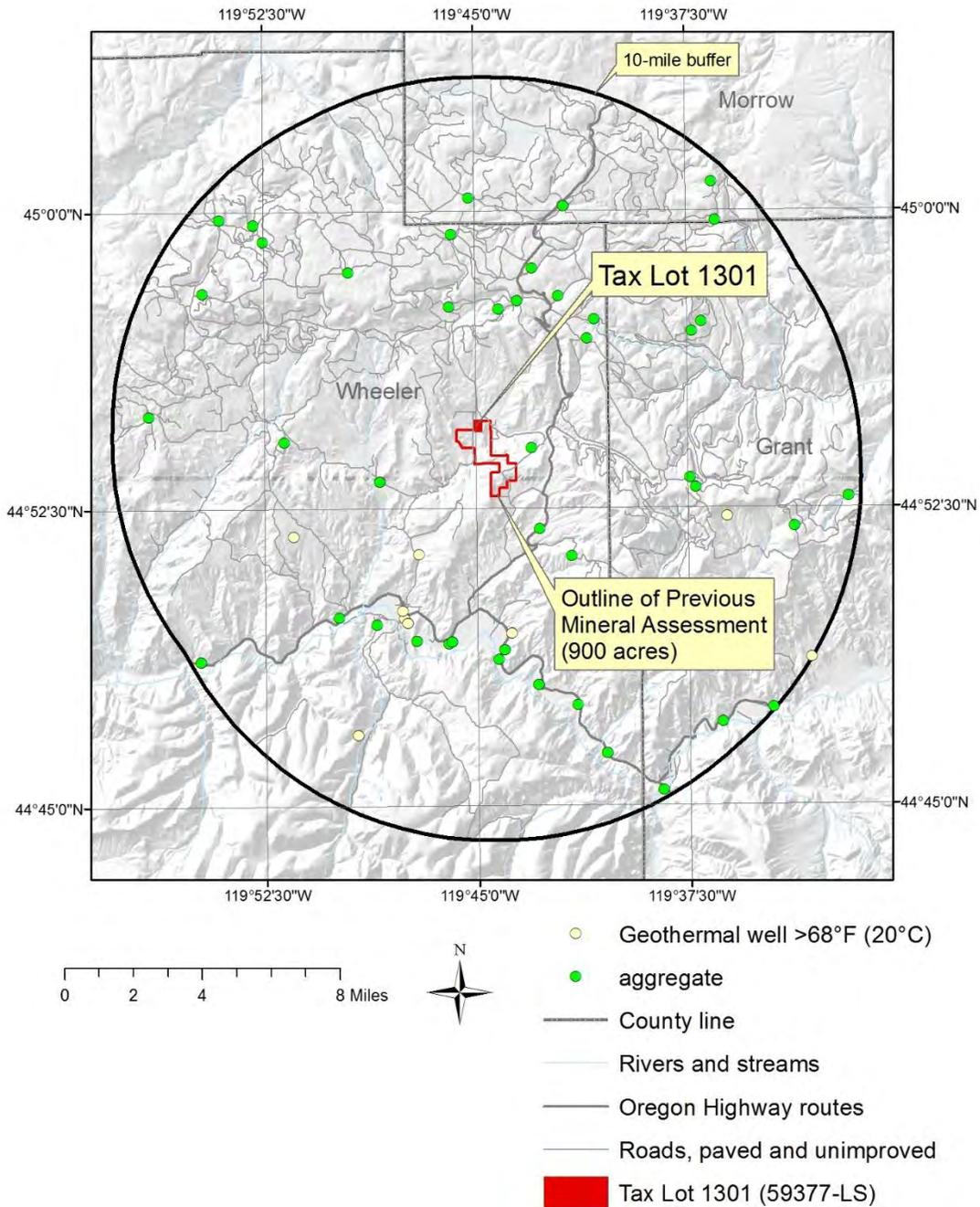
The mineral occurrences that have been identified in the study area are as follows:

- There are 52 aggregate sites. Nine of these sites produced gravel (and associated sand) from river alluvium and terraces along the John Day River. The other 43 sites produced crushed stone, block, or both. These low-unit-value, high-bulk commodities serve local markets. Specific site conditions or restrictions associated with each site are unknown.
- No mineral occurrences of either precious or base metals are documented in the study area, nor is there documentation for an occurrence of industrial minerals (clay, silica sand, pumice, and limestone). Likewise, there is no indication that mineral fuel commodities such as coal, or uranium/thorium exist.
- Available information on existing geothermal resources comes from eight domestic wells that contain ground water with temperatures greater than 68° F (20° C) (Niewendorp and others, 2012). There are no geothermal springs or other related geothermal features reported in the study area.
- Six exploratory or "wildcat" oil and gas wells have been drilled in Wheeler County but none in the study area. These wells, which are scattered throughout the western part of the county, are mentioned because they give an idea of Wheeler County's oil and gas potential. It appears the wells tested the Clarno formations and particularly the underlying Cretaceous marine sedimentary rocks, as they were drilled to maximum depths of between 1,507 ft (456.3 m) and 6,532 ft (1,991 m) below land surface (bls). Of the six wells, one well encountered crystalline basement rock (6,532 ft - 1,991 m bls) and three reported a "show" of oil, gas, or both. A show means either oil, gas, or both were encountered but have not been proven or judged to be productive. DOGAMI is not aware of any current local or regional activity related to oil and gas exploration.

3.4.2 Parcel

There are no known mineral occurrences, including geothermal features and oil and gas test wells, in and on the Parcel.

Figure 3-2. Mineral occurrences in the study area (Black line). The map base is a 10-m hillshade-relief image. Gray lines = roads; Gray line = county boundary; Red fill = Parcel.



3.5 Mineral Resource Interpolation

The mineral resource potential of the Parcel is based on the interpolation of the study area's mineral inventory. Each commodity was rated using the criteria developed by Goudarzi (1984) (see Section 5). This potential is summarized below and listed in Table 3.2:

- The Parcel has a low potential for a stone (basalt) resource, level of certainty A.
- There is no mineral resource potential for an undiscovered deposit of sand and gravel resource.
- The Parcel has no mineral resources potential for the following commodities and mineral fuels: industrial minerals, metals; coal, and uranium, and thorium.
- The Parcel may have a low potential for a low-temperature geothermal resource, level of certainty A. This potential is based on the presence of "warm" water in the wells within the study area which were used to interpolate a potential to the Parcel. Minimum temperatures of 212° F (100° C) are required for geothermal power plant development. No temperatures in wells in the study area have temperatures sufficient for electricity generation. However, temperatures of 68° F (20° C) and higher have direct use applications such as aquaculture, therapeutic bathing, melting ice and snow, and heating homes, buildings and greenhouses. All of the wells have temperatures that are marginally into the lower limits of direct use.
- The Parcels may have a low potential, level of certainty A, for an oil and gas resource. This rating is based on the geologic setting of Wheeler County which has attracted some attention for petroleum prospects. However, new geologic data would be required for an understanding of this potential as it relates to the Parcel and to enhance interest in the resource.

Table 3-2. Mineral resource potential in the Parcel.

Type of Commodity	Resource Potential‡	Level of Certainty**
Sand and gravel (borrow/fill/topsoil)	no	
Construction Material (crushed/block stone-basalt)	low*	A
Limestone	no	
Clay	no	
Pumice	no	
Silica sand	no	
Bentonite	no	
Metals (precious, base metals)	no	
Coal	no	
Uranium and thorium	no	
Geothermal	low*	A
Oil & Gas	low*	A
Others industrial minerals: (gemstone materials, perlite, zeolite, manganese, titanium, zirconium)	no	

*Potential for yet undiscovered resources.

‡See Section 5.1 for description of levels of resource potential

**See Section 5.2 for descriptions of levels of certainty

4.0 LITERATURE SOURCES

All references below were consulted as a part of this review but may not be cited in the text body because they contain no information on the Parcel.

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5.0 METHODS AND LIMITATIONS

The Scope-of-Work for this assessment did not include a site visit or field work. The objective of the examination was only to determine and/or confirm through desk-top research that a potential mineral resource exists or there is the potential for one. Data compilation efforts for the assessment includes, but is not limited to the following: published and unpublished geology and mineral/material resource literature available at DOGAMI.

A core part of the mineral inventory process is the review of six datasets:

- MILO-2 (Mineral Information Layer for Oregon, Release 2).
- GTILO-2 (Geothermal Information Layer for Oregon, Release 2).
- MLRR (Mineral Land Reclamation and Regulation program of DOGAMI) databases.
- LR2000, the Federal Bureau of Land Management's (BLM) electronic database for claims (inactive, closed).
- An unpublished DOGAMI database of oil and gas wells in Oregon.
- OGCD-6 (Oregon Geologic Data Compilation, Release 6).

The collection and presentation of data is facilitated through GIS. This report of findings is tailored to address the required items listed in the Intergovernmental Agreement (IGA), DSL #14-111-90004.

This examination did not include activities such as sampling and systematic geological, geophysical, and geochemical mapping as the basis for determination or confirmation that a mineral resource potential, deposit, or mineral occurrence exists.

A desktop inventory of mineral occurrences such as the present report cannot alone determine the following:

- The accurate identification of the concentration and occurrence of material in relation to its particular geographical controls.
- The volume of valuable mineral or rock present or removed, and reserves remaining.
- The applicable extraction and processing methods and market factors for its products.

Also, this low-level mineral assessment cannot be the sole basis for an appraisal or the basis for other generally accepted industrial standard for placing a value on and with a resource and the land itself. Users of this report are advised to consult with DOGAMI to gain a better understanding of the inherent limitations of the information herein and its scope of inference.

Provided below are definitions for levels of mineral resource potential and certainty of assessment (modified from Goudarzi, 1984). Under this system, the level of mineral resource potential assigned to a commodity is based on geologic, geochemical, and geophysical characteristics.

5.1 Levels of Resource Potential (modified from Goudarzi, 1984)

HIGH	HIGH mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics indicate a geologic environment favorable for resource occurrence, where interpretations of the data indicate high degree of likelihood for resource accumulation, where data support mineral-deposit models indicating presence of resource, and where evidence indicates that mineral concentration has taken place. Assignment of high resource potential to an area requires some positive knowledge that mineral-forming processes have been active in at least part of the area.
MEDIUM	MEDIUM mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics indicate a geologic environment favorable for resource occurrence, where interpretations of the data indicate high degree of likelihood for resource accumulation, where and (or) where an application of mineral-deposit models indicates favorable ground for the specified type(s) of deposits.
LOW	LOW mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics define a geologic environment in which the existence of resources is permissive. This broad category embraces areas with dispersed but insignificantly mineralized rock, as well as areas with obvious site limitations and little or no indication of having been mineralized.
NO	NO mineral resource potential is a category that should be reserved for a specific type of resource in a well-defined area.
UNKNOWN	UNKNOWN mineral resource potential is assigned to areas where information is inadequate to assign a low, moderate, or high level of resource potential.

5.2 Levels of Certainty of Assessment (Goudarzi, 1984)

A	Available information is not adequate for determination of the level of mineral resource potential.
B	Available information suggests the level of mineral resource potential.
C	Available information gives a good indication of the level of mineral resource potential.
D	Available information clearly defines the level of mineral resource potential.

Space above this line for Recorder's use.

Quitclaim Deed
(Minerals and Geothermal Resources)

GRANTOR:

State of Oregon, acting by and through its
Department of State Lands
775 Summer St. NE, Ste 100
Salem, OR 97301-1279

GRANTEE:

Carl Kintz
P.O. Box 125
Spray, OR 97874

**FUTURE TAX STATEMENTS
SHOULD BE MAILED TO:**

Carl Kintz
P.O. Box 125
Spray, OR 97874

**AFTER RECORDING
RETURN TO:**

Carl Kintz
P.O. Box 125
Spray, OR 97874

The STATE OF OREGON, acting by and through its Department of State Lands, GRANTOR, releases and quitclaims to Carl Kintz, GRANTEE, all right, title and interest in and to all minerals as defined in ORS 273.775 (1), including soil, clay, stone, sand and gravel, and all geothermal resources as defined in ORS 273.775 (2), within or upon the following described real property:

BEING a tract of land located in Sections 33 and 4, Townships 7 and 8 South, Range 25 East of the Willamette Meridian, Wheeler County, Oregon and being more particularly described as follows:

Wheeler County, Oregon in Townships 7 and 8 South, Range 25 East, W.M. Sections 33 and 4 respectively, parcel number 2 of land partition 97-03 as shown on the plat thereof on file and of record in the office of the County Clerk of Wheeler County, Oregon.

The true and actual consideration for this conveyance is \$460.00.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

Dated this _____ day of _____, 20__.

STATE OF OREGON, acting by and through its Department of State Lands,

James T. Paul, Director

STATE OF OREGON)
) ss
County of Marion)

The foregoing instrument was acknowledged before me this _____ day of _____, 2017,
by _____, as _____ of the Department of State Lands.

Notary Public for Oregon
My commission expires _____, 20__.



Oregon

Kate Brown, Governor

Department of State Lands

775 Summer Street NE, Suite 100

Salem, OR 97301-1279

(503) 986-5200

FAX (503) 378-4844

www.oregon.gov/dsl

State Land Board

Kate Brown

Governor

State Land Board

Regular Meeting

May 9, 2017

Agenda Item 3

Dennis Richardson

Secretary of State

Tobias Read

State Treasurer

SUBJECT

Request from the Southern Oregon Land Conservancy, on behalf of the MacArthur Family LLC, to acquire the subsurface mineral and geothermal rights on approximately one acre of state-owned property.

ISSUE

Whether the State Land Board should authorize the release of approximately one acre of mineral and geothermal rights held by the State Land Board located in Jackson County (Tax Lot 100, T35S, R01W, W.M., Section 16).

AUTHORITY

Oregon Constitution, Article VIII, Sections 2 and 5; pertaining to the Common School Fund and land management responsibilities of the State Land Board.

OAR 141-067-0320; relating to procedures for the sale, exchange, or release and transfer of mineral and geothermal resources.

SUMMARY

The MacArthur Family LLC is interested in selling to the Southern Oregon Land Conservancy (SOLC) approximately 352 acres along the Rogue River in Jackson County known as the "Rogue River Preserve" comprised of Tax Lots 100 and 200. The SOLC has received grant funds from the Oregon Watershed Enhancement Board and the U.S. Fish and Wildlife Service to purchase this property. However, the grantors will not release the funds until the mineral ownership is resolved. In order for this to occur, the SOLC must purchase the estate as a whole and have control of all subsurface ownership, which include approximately one acre of land under Common School trust land ownership that is within Tax Lot 100.

The Common School trust lands subsurface ownership includes a small area on an island in the Rogue River, combined with some uplands on the western bank within Tax Lot 100 (subsurface rights under what was part of a larger area of uplands owned at statehood, that has been physically divided due to the natural movement of the Rogue River). The combination of the two areas total approximately one acre: made up of about 0.76 acres west of the river and about 0.24 acres on the island.

The Department has obtained a mineral assessment from the Department of Geology and Mineral Industries (DOGAMI) for the lands requested (Appendix B). This review determined that there is no or low potential for significant mineral or geothermal resources to be present at this location. Therefore, the Department sees no conflicts or concerns in releasing these subsurface rights to the surface owner. On this basis, the Department recommends the release and transfer of the mineral and geothermal resources in the long-term, best interest of the Trust (Common School Fund).

The Department typically levies \$10.00 an acre charge for release through quitclaim deed (Appendix C) of mineral and geothermal rights. However, to be in the best interest of the Trust, appropriate revenues must accrue to the Common School Fund for the sale/release of this Common School trust land. It is the Department's recommendation that a price of \$250 be set for release through quitclaim for this transaction, in addition to the applicant covering the \$2,853.76 cost of the DOGAMI assessment.

RECOMMENDATION

The Department recommends that the State Land Board find that the release and transfer of mineral and geothermal resources for this property is in the long-term, best interest of the Trust, and authorize the release of mineral and geothermal rights for this property located in Jackson County (underlying portions of Tax Lot 100, T35S, R01E, W.M., Section 16) for the amount of \$250.

APPENDICES

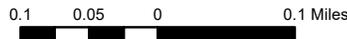
- A. Site map
- B. DOGAMI report
- C. Draft quitclaim deed

State of Oregon
Department of State Lands



Sources: Esri, DeLorme, USGS, NPS, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

EXHIBIT A: 59542-LS
Mineral Release Application
T35S, R1W, Sec. 16, Portion of Tax Lot 100
Approximately 1 Acre
Jackson County

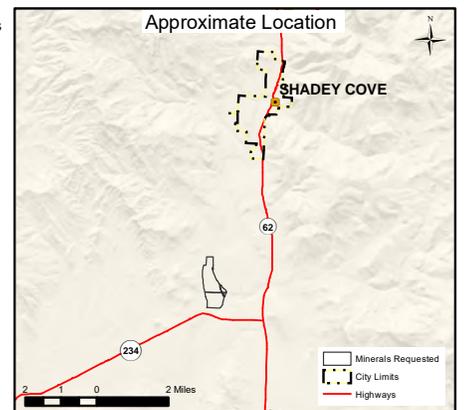


Map Projection:
Oregon Statewide Lambert
Datum NAD83
International Feet

State of Oregon
Department of State Lands
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Bend, OR 97701
503-986-5200
www.oregon.gov/DSL
November 23, 2016

- Tax Lot 100:
DSL Minerals to Release
- DSL Mineral Ownership
- Application Tax Lots
- Townships
- Sections

This map depicts the approximate location and extent of a Department of State Lands, Land Management Division authorization for use. This product is for informational purposes only and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.



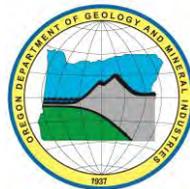
State of Oregon
Oregon Department of Geology and Mineral Industries
Brad Avy, Director and State Geologist

MINERAL ASSESSMENT REPORT
TAX LOT 100
JACKSON COUNTY, OREGON

by Lina Ma¹

for

Amber Ross, Property Manager
Oregon Department of State Lands



2017

¹Oregon Department of Geology and Mineral Industries, 800 NE Oregon Street, Suite 965, Portland, OR 97232

DISCLAIMER

The Oregon Department of Geology and Mineral Industries is not liable for any claimed damage from the use of this information.

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TABLE OF CONTENTS

Summary	2
1.0 Introduction	3
1.1 Instructions	3
1.2 Layout of the Report	3
2.0 Physical Setting	4
3.0 Results	10
3.1 Status of Mineral Surveys	10
3.2 Mining Claims/Leases	10
3.3 Mineral Setting	11
3.4 Known Mineral Occurrences	13
3.4.1 Study Area	13
3.4.2 The Parcel	14
3.5 Mineral Resource Interpolation.....	16
4.0 Literature Sources	18
5.0 Methods and Limitations	20
5.1 Levels of Resource Potential (modified from Goudarzi, 1984)	21
5.2 Levels of Certainty of Assessment (Goudarzi, 1984)	21

LIST OF FIGURES

Figure 2 1. Vicinity map for the Parcel and Study Area.	6
Figure 2 2. Map of active roads in or near the Parcel	7
Figure 2 3. Map of the study area and Land Ownership	8
Figure 2 4. Topographic map index for the Parcel	9
Figure 3-1. Simplified geologic map of the study area	12
Figure 3-2. Mineral occurrences in the study area.....	15

LIST OF TABLES

Table 2-1. Parcel physical setting	4
Table 2-2. Topographic maps covering the Study Area	5
Table 3-1. Mineral occurrences within the study area and in and on the Parcel	13
Table 3-2. Mineral resource potential in the Parcel	17

SUMMARY

This report describes the preliminary evaluation of state-owned mineral rights for a portion of Tax Lot 100, herein referred to as the “Parcel”, located on the Rogue River in Jackson County, Oregon. This Parcel of land is privately owned but the State of Oregon’s Department of State Lands (DSL) has retained ownership of the mineral rights. This report covers metallic (precious and base metals) and industrial mineral resources, including rock for aggregate and building stone, sand and gravel, coal, oil and gas, uranium and thorium, and geothermal resources.

The DSL contacted the Oregon Department of Geology and Mineral Industries (DOGAMI) in February 2017 regarding the preparation of this report. An email from DSL was received early March 2017 with authorization to proceed. The resource assessment was completed on March 17, 2017. The format of this report and its contents follows the requirements of the DSL-DOGAMI Interagency Agreement (DSL #14-111-90004) for the 2013-2019 biennia.

This review is a low-level, qualitative assessment, designed to provide the DSL with general information about the mineral resource potential of the Parcel. A geographically specific and technically detailed assessment was beyond the scope for this work. The type and number of mineral occurrences within the Parcel, are summarized below:

Type of Commodity	Resource Potential	Level of Certainty**
Sand and gravel (borrow/fill/topsoil)	no	—
Construction material (crushed/block stone)	no	—
Limestone	no	—
Clay	no	—
Pumice	no	—
Silica sand	no	—
Bentonite	no	—
Metals (precious, base metals)	no	—
Coal	no	—
Uranium and thorium	no	—
Geothermal	no*	—
Oil and gas	unknown*	—
Other industrial minerals (gemstone materials, perlite, zeolite, manganese, titanium, zirconium)	no	—

*Potential for yet undiscovered resources.

**See Section 5.2 for descriptions of levels of certainty.

The Parcel has no resource potential at this time. Therefore, based on available geologic data, the Oregon Department of Geology and Mineral Industries sees no conflicts or concerns related to the mineral release.

1.0 INTRODUCTION

This report describes the preliminary evaluation of state-owned mineral rights for a portion of Tax Lot 100, containing ±1.2-acres, herein referred to as the “Parcel”, is located on the Rogue River in Jackson County, Oregon. The purpose of the report is address an application to acquire mineral and geothermal resource rights (59542-LS, which follows the provisions contained in Oregon Administrative Rule, OAR 141-073. The Parcel can be found in Section 16 of Township 35 South, Range 1 West (sec. 16, T 35S, R 1W.) This Parcel of land is privately owned but the State of Oregon’s Department of State Lands (DSL) has retained ownership of the Parcel’s mineral rights. This report covers metallic (precious and base metals) and industrial mineral resources, including rock for aggregate and building stone, sand and gravel, coal, oil and gas, uranium and thorium, and geothermal resources.

1.1 Instructions

The Department of State Lands (DSL) contacted the Oregon Department of Geology and Mineral Industries (DOGAMI) in February 2017 regarding the preparation of this report. An email from DSL was received early March 2017 with authorization to proceed. The resource assessment was completed on March 16, 2017. The format of this report and its contents follows the requirements of the DSL-DOGAMI Interagency Agreement (DSL #14-111-90004) for the 2013-2019 biennia.

1.2 Layout of the Report

For the convenience of the reader, this report is divided into the following five sections:

- Section 1 is the introduction. It contains the project’s instructions and the layout of report.
- Section 2 is a description of the Parcel’s physical and geologic setting.
- Section 3 is the desk assessment part and describes the Parcel’s potential mineral resources.
- Section 4 is a list of references; some of which were consulted as a part of this review but may not be cited in the text body because they contain no information on the Parcel.
- Section 5 contains a brief description of the methods and limitations of the study, along with two reference tables: Levels of Resource Potential and Levels of Certainty. These tables provide a dual scheme that expresses (1) the favorability of the study area and the Parcel within it and (2) it gives the resource a confidence rating for which the level of resource potential was assigned.

2.0 PHYSICAL SETTING

The Parcel, which is located on the Rogue River in southwestern Oregon, is approximately 5.8 air miles (9.4 km) south-southwest from the town of Shady Cove, Jackson County and about 4.5 air miles (7.2 km) to the northwest of the city of Eagle Point, Oregon. The nearest metropolitan area, Medford, Oregon, lies approximately 14.4 air miles (23.1 km) to the south. Figure 2.1 shows the outline of the Parcel draped on a topographic base. This map gives a prospective of the Parcel's relationship with the area's topography and cultural features. Table 2.1 below describes the physical characteristics of the Parcel.

Table 2-1. Parcel physical setting.

Size	1.2 acres (± 0.001 square mi; ± 3.64 km ²)
Topography	Rogue River channel alluvial deposits
Shape	Discontinuous crescent shape, elongated N-S
Frontage	Rogue River Drive and Dodge Bridge County Park
Zoning	Exclusive Farm Use 20+ (from Oregon Explorer- http://oregonexplorer.info/content/oregon-zoning-map)

The Parcel's length is roughly 1,104 ft (0.21 mi) north-south and overall width is 95 ft (0.02 mi) east-west at its widest point. As can be seen in Figures 2-1 and 2-2, its shape resembles a discontinuous crescent-like shape, elongated N-S, and is divided by a branch of the Rogue River. The Parcel's elevation difference is minimal and there are no cultural features on this plot of land.

Jackson County is situated on the boundary of the Western Cascades and the Klamath Mountains physiographic provinces. The Cascade Range and Siskiyou Mountains surrounding the Parcel act as topographic barriers for the Rogue Valley. The valley lies in a rain-shadow, giving the area a Mediterranean climate, for this part of southwestern Oregon. Summers tend to be hot with an average high of about 91° F in July and August, while winters are cold with temperatures averaging around freezing (32° F) in December and January. Precipitation in the area is low as the average annual rainfall and snowfall are about 18 in and 4 in, respectively.

The geomorphic expressions of various sedimentary, igneous and metamorphic rocks in the study area appear as irregularly shaped ridges and elevated mountainous plateaus (Figure 2-1). In contrast, the bottom land in stream valleys are flat to hilly. A prominent feature in the study area are the buttes located to the southwest of the Parcel named Upper Table Rock and Lower Table Rock. These two buttes are capped by a thin and flat lava flow that once covered the valley. Much of the lava flow has been removed as the Rogue River cut through it, after its emplacement.

The Parcel is accessible via Rogue River Drive, an improved road off part of the Rogue Umpqua Scenic Byway (Oregon Highway Route 234), near Dodge Bridge County Park. Dry Creek Road at the north end of Tax Lot 100 appears to provide access to the Parcel. Access from the east may be possible from roads leading off the Crater Lake Highway (Oregon Route 62), such as Hammel Road. (Figure 2-2).

The land ownership within the study area is a mix of public and private lands, as shown in Figure 2-3. The Shady Cove topographic maps covering the Parcel is listed in Table 2-2. The outline of these topographic maps in relation to the Parcel are shown in Figure 2.4. The Parcel is privately owned but the State currently owns the mineral rights.

Table 2-2. Topographic maps covering the study area.

1:24,000-Scale Quadrangles	1:100,000-Scale Quadrangles
Boswell Mountain	Crater Lake
Brownsboro	Medford
Eagle Point	
Obenchain Mountain	
Sams Valley	
Shady Cove	

Figure 2-1. Vicinity map for the Parcel (red fill) and Tax Lot 100 (blue outline).

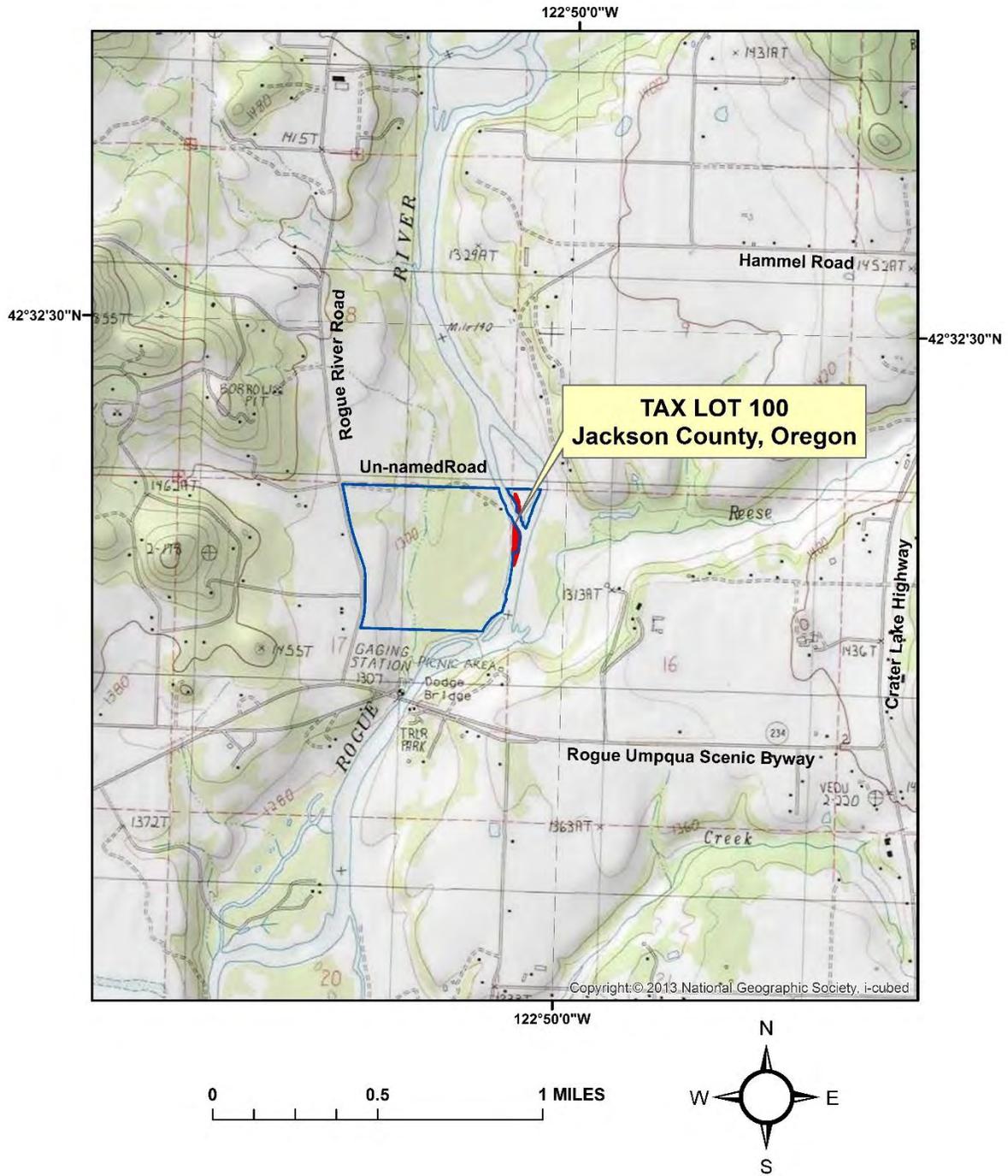


Figure 2-2. Map of active roads in or near the Parcel. Solid red line = State Highways; Gravel and paved roads = brown lines, Parcel = red fill in Tax Lot 100. The map base is a 10-m hillshade-relief mage.

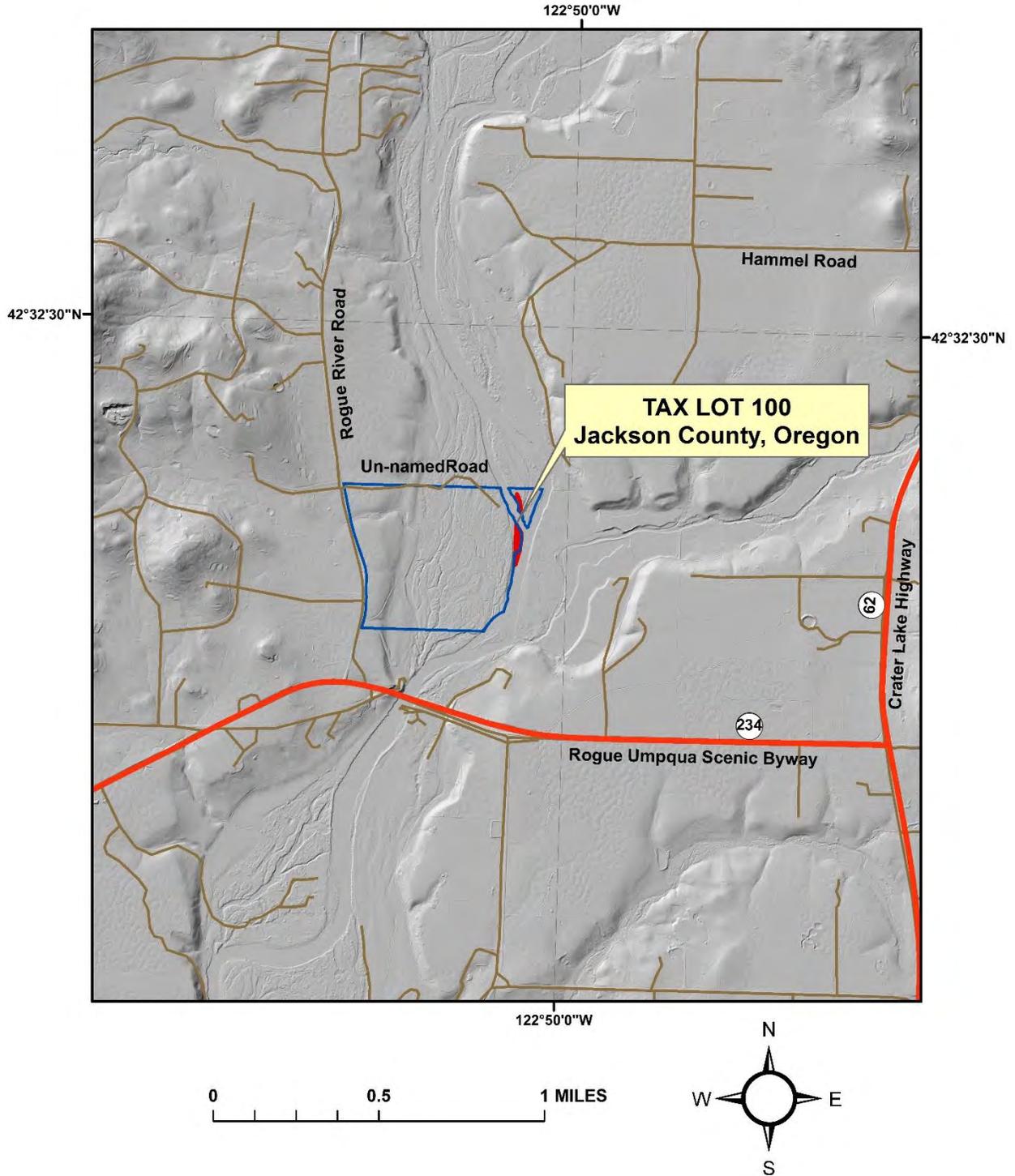


Figure 2-3. Map of the study area and Land Ownership

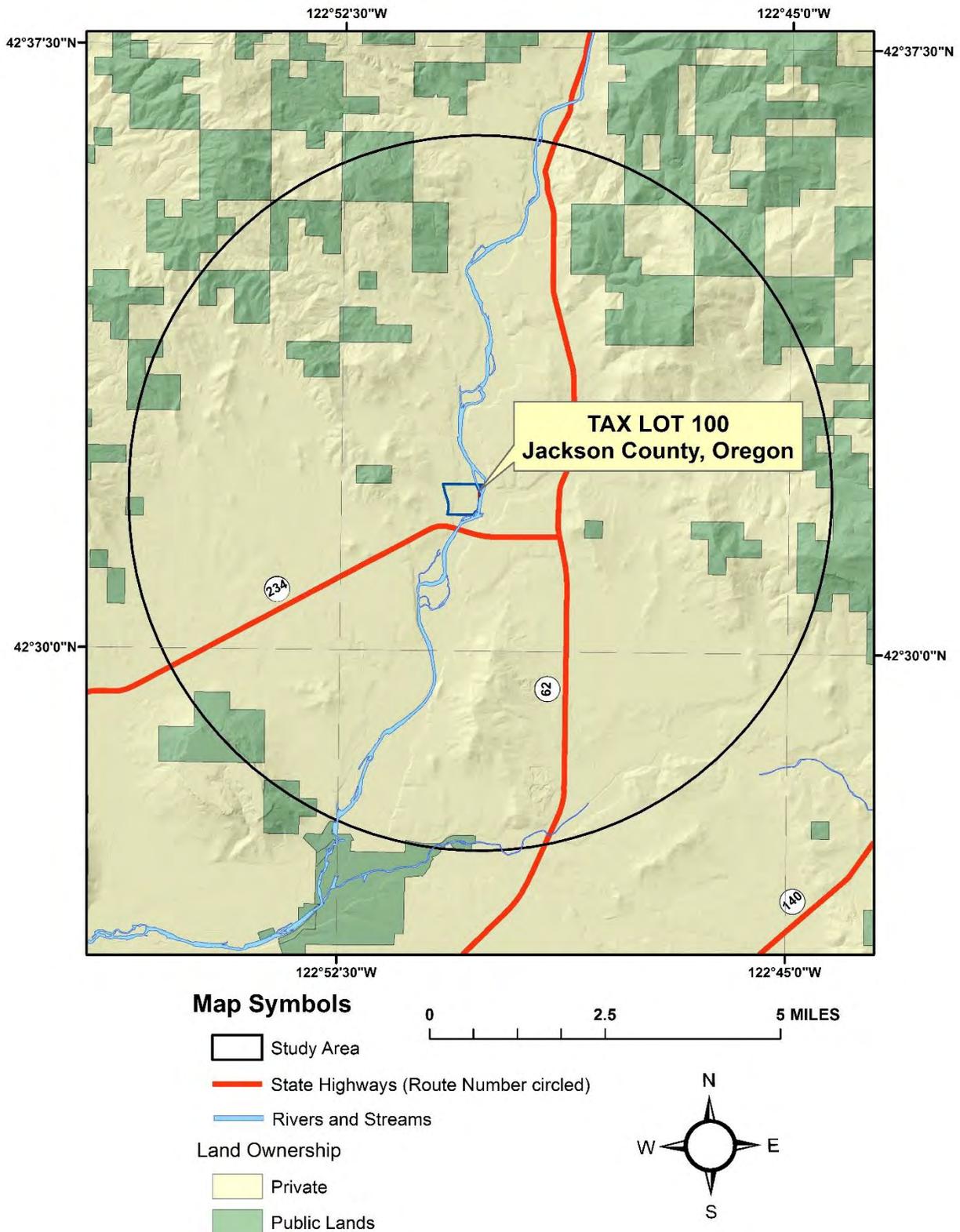
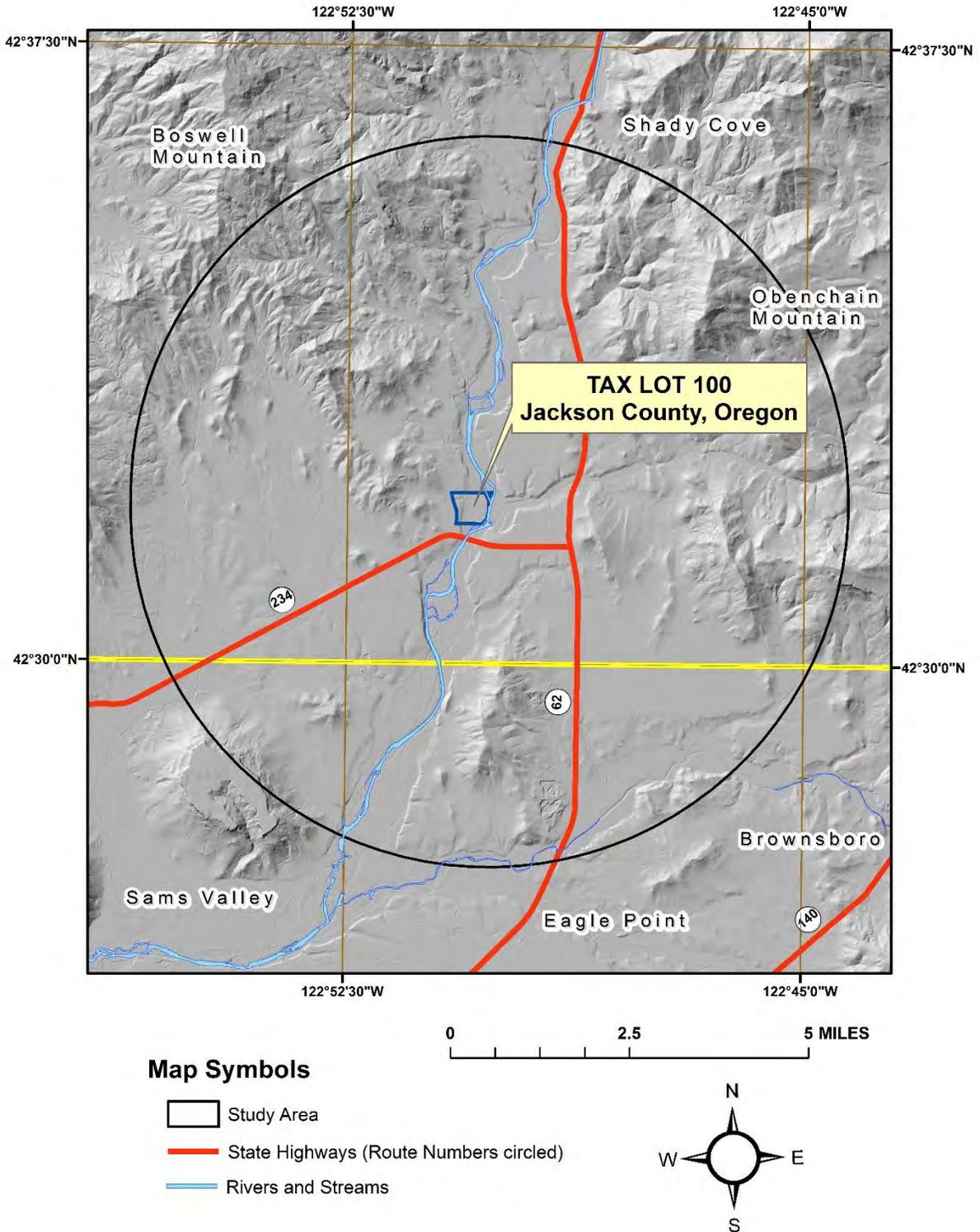


Figure 2-4. Topographic map index for the Parcel. 1:24,000-scale quadrangles = brown outline (brown text is quadrangle name), 1:100,000-scale quadrangles = black outline (black text is quadrangle name), and Parcel = red fill.



3.0 RESULTS

This section presents the results of the mineral scoping of the Parcel. While the focus of this assessment is the Parcel, the larger study area to be considered is an approximately 5 mi (8 km) radius area that borders the Parcel. A study area of this size provides a greater level of information about the identified occurrence of minerals and the Parcel's mineral setting.

Where this report indicates a potential mineral resource might exist, it is important to understand what a "resource" is and means. According to the U.S. Bureau of Mines and U.S. Geological Survey (USGS) Circular 381, "Principles of a Resource/Reserve Classification System," "resource" means, "[a] concentration of naturally occurring solid, liquid, or gaseous material in or on the Earth's crust in such form and amount that economic extraction of a commodity from the concentration is currently or potentially feasible" (p. 1). An identified resource is a "[r]esource whose location, grade, quality, and quantity are known or estimated from specific geologic evidence" (p. 1).

A resource or identified resource does not infer or imply a "reserve base" or "reserve" exists. A "reserve base" is "[t]hat part of an identified resource that meets specific minimum physical and chemical criteria related to current mining and production practices, including those for grade, quality, thickness, and depth" (p. 2). The meaning of a "reserve" is "[t]hat part of the reserve base which could be economically extracted or produced at the time of determination" (p. 2).

The non-fuel mineral commodities evaluated for this assessment include aggregate, industrial minerals (clay, silica sand, pumice, and limestone), and metals (precious, base, and related oxides). Mineral fuel commodities evaluated are coal, uranium/thorium, geothermal, oil, and gas. Occurrences of other commodities (gem material, dimension stone, other clays (bentonite), perlite, zeolites manganese, titanium, zirconium, etc.) will be reported as industrial minerals when encountered as part of this evaluation.

The term "aggregate" includes gravel (and by association sand) and all consolidated stone used for construction and roads. Stone may be further classified as crushed—rock that has been broken into smaller fragments—and blocks. Also, no distinction is made between a mineral occurrence and mineral deposit. The term "mineral occurrence" applies to both and is used to refer to a concentration of a mineral that could be considered valuable by someone somewhere or that is of scientific or technical interest.

3.1 Status of Mineral Surveys

The Parcel, itself, has not been studied as part of a previous mineral survey by DOGAMI or by the U.S. Geological Survey (or the former U.S. Bureau of Mines).

3.2 Mining Claims/Leases

DOGAMI does not maintain records pertaining to public claims or private mineral leases. The Bureau of Land Management (BLM) does make some records of mining claims on Federal lands easily available to the public on its LR2000 website (www.blm.gov/lr2000/index.htm). Only certain types of mineral discoveries can be claimed; these minerals are broadly known as "locatable" (possessing a distinct and special value) and include such things as precious metals, gems, high-value industrial minerals, uranium, etc. Locatable minerals generally do not include construction aggregate, common industrial minerals, oil, gas, coal, or geothermal resources.

There are no mining claims on Federal land in and adjacent to the study area or Parcel.

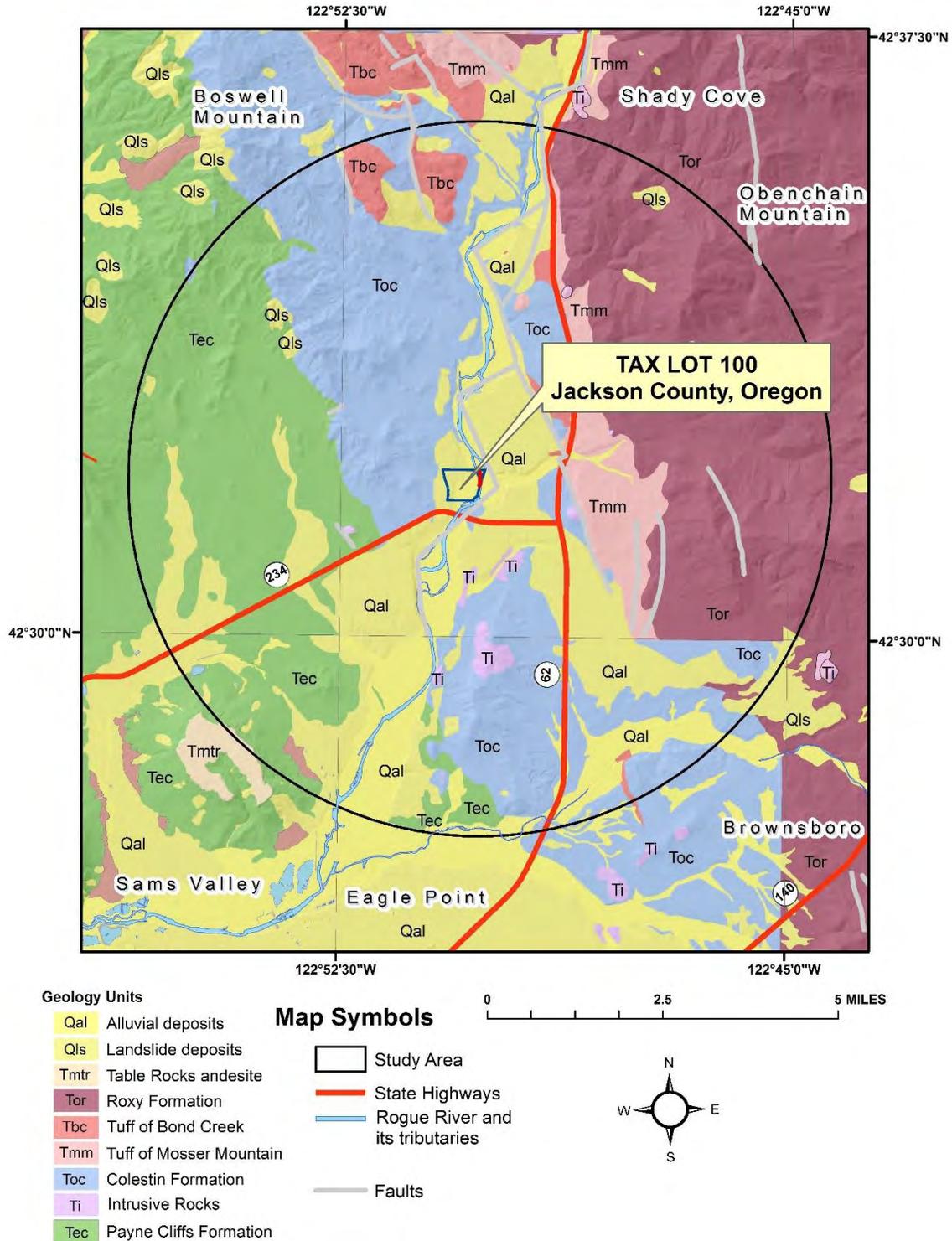
3.3 Mineral Setting

The geology of the study area, as compiled from work by Hladky (1992, 1996 and 1998), Smith and others (1982), Wiley and Hladky (1991), and Wiley (1993, 1996, 2011) is seen in Figure 3-1. Their work has since been compiled by Smith and Roe (2015) into a statewide digital geologic compilation map. As mentioned earlier, the Shady Cove quadrangle covers the Parcel and it was geologically mapped at a 1:24,000-scale by Hladky (1992). The scale of this mapping for mineral scoping is useful and his mapping provides a good characterization of the land's geology and mineral setting.

The main geologic units exposed in the study area are given in order of their ages, beginning with the oldest: (1) to the west of the Parcel, toward the edge of the 5-mi buffer is where the Payne Cliffs Formation crops out. This formation is a sequence of middle and upper Eocene arkosic and micaceous sandstones, conglomerate, siltstone and claystone of fluvial origin. These rocks are associated with outcrops of similar rock types to the north and south of the Parcel area; (2) the Oligocene Colestin Formation stratigraphically overlies the Payne Cliffs Formation and consists of volcanoclastic rocks. The rocks of the Colestin Formation are separated from the Payne Cliffs Formation by a layer of tuff called the tuff of Bond Creek. This tuff has been dated to be about 35 million years old (3) Overlying the tuff of Bond Creek are volcanic, volcanoclastic and pyroclastic rocks of the Roxy Formation. These rocks are of Oligocene and Miocene age and cover the eastern section of the study area; and (4) Quaternary deposits of alluvium and landslide fill modern and older stream valleys and drainages. In general, the Parcel resides in the Quaternary deposits of alluvium in the Rogue River. Rocks belonging to the Colestin and Roxy Formations have likely moved downstream over time. The latter covers most of the eastern third of the study area and the CRBG also caps ridges in the northern half.

The dominant structures in the study area are north to northwest-trending faults. A normal fault is mapped adjacent to the Parcel. There has been no significant activity reported on this fault.

Figure 3-1. Simplified geologic map of the study area. The map base is a 10-m hillshade; the geology is modified from Smith and Roe (2015).



3.4 Known Mineral Occurrences

The inventory of mineral occurrences in the study area, including the Parcel, relied in large part on data derived from past exploration activity, including records of mining claims on federal lands (if applicable) and DOGAMI's digital mineral inventory database (Mineral Information Layer for Oregon [MILO]). Other datasets used in the inventory are as follows:

- Geothermal Information Layer for Oregon (GTILO-2).
- Geoanalytical Information Layer for Oregon (GILO-2; an internal DOGAMI database).
- Oil and Gas (an internal DOGAMI database).
- MLRR (Mineral Land Reclamation and Regulation program of DOGAMI) databases.
- LR2000, the Bureau of Land Management's (BLM) electronic database for claims (inactive, closed). This information is used as evidence of mineral occurrences and surface management.

There are known mineral occurrences and geothermal features in the study area. The results of the inventory are tabulated below in Table 3-1 and shown in Figure 3-3. There are 38 entries in the MILO-2 database for non-fuel minerals and five more entries for mineral fuels. GTILO-2 has records for 18 wells. In the next Section is a brief description of the known mineral occurrences in the study area and in and on the Parcel. Specific site conditions or restrictions associated with each these sites are unknown.

Table 3-1. Mineral occurrences within the study area and in and on the Parcel.

Type of Commodity	study area*	Parcel*
Aggregate (sand and gravel; stone, crushed)	37	0
Industrial mineral (manganese ore)	1	0
Metals/minerals (gold, silver, mercury, and chromium)	0	0
Coal	0	0
Uranium and thorium	0	0
Geothermal features	18 wells, 0 springs	0 wells, 0 springs
Oil and gas wells (abandoned)	0	0

*Mineral occurrence information queried from two spatial databases (see Section 4).

3.4.1 Study Area

The mineral occurrences that have been identified in the study area are as follows:

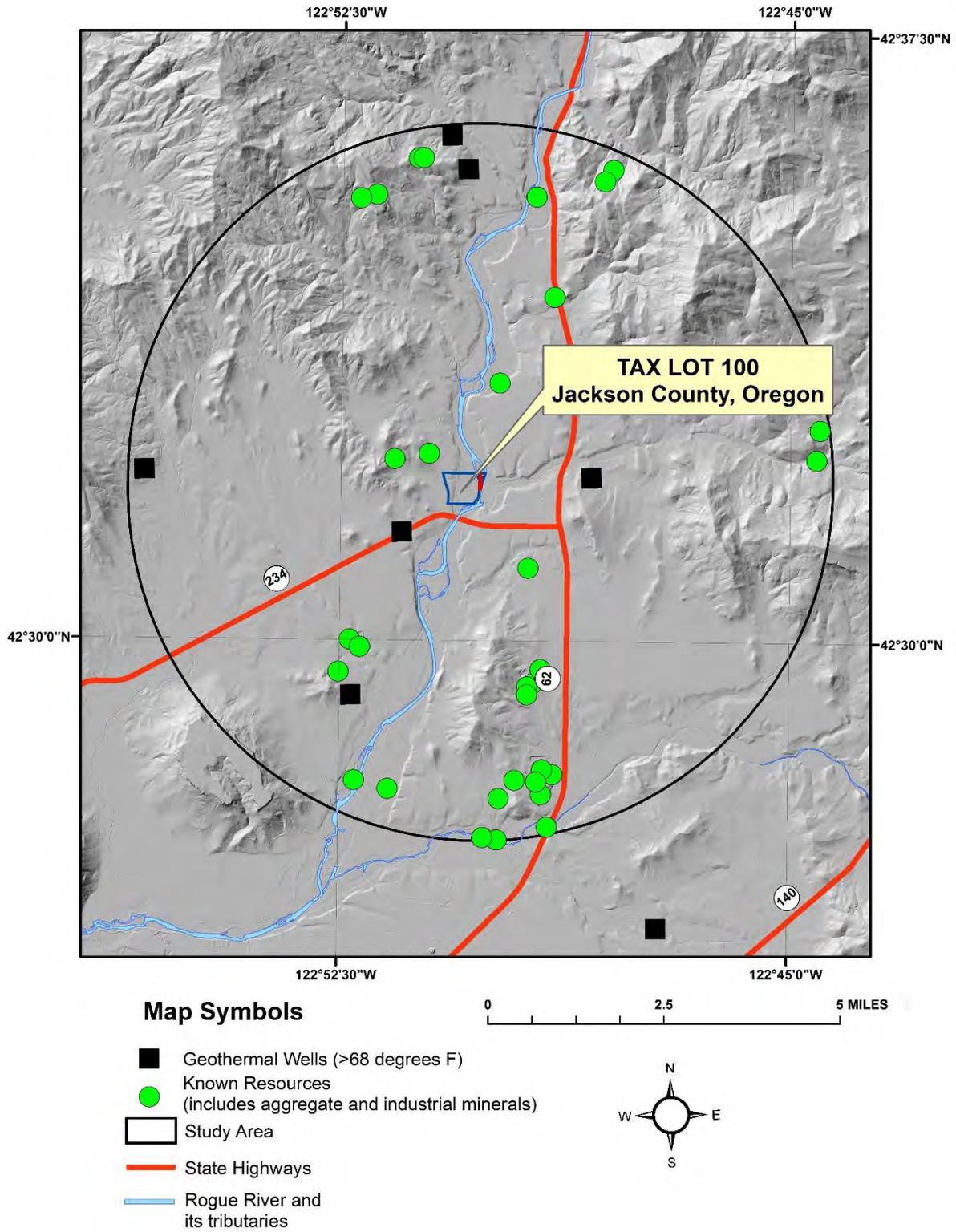
- There are 37 aggregate sites. Ten of these sites produced gravel (and associated sand) from river alluvium and terraces along the Rogue River and its tributaries in the study area. The other 27 sites produced crushed stone. These low-unit-value, high-bulk commodities serve local markets. Specific site conditions or restrictions associated with each site are unknown.
- There is 1 site for industrial minerals (manganese ore).
- No mineral occurrences of either precious or base metals are documented in the study area. Likewise, there is no indication that mineral fuel commodities such as coal, or uranium/thorium exist.

- Available information on existing geothermal resources comes from 18 domestic wells that contain ground water with temperatures greater than 68° F (20° C) (Niewendorp and others, 2012). There are no geothermal springs or other related geothermal features reported in the study area.
- There are no occurrences of oil and gas in the study area.

3.4.2 The Parcel

As can be seen in Figure 3-4, there are no known non-fuel mineral and mineral fuel occurrences in and on the Parcel.

Figure 3-2. Mineral occurrences in the study area.



3.5 Mineral Resource Interpolation

The mineral resource potential of the Parcel is based on the interpolation of the study area's mineral inventory. Each commodity was rated using the criteria developed by Goudarzi (1984) (see Section 5). This potential is summarized below and listed in Table 3.2:

- The Parcel has no potential for a stone (andesite/basalt) resource, level of certainty A, nor does the associated Tax Lot.
- There is no mineral resource potential for an undiscovered deposit of sand and gravel resource.
- The Parcel has no mineral resources potential for the following commodities and mineral fuels: industrial minerals, metals; coal, and uranium, and thorium.
- The Parcel does not appear to have the potential for a geothermal "power" resource, level of certainty A. This assignment of potential is based on the presence of only "warm" water (68° F [20° C] to 78° F [25.6° C]) in the area's wells. A minimum temperature of 212° F (100° C) is required for most geothermal power plant development. The range of water temperatures in the wells of the study area is not sufficient for power (electricity) generation. However, temperatures of 68° F (20° C) and higher maybe of interest locally as they are associated with direct use applications, for example: aquiculture, therapeutic bathing, melting ice and snow, and heating homes, buildings and greenhouses.
- The Parcel has an unknown resource potential for an oil and gas, level of certainty A. This rating is based on the geologic setting of this part of Jackson County which has not attracted any attention for development of petroleum plays. However, new geologic data would be required for an understanding of the study area and the Parcel within if for its oil and gas resource potential and to enhance interest in the resource.

Table 3-2. Mineral resource potential in the Parcel.

Type of Commodity	Resource Potential‡	Level of Certainty**
Sand and gravel (borrow/fill/topsoil)	no	A
Construction Material (crushed/block stone-basalt)	no	A
Limestone	no	A
Clay	no	A
Pumice	no	A
Silica sand	no	A
Bentonite	no	A
Metals (precious, base metals)	no	A
Coal	no	A
Uranium and thorium	no	A
Geothermal*	no	A
Oil & Gas	unknown	A
Others industrial minerals: (gemstone materials, perlite, zeolite, manganese, titanium, zirconium)	No	A

*Potential applies to geothermal power resource

‡See Section 5.1 for description of levels of resource potential

**See Section 5.2 for descriptions of levels of certainty

4.0 LITERATURE SOURCES

Some references below were consulted as a part of this review but may not be cited in the text body because they contain no information on the Parcel.

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5.0 METHODS AND LIMITATIONS

The Scope-of-Work for this assessment did not include a site visit or field work. The objective of the examination was only to determine and/or confirm through desk-top research that a potential mineral resource exists or there is the potential for one. Data compilation efforts for the assessment includes, but is not limited to the following: published and unpublished geology and mineral/material resource literature available at DOGAMI. Additional data is often acquired from industrial Web sites.

A core part of the mineral inventory process includes the review of six datasets:

- MILO-2 (Mineral Information Layer for Oregon, Release 2).
- GTILO-2 (Geothermal Information Layer for Oregon, Release 2).
- MLRR (Mineral Land Reclamation and Regulation program of DOGAMI) databases.
- LR2000, the Bureau of Land Management's (BLM) electronic database for claims (inactive, closed).
- Oil and Gas (an internal DOGAMI database).
- OGCD-6 (Oregon Geologic Compilation Database, Release 6).

The collection and presentation of data is facilitated through GIS. Report of Findings is tailored to address the required items listed in the Intergovernmental Agreement (IGA), DSL #14-111-90004.

This examination did not include activities such as sampling and systematic geological, geophysical, and geochemical mapping as the basis for determination or confirmation that a mineral resource potential, deposit, or mineral occurrence exists.

A desktop inventory of mineral occurrences cannot alone determine the following:

- The accurate identification of the concentration and occurrence of material in relation to its particular geographical controls.
- The volume of valuable mineral or rock present or removed, and reserves remaining.
- The applicable extraction and processing methods and market factors for its products.

Also, this low-level mineral assessment cannot be the sole basis for an appraisal or the basis for other generally accepted industrial standard for placing a value on and with a resource and the Parcel itself. Users of this report are advised to consult with DOGAMI to gain a better understanding of the inherent limitations of the information herein and its scope of inference.

Provided below are definitions for levels of mineral resource potential and certainty of assessment (modified from Goudarzi, 1984). Under this system, the level of mineral resource potential assigned to a commodity is based on geologic, geochemical, and geophysical characteristics.

5.1 Levels of Resource Potential (modified from Goudarzi, 1984)

HIGH	HIGH mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics indicate a geologic environment favorable for resource occurrence, where interpretations of the data indicate high degree of likelihood for resource accumulation, where data support mineral-deposit models indicating presence of resource, and where evidence indicates that mineral concentration has taken place. Assignment of high resource potential to an area requires some positive knowledge that mineral-forming processes have been active in at least part of the area.
MEDIUM	MEDIUM mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics indicate a geologic environment favorable for resource occurrence, where interpretations of the data indicate high degree of likelihood for resource accumulation, where and (or) where an application of mineral-deposit models indicates favorable ground for the specified type(s) of deposits.
LOW	LOW mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics define a geologic environment in which the existence of resources is permissive. This broad category embraces areas with dispersed but insignificantly mineralized rock, as well as areas with obvious site limitations and little or no indication of having been mineralized.
NO	NO mineral resource potential is a category that should be reserved for a specific type of resource in a well-defined area.
UNKNOWN	UNKNOWN mineral resource potential is assigned to areas where information is inadequate to assign a low, moderate, or high level of resource potential.

5.2 Levels of Certainty of Assessment (Goudarzi, 1984)

A	Available information is not adequate for determination of the level of mineral resource potential.
B	Available information suggests the level of mineral resource potential.
C	Available information gives a good indication of the level of mineral resource potential.
D	Available information clearly defines the level of mineral resource potential.

Space above this line for Recorder's use.

Quitclaim Deed
(Minerals and Geothermal Resources)

GRANTOR:

State of Oregon, acting by and through its
Department of State Lands
775 Summer St. NE, Ste 100
Salem, OR 97301-1279

GRANTEE:

MacArthur Family LLC
1839 Washington Street
Newton, MA 02466

**FUTURE TAX STATEMENTS
SHOULD BE MAILED TO:**

MacArthur Family LLC
1839 Washington Street
Newton, MA 02466

**AFTER RECORDING
RETURN TO:**

MacArthur Family LLC
1839 Washington Street
Newton, MA 02466

The STATE OF OREGON, acting by and through its Department of State Lands, GRANTOR, releases and quitclaims to MacArthur Family LLC, GRANTEE, all right, title and interest in and to all minerals as defined in ORS 273.775 (1), including soil, clay, stone, sand and gravel, and all geothermal resources as defined in ORS 273.775 (2), within or upon the following described real property:

BEING a tract of land located in Section 16, Township 35 South, Range 01 West of the Willamette Meridian, Jackson County, Oregon and being more particularly described as in Exhibit A attached hereto:

The true and actual consideration for this conveyance is \$250.00.

EXHIBIT A
(Legal Description)

Those portions of Government Lot 3 lying within the boundaries of tax lot 100 and lying outside of the ordinary high water line of the Rogue River, containing a portion of the tax lot existing on an island within the Rogue River and a portion of the tax lot on the western bank of the Rogue River in Section 16 of Township 35 South, Range 01 West, Jackson County, Oregon more particularly described below:

A portion of Government Lot 3 within tax lot 100 existing as upland on an island within the river described more particularly as:

Beginning at the northeast corner of section 16, following the section line south 268.3° for 88.3 feet to the point of beginning; thence southeast 304.8° for 29.9 feet, thence southeast 289.0° for 102.8 feet, thence south 276.2° for 354.2 feet, thence south 279.2° for 28.5 feet to a point along the ordinary high water line of the eastern bank of the Rogue River channel that runs adjacent to the island contained within tax lot 100, thence following the ordinary high water line of the Rogue River north along the bank for approximately 256 feet to a point on the ordinary high water line, thence north 88.2° for 107.3 feet back to the point of beginning.

A portion of Government Lot 3 within tax lot 100 lying west of the ordinary high waterline on the western bank of the Rogue River more particularly described as:

Beginning at the northeast corner of section 16, following the section line south 268.3° for 550.7 feet to the point of beginning; thence south 268.2° along the section line for 474.3 feet, thence northeast 23.2° for 10.5 feet, thence east 359.9° for 37.2 feet thence northeast 33.6° for 52.6 feet to a point on the ordinary high water line of the western bank of the Rogue River, thence following the ordinary high water line north along the western bank of the Rogue River for 461.5 feet back to the point of beginning.

The aggregate totaling approximately one (1) acre.

These descriptions were made using Geographic Information Software and represent approximate locations. These descriptions were prepared for a quitclaim deed of mineral rights and were not created for, nor may be used for survey purposes.



Oregon

Kate Brown, Governor

Department of State Lands

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State Land Board

State Land Board

Kate Brown

Governor

Regular Meeting

May 9, 2017

Agenda Item 4

Dennis Richardson

Secretary of State

Tobias Read

State Treasurer

SUBJECT

Request for approval to grant a 20-year easement for a fiber optic communication cable across state-owned submerged and submersible lands in the Territorial Sea in Tillamook County.

ISSUE

Whether the State Land Board should approve a request from Hawaiki Submarine Cable USA, LLC for an easement to operate, maintain, repair and replace a fiber optic communication cable across state-owned submerged and submersible lands in the Territorial Sea in Tillamook County.

AUTHORITY

ORS 273.045; providing that the Department establish administrative rules as necessary to carry out its duties.

ORS 390.715; providing that permits for cable lines in the submerged land adjacent to the ocean shore may be issued upon payment of just compensation by the permittee.

ORS 758.010; providing that communication line easements across all state-owned submerged and submersible land are statutorily granted.

ORS 141-083-0800 through 141-083-0870; establishing procedures for granting fiber optic and other cable easements and rights-of-way across state-owned submerged and submersible land, and requiring Land Board approval of easements in the Territorial Sea.

BACKGROUND

The easement is for the right to construct, maintain, operate and replace a fiber optic communication cable over, upon, and under Oregon's Territorial Sea. Appendix A shows the approximate location of the proposed cable across the Territorial Sea, landing near Pacific City in Tillamook County.

Hawaiki Submarine Cable USA, LLC proposes to install the Hawaiki Cable System that is an ultra-high speed fiber optic cable system consisting of six fiber strands that will connect the United States (at Pacific City, Oregon) to Australia. The Hawaiki Cable System comprises a route from Pacific City, Oregon to Hawaii, American Samoa, New Zealand, and Australia.

Hawaiki Submarine Cable USA, LLC entered into an agreement with Oregon Fishermen's Cable Committee (OFCC) that encourages the use of cable installation and maintenance techniques that minimize interface with commercial fishing activities. In addition, this agreement provides an annual fund for committee expenses and replacement of cable-related fishing gear losses; provides a 24-hour toll free hotline for reporting cable snags; and releases participating fisherman from liability for cable damages (Appendix B).

The Department received the application fee of \$5,000 on December 19, 2016. The Department received a \$20,000 surety bond on April 18, 2017, for construction related activities. Additionally, Submarine Cable USA, LLC proposes a \$300,000 payment to satisfy the just compensation requirement for the use of the state-owned land for the initial 20-year term of the easement in exchange for the certainty provided by removing the 'prevailing law/future consideration' clause. This payment is consistent with compensation received for other similar types of easements granted by the Department in the past.

PUBLIC INVOLVEMENT

The Hawaiki Submarine Cable USA, LLC worked with the Oregon Fishermen's Cable Committee to select a route that will allow burial of the cable where appropriate to minimize loss of fishing areas and risks to fishing gear. Hawaiki Submarine Cable USA LLC and OFCC have reached and signed an agreement requiring Hawaiki Submarine Cable USA LLC to pay costs associated with the installation of the cable and notification to the fishing fleet, and a pro-rated share of the OFCC's expenses. Hawaiki Submarine Cable USA LLC will also contribute, along with other cable companies, an equal share to a Sacrificed Gear Fund to compensate fisherman for snagged or released gear.

On January 11, 2017, the Department circulated the Hawaiki Submarine Cable USA LLC application for a fiber optic cable easement crossing the Territorial Sea for public comment; including but not limited to state, county, federal agencies, tribal entities and adjacent property owners. The Oregon Department of Fish & Wildlife (ODFW) sent a letter on February 21, 2017 with a recommendation that construction activities be conducted outside of the gray whale "Phase B" migration between April 1 and June 15. Hawaiki Submarine Cable USA LLC responded that the construction activities would take place outside that window (Appendix C).

A removal-fill permit DSL #59615-RF was required by the Department and includes language to address the ODFW concern regarding gray whale migration. The removal-fill permit was issued on March 15, 2017. The application process and resulting draft easement is also consistent with Part Four of the Oregon Territorial Sea Plan.

The draft easement has been reviewed and approved by the Oregon Department of Justice (Appendix D).

RECOMMENDATION

The Department recommends that the State Land Board approve the granting of a 20-year easement to the Hawaiki Submarine Cable USA, LLC for a fiber optic communication cable across state-owned submerged and submersible land within and adjacent to the Territorial Sea, landing near Pacific City in Tillamook County.

APPENDICES

- A. Site map
- B. Oregon Fishermen's Cable Committee agreement
- C. Hawaiki Submarine Cable USA, LLC response to ODFW comment and recommendation
- D. Draft easement (59614-EA)

State of Oregon
Department of State Lands



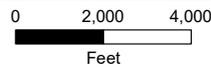
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix A

59614-EA Waterway Easement
Territorial Sea
314,000 Square Feet
Tillamook County

- ▲ Description Points
- Description Lines
- ▨ Authorization Area

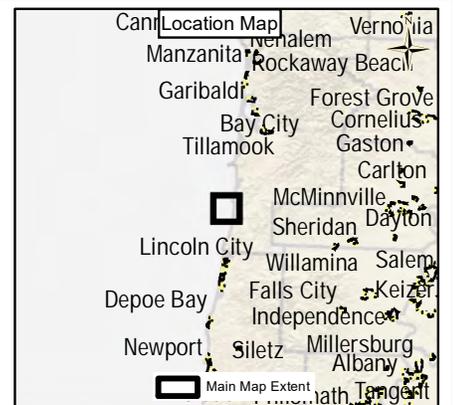
This map depicts the approximate location and extent of a Department of State Lands Proprietary authorization for use. This product is for informational purposes only and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.



Map Projection:
Oregon Statewide Lambert
Datum NAD83
International Feet

State of Oregon
Department of State Lands
775 Summer St NE, Suite 100
Salem, OR 97301
503-986-5200
www.oregon.gov/DSL

Date: 3/3/2017



**AGREEMENT BETWEEN THE OREGON FISHERMEN'S
CABLE COMMITTEE, INC. AND HAWAIKI
AS RELATES TO THE HAWAIKI SUBMARINE CABLE**

This Agreement is entered into on the date noted below between and among: The Oregon Fishermen's Cable Committee, Inc. ("OFCC" or "Oregon Committee" or "the Committee"), an Oregon non-profit corporation with a business address at 2021 Marine Drive, Suite 102, Astoria, Oregon 97103, and Hawaiki Submarine Cable USA LLC, (hereinafter called "HAWAIKI"), a Delaware limited liability company and having its registered office at 16192 Coastal Highway, Lewes, County of Sussex, DE 19958 USA. The OFCC and HAWAIKI are at times referred to collectively as the "Parties".

The OFCC is constituted of representatives of both the Oregon commercial fishing industry and the sub-sea telecommunications industry and sub-sea scientific observation representatives. The fishing representatives are from the areas near and the waters off Astoria/Columbia River, Garibaldi, Newport/Yaquina Bay, Charleston/Coos Bay and Brookings/Harbor in the State of Oregon. The current telecommunications and scientific cable representatives are from ACS Cable Systems, Inc. ("ACS"), MFS Globenet, Inc. ("Verizon"), Tata Communications (America) Inc. ("Tata"), General Communication, Inc. ("GCI"), The Consortium for Ocean Leadership, Inc. ("Ocean Leadership"), GU Holdings ("GOOGLE"), and Microsoft Infrastructure Group, LLC ("Microsoft").

The Oregon Accord (established on July 9, 1998 between Certain Oregon Commercial Fishing Interests and WCI Cable, Inc.) was the first agreement between the Oregon commercial fishing industry and the sub-sea telecommunications industry. The Oregon Accord established the OFCC along with basic principles, understandings, and procedures to follow for the shared use of the seabed off the Oregon coast. Among the other Goals set forth below, the Oregon Accord seeks to minimize risks to, interference with, and/or interruption of commercial fishing activities and of submarine fiber optic cable operations.

HAWAIKI intends to install the HAWAIKI SUBMARINE CABLE from near Pacific City, Oregon to Hawaii and Oceania through commercial fishing grounds in the waters off the State of Oregon. This Agreement reflects the basic principles of the Oregon Accord as modified and amended to date by the OFCC. HAWAIKI agrees to adhere to the terms and conditions of this Agreement. If there is a conflict between the Oregon Accord and this Agreement, the terms and conditions of this Agreement take precedence.

GOALS OF THE PARTIES

To continue communication, coordination, and cooperation between members of the Oregon commercial fishing and fiber optic cable industries so that they can amiably discuss and resolve concerns;

To encourage the employment of commercially reasonable cable installation and maintenance techniques to minimize interference with and/or interruption of commercial fishing activities;

To distribute to US West Coast trawl fishermen the 24-hour toll free hotline numbers maintained by individual cable owners who are a party to the OFCC;

To establish a Fund to compensate commercial fishermen for the replacement of cable-related fishing gear losses;

To form a committee constituted of Oregon commercial fishermen and fiber optic cable representatives who oversee Committee funds and administer the Committee's related activities;

To release participating commercial fishermen from liability for damage to member fiber optic cable systems; and

To educate and encourage the West Coast US trawl fleet to follow safe practices around OFCC member fiber optic cables and to protect those cables from damage.

SHARED UNDERSTANDINGS

The Oregon Accord was the first effort by representatives of the commercial fishing and telecommunications industries to discuss, describe, and delineate their shared use of a community resource – the coastal continental shelf and slope. The Oregon Accord and this Agreement are a refinement of the rights and duties set forth in and under international and national law. These agreements are private compacts between and among individuals and entities. These agreements are not intended to, nor do they create, any rights in third parties other than the individual Participating Fisherman who executes the "Individual Fisherman's Agreement And Mutual Release", a copy of which is attached to this Agreement as Attachment 2. These agreements are intended to be implemented with a minimum of government involvement and interference. These agreements are not intended to be and should not be interpreted or enforced by an agency or court except as set forth in the Dispute Resolution section of this Agreement. These agreements are not intended to be disclosed in any administrative or judicial proceeding except as otherwise required by law.

The Parties acknowledge and agree that this Agreement covers only the HAWAII submarine fiber optic cable running from the shoreside near Pacific City, Oregon seaward to a water depth of 1500 meters. The HAWAII submarine cable will be buried to a water depth of 1,300 meters or a mutually agreed point (Burial End Point) in accordance with Attachment 3. All cable segments that are located shoreward of the 700 Fathoms Essential Fish Habitat ("700 Fm EFH") shoreward boundary shall be buried excepting at those mutually agreed locations. The Parties also acknowledge and agree that because the fiber optic cable is intended to remain buried, all current fishing activities undertaken by (a) Class A limited entry groundfish permit holders with trawl endorsement, and (b) Washington, Oregon and California pink shrimp permit holders, may continue in the area where the HAWAII submarine cable is buried. The Parties also acknowledge and agree that this Agreement is limited to the traditional fisheries and current gear and technology in the fishing industry. This Agreement expressly does not cover or protect the fishermen who utilize clam dredges, scallop dredges, and/or any other sub-benthic technology.



24-HOUR TELEPHONE HOT LINE

HAWAIIKI shall provide and maintain, either individually or in collaboration with other cable entities a 24-hour toll free telephone hot line for fishermen to call who believe they have snagged their gear on the HAWAIIKI submarine fiber optic cable. There shall always be one person on duty at all times who (1) has the authority to make a decision and (2) the background and experience to make the most prudent decision under the circumstances. The individual shall have the authority to make a quick decision to cut the snagged fishing gear based on limited information if a failure to cut the gear could jeopardize lives or other property, including the HAWAIIKI submarine fiber optic cable.

FUNDS

Installation Costs

The Parties entered into a Memorandum of Understanding ("MOU") dated November 30, 2015 governing pre-installation and installation activities and funds for such activities.

In the unlikely event that the HAWAIIKI submarine cable system is not installed with an Oregon landing, the Parties agree this Agreement shall be terminated without further liability, provided that HAWAIIKI shall be responsible for payment of actual costs for pre-installation and installation activities incurred by the Oregon Committee up to the date of termination.

Annual Costs for OFCC Expense

HAWAIIKI shall share in the Committee's expenses with the other cable entities on a pro rata basis according to the following:

Determination of Pro Rata Share: The OFCC pro rata share calculation is 1 share for the first cable segment and $\frac{1}{2}$ share for each additional cable segment forming a part of the same cable system. Presently, GCI, Google and Microsoft each have 1 cable under agreement and, therefore, are each obligated for 1 share of the expenses. ACS and Verizon have 2 cables under agreement and are obligated for $1 \frac{1}{2}$ shares of the expenses. Tata has 3 cables under agreement and is obligated for 2 shares of the expenses. The Consortium For Ocean Leadership, Inc. has 3 continental shelf cable segments and is obligated for 2 shares of the expenses. There are a total of 10 shares currently under agreement. With the addition of the HAWAIIKI submarine cable, there will be 11 shares. HAWAIIKI will be responsible for 1 out of a total of 11 shares, or 9.09091% of the OFCC's expenses. Should HAWAIIKI install additional HAWAIIKI cable segments in Oregon, an additional $\frac{1}{2}$ share will be allocated to HAWAIIKI for each HAWAIIKI cable segment.

Timing and Amount of Payments: The OFCC shall approve an annual budget for OFCC operations for the fiscal year commencing July 1. HAWAIIKI will be invoiced semi-annually for its share of the OFCC expense up to a maximum of \$75,000 per period. The budget will be reconciled semi-annually with credits applied or payments owed reflected in the invoice for a subsequent six month period. HAWAIIKI's payment obligation shall become effective upon HAWAIIKI's execution of this Agreement. The initial invoice shall be prorated from the effective date to the end of the applicable invoice period. All invoices will be paid within 60 days of receipt. In the unlikely event that the HAWAIIKI submarine cable system is not installed with an Oregon landing, the Parties agree this Agreement shall be terminated without further liability.



In the case of termination, the OFCC shall retain all payments made by HAWAIIKI for its pro rata share of the OFCC operations budget for the then current invoice cycle.

At the May 26, 2016 Board of Directors meeting, it was recommended setting aside an approximate three-month reserve of operating expenses. The OFCC Board of Directors agreed to establish an initial reserve fund of \$50,000 USD. A payment of \$7142.86 for the reserve account will also be expected of newly joining cable companies.

Sacrificed Gear Fund

The OFCC has maintained a Sacrificed Gear Fund of \$150,000 which is funded by the member cable owners. An equal share of this Sacrificed Gear Fund shall be borne by each cable owner that is a member of the OFCC. This fund will only be used to pay sacrificed gear claims, provide sacrificed gear bridge loans, and pay related expenses. Related expenses shall include the cost of OFCC fishermen representatives (in accordance with the OFCC Rate Schedule in effect at the time) involved with the investigation, processing or review of a claim for sacrificed gear. If payments from this fund are made in connection with gear sacrificed to protect the HAWAIIKI submarine cable, then the OFCC shall invoice HAWAIIKI for the amounts paid from the fund and HAWAIIKI shall replenish the fund by paying those amounts into the fund within 60 days of receiving said invoice. In addition, if a sacrificed gear claim on the HAWAIIKI submarine cable exceeds the amount available in the Sacrificed Gear Fund, HAWAIIKI agrees to deposit into the Sacrificed Gear Fund the amount of the OFCC approved claim, including the amount that exceeds the fund, within 60 days.

At the May 26, 2016 Board of Directors meeting, a motion was made, seconded and passed unanimously to increase the Sacrificed Gear Fund by \$25,000, the amount each current cable company has paid into the Fund, with each new company that comes into the OFCC. The initial \$25,000 payment shall be due upon commencement of cable placement operations.

RESOLUTION OF CLAIMS

The OFCC has established a claims review procedure. A Participating Fisherman shall submit a written claim for compensation pursuant to the claims review procedure and on approved forms including the "Sacrificed Gear Claim Form And Release And Settlement" within the time set by the OFCC. The OFCC shall review and then approve or deny a claim in accordance with its claim review procedure. As part of its review, the OFCC may review any available information relating to the sacrificed gear claim, including an inspection of the cable by an underwater remote operated vehicle ("ROV"). If the OFCC approves a claim, the OFCC waives any right to collect from the claimant amounts OFCC paid for the replacement gear related to that claim. In addition, the OFCC shall pay from the Sacrificed Gear Fund an amount equal to fifty percent (50%) of the value of the replacement gear to the Participating Fisherman. This sum represents liquidated damages in settlement and satisfaction of any and all claims or possible claims for loss of business, lost profits, or any other damages incurred by the Participating Fisherman. If the OFCC denies a claim because of fraud, misrepresentation, or failure to follow the required procedures, the authorization to the approved suppliers for the sacrificed gear is treated as a bridge loan to the fisherman that must be repaid by the fisherman.

THE OREGON FISHERMEN'S CABLE COMMITTEE

Voting Members

The size, structure, and membership of the OFCC are set forth in the Bylaws of the Oregon Fishermen's Cable Committee, Article III, Section 2 as amended.

Non-Voting Members

There shall be one non-voting director as set forth in the Bylaws of the Oregon Fishermen's Cable Committee, Article III, Section 3 as amended: There shall be one (1) non-voting Director selected by the voting Directors, who shall be a specialist in undersea telecommunications construction and maintenance.

OFCC Fishermen Board Member Costs

Each fisherman Board Member shall be paid for duties agreed by the OFCC in accordance with the OFCC Rate Schedule in effect at the time. In addition, each fisherman Board Member will be reimbursed for all reasonable expenses incurred in performing his or her duties. Payments made to fishermen Board Members will be made from the OFCC Expense operating funds.

RELEASE OF LIABILITY

HAWAIIKI agrees to release any claims against vessel owners and operators and refrain from taking any administrative, legal or other action to sanction and/or recover damages against vessel owners and operators who honor the procedure established by the Committee pursuant to this Agreement. HAWAIIKI further agrees to encourage all administrative, legal and other authorities to honor the procedure established by the Committee pursuant to this Agreement. HAWAIIKI will not be deemed to have released claims against vessel owners or operators who engage in fraud, misrepresentation or failure to substantially follow the OFCC procedures. In such case, HAWAIIKI will be entitled to pursue any and all legal and equitable remedies available to it.

OFCC ACTIVITIES

OFCC will communicate with fishermen about the HAWAIIKI submarine cable, and evaluate and resolve fishermen claims. OFCC will also oversee the Sacrificed Gear Fund and other funds and perform any other related activities as needed and according to the OFCC Rate Schedule in effect.

HAWAIIKI ACTIVITIES

Cable Burial

HAWAIIKI has contracted to have the HAWAIIKI submarine fiber optic cable installed at a depth of one meter or more beneath the seabed from shore to the Burial End Point. The fiber optic cable may be buried at less than one meter in hard ground or where the onboard OFCC

observers have determined that reasonable efforts failed to achieve full burial. Additionally, where soft bottom is encountered, the fiber optic cable may be buried deeper than one meter. In all instances, current technology will be utilized in the cable burial process including using remote operated vehicles ("ROV"), post-lay burial, where required, and ROV inspection immediately following installation shoreward of the Burial End Point.

HAWAIIKI agrees that two (2) OFCC fishermen representatives shall be allowed on board cable survey, cable installation, and cable maintenance vessels from the coast out to the Burial End Point. The involvement of OFCC fishermen representatives is limited to cable survey, cable installation, cable maintenance, cable inspection and cable repair activities.

OFCC shall ensure that the Personal Liability Release Form included as Attachment 1 to this Agreement is signed by all persons undertaking activities at the behest of OFCC onboard any cable survey, installation, inspection or maintenance vessels chartered by HAWAIIKI or its contractors. The OFCC fishermen representatives shall have access to observe all operations including access to instruments onboard vessels whenever space and working conditions reasonably allow. HAWAIIKI shall pay all of the representatives' approved expenses in the course of their observing such operations in accordance with the OFCC Rate Schedule in effect at the time of the operation.

Miscellaneous Activities

HAWAIIKI and its contractors shall undertake stringent debris control efforts during installation and burial of the cables.

As-Built Coordinates and Charts

HAWAIIKI shall provide cable as-built installation GPS coordinates to the OFCC within 30 days after the installation contractor delivers the information to HAWAIIKI. This data shall be provided in written and electronic data form. HAWAIIKI shall provide the OFCC with a complete set of as laid charts of the cables shoreward of 1,500 meters water depth.

ROV Burial Verification

HAWAIIKI shall conduct an ROV burial verification inspection not more than five (5) years following the completion of the HAWAIIKI submarine cable installation. If the survey of the cable, at not more than five (5) years following installation, presents significant evidence that the cable has remained buried, subsequent surveys for the same cable shall occur at not more than eight (8) year intervals. If there is significant evidence that the cable has not remained buried, the ROV burial surveys shall continue at intervals of not more than five (5) years. In addition to the foregoing ROV burial verification surveys, HAWAIIKI shall conduct an ROV inspection and survey after any major geological or environmental event as determined by the OFCC. If required, HAWAIIKI shall pay committee-approved gear compensation and/or gear removal costs associated with these or other maintenance activities. All ROV burial verification inspections shall follow protocols to be agreed to by HAWAIIKI and the OFCC.

Patrol/Guard Vessels

HAWAIIKI shall separately execute Fishing Vessel Charter Agreements that independently fund patrol boats that are nominated by the OFCC during the cable landing, laying and burial operation shoreward of the Burial End Point. The OFCC shall only nominate patrol boats that

will meet committee minimum requirements. Patrol vessels will be compensated in accordance with the OFCC Rate Schedule in effect at the time of the operation. Patrol Boats will not be required during ROV operations, whether part of a Post Lay Inspection & Burial (PLIB) operation, subsequent repair or ROV Inspection.

A guard boat will be required for a new cable exposure during construction or repair operations more than 3 nm away from the cable ship performing the work. The guard boat shall maintain a watch at the site for up to 10 days, or a mutually agreed upon duration, to allow for fleet notification to occur. A single guard boat may stand watch over multiple exposures in which no exposure is more than 10 nm from any other exposure. If exposures are more than 10 nm apart, one or more additional guard boats are required.

REVIEW BY LEGAL COUNSEL

The Parties acknowledge and agree that they have had this Agreement reviewed by legal counsel or were afforded an opportunity to have this Agreement reviewed by legal counsel.

DISPUTE RESOLUTION AND LIMITATION OF LIABILITY

In the event of a dispute between the Parties to this Agreement, the Parties shall (1) discuss the problem between them and attempt a resolution. If the dispute is not thereby resolved within seven (7) days, the Parties shall (2) mediate the problem in Portland, Oregon or in another mutually agreed location. If the dispute is not thereby resolved within thirty (30) days, the Parties shall (3) engage in binding arbitration in Portland, Oregon or in another mutually agreed location and before a mutually agreed arbitrator.

Neither Party will be liable to the other for any indirect, consequential, special, incidental or punitive damages, or for any lost profits of any kind or nature whatsoever, foreseeable or not, arising from its performance of its obligations under this Agreement, whether from negligence or otherwise. Neither Party's total aggregate liability arising out of or relating to this Agreement will exceed the annual amount paid or payable under this Agreement.

In the event of a dispute between or among the Parties to this Agreement on a technical issue, the Parties shall discuss the problem between them and diligently attempt to reach a resolution. If the dispute is not thereby resolved in a timely manner, the Parties shall employ an independent engineer to review the issue and render an opinion that shall be binding. The engineer shall be hired from a mutually agreeable independent engineering firm with expertise in undersea cable systems and paid by HAWAIIKI.

SUPPORT FOR HAWAIIKI SUBMARINE CABLE PROJECT

The fishing industry members of the OFCC express their support to governmental agencies in connection with the permitting, installation, operation and maintenance of the HAWAIIKI submarine cable that is the subject of this Agreement. These members shall also express support for subsequent cables that may be proposed by HAWAIIKI, provided that the provisions of this Agreement or a similar agreement cover these subsequent cables.



CONFIDENTIALITY

All data concerning cable installation and engineering shall be considered confidential and released outside the OFCC only by written consent of HAWAIIKI.

AGREEMENT OPEN TO NEW MEMBERS

Additional cables and cable companies may join the OFCC by majority vote of the OFCC. In such an event, the OFCC's operating expense, Sacrificed Gear Fund, and other shared costs of the Committee will be allocated among the cable company committee members and such new member cable companies must agree to the substantive terms and provision of this Agreement. Changes to the total number of shares under agreements with the OFCC will be adjusted accordingly and will not require amendment to this Agreement. Such changes shall be noted in the published meeting minutes from the Board Meeting approving the change. The new company may only be offered more favorable terms provided that all existing members receive the same or similar improved terms.

MISCELLANEOUS

This Agreement is solely for the benefit of the Parties and their respective successors and permitted assigns, and this Agreement shall not otherwise be deemed to confer upon or give to any other third-party any remedy, claim, liability, reimbursement, cause of action or other right.

HAWAIIKI shall have the right to assign its interests and obligations in this Agreement subject to the Oregon Committee's written approval, which shall not be unreasonably withheld. OFCC will approve the assignment if the assignee agrees to assume the interests and obligations of this agreement. OFCC agrees to use its best efforts to effect an orderly and efficient transition to any assignee in the event of any such assignment. HAWAIIKI shall have the right to assign without consent to its related affiliates, any of which will assume all interests and obligations from HAWAIIKI. In the event of an assignment, the assigning entity will remain liable under the terms of this Agreement. This Agreement shall be binding on HAWAIIKI and the OFCC and their respective successors and assigns.

If any of the provisions of this Agreement are invalid or unenforceable, such invalidity or unenforceability shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provision or provisions and the rights and obligations of the Parties shall be construed and enforced accordingly.

A waiver of any of the terms and conditions of this Agreement, or the failure of either Party strictly to enforce any such term or condition on one or more occasions shall not be construed as a waiver of the same or of any other term or condition of this Agreement on any other occasion.

This Agreement supersedes all prior oral or written understanding between the Parties and constitutes the entire Agreement with respect to the subject matter herein. The Agreement can not be modified or amended except by a writing signed by authorized representatives of all Parties.

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This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

All notices and other communications to HAWAIIKI under this Agreement must be in writing and will be deemed to have been given if delivered personally, sent by facsimile (with confirmation), or delivered by an overnight delivery service (with confirmation) to the parties at the following address:

Hawaiki Submarine Cable USA LLC
c/o Hawaiki Submarine Cable Limited Partnership
2/a, 3 Ceres Court, Rosedale, Auckland, 0632, New Zealand

GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon, United States, excluding its conflicts of laws provisions.

AUTHORITY TO EXECUTE

The Parties execute this Agreement by and through their respective duly authorized representatives who warrant and covenant their authority to enter into this Agreement.

This Agreement is executed this 14th day of October, 2016

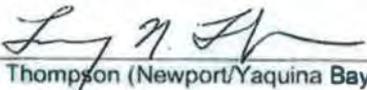
HAWAIIKI SUBMARINE CABLE USA LLC

By: 
Christophe Terral, Manager

OREGON FISHERMEN'S CABLE COMMITTEE, INC.

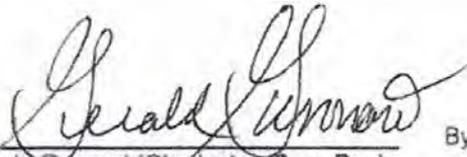
By: 
Scott McMullen, President/Chairman
(Astoria/Columbia River)

By: _____
Mike Retherford
(Newport/Yaquina Bay)

By: 
Terry Thompson (Newport/Yaquina Bay)

By: _____
Brad Pettinger (Brookings/Harbor)



By: 
Gerald Gunnari (Charleston/Coos Bay)

By: _____
Bill Kositz (ACS Cable Systems, Inc.)

By: _____
David Jordan (Garibaldi)

By: _____
John Hayduk
(Tata Communications (America) Inc.)

By: _____
Mikal Modisette (MFS Globenet, Inc.)

By: _____
Rob Munier
(Woods Hole Oceanographic Institution)

By: _____
Bruce Rein
(General Communication, Inc.)

By: _____
Gary Wintersteen (Astoria/Columbia River)

By: _____
Greg Ulses, CAPT, USN
(The Consortium for Ocean Leadership, Inc.)

By: _____
Woohyong Choi (GU Holdings, Inc.)

By: _____
Dave Crowley (Microsoft Corporation)

ALL SIGNATURES ON FILE

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**OREGON FISHERMEN'S CABLE COMMITTEE
PERSONAL LIABILITY RELEASE FORM
Attachment 1**

This is a legally-binding Liability Release, Waiver, Discharge, and Covenant Not to Sue made by me, _____ (hereinafter referred to as "Releaser") to Hawaiki Submarine Cable USA LLC (hereinafter referred to as "HAWAIKI") and the Oregon Fishermen's Cable Committee Inc. (hereinafter referred to as "OFCC").

I fully recognize that there are dangers and risks to which I may be exposed by participating in support of the Oregon Fishermen's Cable Committee (OFCC) activities associated with the planning and installation of the HAWAIKI submarine cable from the time of signing this release until completion of this cable installation. The following is a description and/or examples of significant dangers and risks associated with this activity:

1. Serving as an OFCC shipboard observer during cable installation activities or route survey.
2. Being a skipper or crewmember of a fishing vessel chartered to support the HAWAIKI submarine cable project.
3. Driving or riding in a vehicle transporting me to meetings or activities associated with the HAWAIKI submarine cable project.

I understand that neither HAWAIKI nor OFCC requires me to participate in this activity, but I want to do so, despite the possible dangers and risks and despite this Release.

I, therefore, agree to assume and take on myself all of the risks and responsibilities in any way associated with this activity. In consideration of and return for the services, facilities, and other assistance provided to me by HAWAIKI, I release HAWAIKI and OFCC (and their governing boards, employees, contractors and agents) from any and all liability, claims and actions that may arise from injury or harm to me, including death, or from damage to my property in connection with this activity. I understand that this Release covers liability, claims and actions caused entirely or in part by any acts or failures to act on my part, including but not limited to negligence, mistake, or failure to supervise.

I assure HAWAIKI and OFCC that there are no health-related reasons or problems which preclude or restrict my participation in this activity and I will indemnify and hold HAWAIKI and OFCC harmless for any such medical costs.

I understand that this Release means I am giving up, among other things, rights to sue HAWAIKI, and/or OFCC, their governing boards, employees, and/or agents for injuries (including death), damages, or losses I may incur. I also understand that this Release binds my heirs, executors, administrators, and assigns.

I HAVE READ THIS ENTIRE RELEASE, I FULLY UNDERSTAND IT, AND I AGREE TO BE LEGALLY BOUND BY IT.

Witness

Releaser's Signature

Date



THE OREGON FISHERMEN'S CABLE COMMITTEE AGREEMENT
Attachment 2

INDIVIDUAL FISHERMAN'S AGREEMENT AND MUTUAL RELEASE

OFCC Member Submarine Fiber Optic Cable Companies landing in Oregon ("Cable Companies") agree to release me, a Participating Trawl Fisherman, and the

F/V _____ a Participating Trawl Vessel, from liability to the Cable Companies for my ordinary negligence if, when engaged in trawl operations, I agree to honor the "Procedures to Follow While Operating Near Submarine Fiber Optic Cables" (the "Operating Procedures") established by the Oregon Fishermen's Cable Committee ("OFCC" or "Oregon Committee") pursuant to the "AGREEMENT TO CREATE AND ESTABLISH THE OREGON FISHERMEN'S UNDERSEA CABLE COMMITTEE" dated July 9, 1998 and related subsequent agreements (the "Oregon Accord" at times described as the "Oregon Fishermen's Agreements"). I agree that "THE OREGON FISHERMEN'S CABLE COMMITTEE AGREEMENT: INDIVIDUAL FISHERMAN'S AGREEMENT AND MUTUAL RELEASE" (this "Agreement" also known as the "IFA") does not release me and the Participating Trawl Vessel from liability for damage arising directly or indirectly from my gross negligence or intentional, willful or wanton acts or omissions, which for purposes of this Agreement shall include my failure to honor the Operating Procedures. The Cable Companies further agree that they will actively encourage governmental authorities not to bring or maintain any civil or criminal actions or penalties against a Participating Trawl Fisherman or Participating Trawl Vessel who honors the procedures established by the Oregon Committee pursuant to the Oregon Fishermen's Agreements.

I agree to learn about the location of the submarine fiber optic cables that land in Oregon and also to exercise care and observe the Operating Procedures when trawl fishing in the area of the cable. If I believe that I have snagged a cable, I agree to cease hauling on the trawl fishing gear and to call the 24-hour toll free telephone line maintained by the Cable Owners to discuss the situation. The Cable Owner's representative has the authority immediately to approve cutting the trawl gear and by doing so thereby authorizes the provision of replacement trawl gear to me from approved suppliers. I agree to present my claim in writing (my "Claim") to the Oregon Committee for review on the approved form within thirty (30) days of the incident. I understand that the Oregon Committee, constituted of Oregon commercial fishermen and fiber optic cable representatives, is empowered to review and investigate my Claim for compensation including if necessary undertaking an inspection of the cable by an underwater remote operated vehicle. If the Oregon Committee approves my Claim, the Oregon Committee waives any right to collect from me for any replacement trawl gear provided to me. In addition, the Oregon Committee shall pay from the Fund established by the Oregon Fishermen's Agreements an amount equal to fifty percent (50%) of the value of the replacement trawl gear to me. This sum represents liquidated damages in settlement and satisfaction of any and all claims or possible claims for loss of business, lost profits or any other damages incurred by me. If the Oregon Committee denies my

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Claim because of fraud, misrepresentation or failure to follow the required Operating Procedures or other procedures, the payment for the sacrificed trawl gear is treated as a bridge loan to me that I may have to repay. The Oregon Committee may issue and revise the Operating Procedures and other procedures from time to time governing the treatment of Claims and shall send copies of the revisions to me at the address noted below.

The Oregon Committee shall review my Claim and accept it in full or offer a settlement to me. I understand that by signing this Agreement I agree to and do hereby release any and all individuals affiliated with the Oregon Committee, the Oregon Committee itself, and the Cable Companies and their affiliates and subsidiaries, including their officers, directors, employees, agents and assigns from any and all legal and equitable liability for any actions, inactions or decisions of the Oregon Committee including the decision on my claim. I further agree not to bring any legal or equitable action against them. I also release any other telecommunications companies that execute the Oregon Fishermen's Agreements or a related subsequent agreement.

If the Oregon Committee accepts my claim in full or if I accept the settlement for my claim offered to me by the Oregon Committee, I agree to release and am thereby releasing the Cable Companies and their affiliates and subsidiaries, including their officers, directors, employees, contractors, agents and assigns from any and all legal and equitable liability. I further agree not to bring any legal or equitable action against them. I also agree that the Cable Companies and the Oregon Committee shall not be responsible in any way for any lost earnings, waste of fishing resources or other consequential, incidental or punitive damages. I also release any other telecommunications companies that execute the Oregon Fishermen's Agreements or a related subsequent agreement.

In the event of a dispute between the parties to this Agreement, the parties shall (1) discuss the problem between themselves and attempt a resolution. If the dispute is not thereby resolved within seven (7) days, the parties shall (2) mediate the problem in Portland, Oregon or in another mutually agreed location. If the dispute is not thereby resolved within thirty (30) days, the parties shall (3) engage in binding arbitration in Portland, Oregon or in another mutually agreed location. This dispute resolution provision reflects the provision in the Oregon Fishermen's Agreement and represents a commitment to resolve disagreements in a just, speedy and inexpensive way without resorting to litigation.

This Agreement can be terminated by thirty (30) days written notice to the other party. By joining as a Participating Trawl Fisherman and representative of a Participating Trawl Vessel, I agree to these terms and conditions and to the terms and conditions of the Oregon Fishermen's Agreements. I acknowledge that I have contacted legal counsel or had an opportunity to contact legal counsel to discuss the terms set forth in this Agreement.

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Signature of Participating Trawl Fisherman/Vessel
Owner/Vessel Operator/Master/Skipper

Trawl Vessel Name

Print Name _____

Date: _____

Address

Oregon Fishermen's Cable Committee, Inc.

2021 Marine Drive, Suite 102

Astoria, OR 97103

By Its: Chairman

Date: _____

2

THE OREGON FISHERMEN'S CABLE COMMITTEE AGREEMENT
Attachment 3

OFCC- HAWAII Burial End Point Agreement

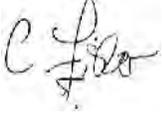
It is noted that the burial of the HAWAII submarine cable in the areas being fished by OFCC members is in the best interest of both the fishermen and the HAWAII cable owners. However, it must be recognized that there are limitations to the burial process that may result in full burial not being achieved.

HAWAII has requested their installation contractor to attempt burial up to a Burial End Point that is located at approximately 44° 57.386'N 125° 07.720'W. For the avoidance of doubt, the actual achievement of burial to this Burial End Point will be determined by the Engineer in Charge (EIC) responsible for the ploughing operations during installation of the HAWAII cable. The EIC will use the plough cameras, sonar data and other considerations to determine the final point at which the ploughing operation will end. The OFCC representatives and the HAWAII representative on board during the HAWAII cable installation will be made aware of the EIC's considerations and be given an opportunity to provide input to the decision making process but ultimately, the EIC will make the final decision after taking into consideration all inputs including consideration of safety for both personnel and equipment.



We greatly appreciate ODFW comments on the proposed Hawaiki undersea cable project. If you have any questions regarding our summary above, please do not hesitate to contact me at either (206) 714-5474 or at cfisher@48northsolutions.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'C Fisher', written over a faint, light-colored rectangular stamp or watermark.

Cameron Fisher
48 North Solutions, Inc.

Cc (via electronic mail):

Cecile Durand (TE SubCom)
Matthew Teich (TE SubCom)



909 NE Boat Street, Seattle, Washington, 98105

February 27, 2017

Ms. Patricia Fox/Mr. Michael DeBlasi
Oregon Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279

Mr. Scott Marion
Oregon Department of Fish and Wildlife
Marine Resources Program
2040 SE Marine Science Drive
Newport, OR 97365

**RE: Response to ODFW's Comments on the Hawaiki Fiber Optic Cable
DSL Application #59615-RF/#59614-EA**

Dear Ms. Fox, Mr. DeBlasi and Mr. Marion,

The intent of this letter is provide clarification and resolution to comments received from the Oregon Department of Fish and Wildlife (ODFW) on February 15 and 21, 2017, regarding the applications 59615-RF and 59614-EA submitted by Hawaiki Submarine Cable USA, LLC (Hawaiki) for the proposed Hawaiki undersea fiber optic cable. We understand that ODFW has a direct interest in the proposed action because the project has the potential to affect fish and wildlife resources that are within ODFW's statutory purview.

We appreciate the acknowledgement from ODFW regarding the siting of the cable to minimize sensitive seafloor habitats by avoiding hard substrates to the extent possible, and that we have worked extensively with the Oregon Fishermen's Cable Committee (OFCC) to minimize the likelihood of the cable interacting with fishing gear. A key to this project's success has been to work closely with all stakeholders throughout the siting process.

ODFW expressed a concern about the targeted date of installation of the Hawaiki undersea fiber optic cable off the coast of Pacific City. ODFW's concern that the proposed cable installation will encompass the April 1 to June 15 migration period of the Oregon State listed endangered gray whale migration, and in particular, when mothers and calves are moving north in shallow waters (generally 12 to 75 meters [m]).

Onshore construction operations for the Hawaiki cable are scheduled to begin in late May with horizontal directional drilling (HDD) of a conduit under the nearshore to a depth of 15 meters. HDD activities are not expected to impact gray whale migration as they are essentially occurring from shore. According to the current schedule, Tyco Electronics SubSea Communications, LLC (TE SubCom) proposes to install and lay the offshore portion of the undersea cable at the end of September. The timing of the proposed offshore cable installation will thereby avoid any conflict with the migrating whale populations.

STATE OF OREGON
Department of State Lands

COMMUNICATION CABLE EASEMENT AGREEMENT
59614-EA

THIS COMMUNICATION CABLE EASEMENT AGREEMENT (this "Agreement"), effective as of _____, 20____, is made by and between the State of Oregon, by and through its Department of State Lands ("GRANTOR"), and Hawaiki Submarine Cable USA, LLC (hereinafter called "HAWAIKI")., a Delaware limited liability company. ("GRANTEE").

1. Grant of Easement. Pursuant to ORS 758.010 and OARs 141-083 and 141-122 (as may be amended at any time and from time to time), GRANTOR hereby grants to GRANTEE an easement (the "Easement") to construct, maintain, operate and replace a portion of a single submarine fiber optic cable known as the Hawaiki cable system (the "Cable"), in, over, under and across GRANTOR-owned submerged and submersible land of the Pacific Ocean, in or adjacent to Tillamook County, Oregon, described as the Easement Parcel in Section 2 below. This Agreement does not convey an estate in fee simple of the Easement Parcel. The grant contained herein is for an easement only, and title to the Easement Parcel remains in GRANTOR.

2. Easement Parcel. The Easement runs in, over, under and cross a fifteen foot (15.00') wide swath of shore and seabed located seven and half feet (7.50') on either side of the following described proposed centerline described below (the "Easement Parcel"). The Easement Parcel includes the "Shore Area" (GRANTOR'S submersible land, i.e., from the ordinary high tide to the ordinary low tide, pursuant to ORS 390.615) and the "Territorial Sea Area" (GRANTOR'S submerged land, i.e., from the ordinary low tide to the three-mile limit of the Territorial Sea (as defined in ORS 196.405(5) and OAR 141-083-0280(11) and pursuant to ORS 274.710). The Easement Parcel is further described as follows:

The proposed centerline of the Easement Parcel is further described as follows:

All latitude and longitude are in degree decimal minutes.

Beginning at the southwest corner of Section 25, Township 4 South, Range 11 West of the Willamette Meridian, Tillamook County, Oregon (located approximately 45.2023°N, 123.9672°W).

Beginning at 45° 12.138, -123 58.029

thence to 45° 12.089, -123 58.183

thence to 45° 11.880, -123 58.843

thence to 45° 11.869, -123 58.878

thence to 45° 11.714, -123 59.367

thence to 45° 11.144, -124 0.869

thence to 45°10.790, -124 2.573, to the approximate extent of the Three (3) Mile Limit of the Territorial Sea.

Containing approximately 7.2 acres (314,000 square feet), more or less, and as shown on Exhibit A.

3. Payment. GRANTEE understands and acknowledges that the Easement may be granted at no charge, pursuant to current Oregon state law and GRANTOR'S administrative rules, but that, if Oregon state law changes during the term of this Agreement, GRANTEE may be subject to future imposition, by GRANTOR, of a consideration payment and/or usage fee that would be established by the Oregon State Land Board as authorized by law. In order to avoid the potential future imposition of a consideration payment and/or usage fee, GRANTEE has paid to GRANTOR, concurrently with the execution of this Agreement, a one-time payment of Three Hundred Thousand Dollars (\$300,000.00), the receipt and sufficiency of which is acknowledged by GRANTOR. No additional consideration, payments, usage fees and/or rents shall be due or may be imposed as consideration for the rights granted in this Agreement, regardless of any amendment to statutes or administrative rules governing this Agreement that may be enacted during the original term of this Agreement. Notwithstanding the foregoing, GRANTEE acknowledges and agrees that it shall not be entitled to any rebate or reimbursement of all or any portion of the consideration paid for the Easement if for any reason this Agreement is not renewed or is terminated pursuant to the provisions herein.

4. Term. The term of this Agreement is twenty (20) years.

5. Renewal. GRANTEE, subject to continued compliance with the terms and conditions of this Agreement, shall have the right to renew this Agreement for an additional twenty (20) -year term, in accordance with the governing law and applicable rules of GRANTOR at the time of renewal.

6. Construction of Cable.

(a) Construction of the Cable shall conform to standards and specifications set by the U.S. Army Corps of Engineers and the U.S. Coast Guard.

(b) Any blasting which may be necessary for the construction of the Cable shall be performed according to the laws of the State of Oregon and the rules of its agencies, including, without limitation, Oregon Department of Fish and Wildlife's in-water work windows.

(c) GRANTEE shall supply to GRANTOR an as-laid survey for the Cable within ninety (90) days after completion of construction.

7. Surety Bond. GRANTEE shall furnish to GRANTOR a surety bond in the amount of \$20,000.00 (or, in lieu of the surety bond, an equivalent cash deposit or certificate of deposit), which names the State of Oregon as co-owner, to ensure that GRANTEE performs construction of the Cable in accordance with all terms and conditions of this Easement, to be held until construction of the Cable is completed.

8. Maintenance and Repair in Shore Area. If maintenance or repair is required within the Shore Area, GRANTEE shall follow and adhere to the Oregon Parks and Recreation Department OARs 736-020 – Beach Construction/Alteration Standards (as may be amended at any time and from time to time).

9. Inspection. GRANTEE shall inspect the Cable and related fixtures at least every five (5) years and after any major geologic event, such as subduction-zone earthquakes, to ensure continued burial (from the entry of the Cable on the Shore Area to the end of HDD) and location

integrity of non-buried cable (from the end of the HDD to the remainder of the Cable on the Easement Parcel). GRANTEE shall promptly perform any maintenance or repair shown to be necessary after such inspections, to ensure continued burial or location integrity of the Cable.

10. Restoration. The Easement Parcel shall be restored to a condition acceptable to GRANTOR, in GRANTOR'S discretion, as soon as construction or maintenance is completed.

11. Vegetation and Mineral Resources.

(a) Except as expressly authorized in writing by GRANTOR, GRANTEE shall not:

(i) cut, destroy or remove, or permit to be cut, destroyed or removed, any vegetation from the Easement Parcel (provided, however, that routine right-of-way maintenance, including vegetation trimming, is allowed without GRANTOR'S express authorization); or

(ii) remove from the Easement Parcel any sand and gravel, or other mineral resources, for commercial use or sale.

(b) GRANTEE shall compensate GRANTOR for the fair market value of any commercially valuable timber or sand and gravel, or other mineral resources, in the Easement Parcel that must be removed during or after construction or maintenance of the Cable, or which cannot be developed because of GRANTEE'S use of the Easement Parcel.

12. Damage; Fines.

(a) GRANTEE shall pay to GRANTOR the current market value, as determined by GRANTOR, for any unnecessary and non-approved damages to the Easement Parcel or surrounding seabed or shoreline caused by construction or maintenance of the Cable.

(b) GRANTEE shall be responsible for the payment of any fines or penalties charged against the Easement Parcel resulting from GRANTEE'S failure to comply with laws or regulations affecting the Easement Parcel.

13. Conservation. GRANTEE shall conduct all operations within the Easement Parcel in a manner that conserves fish and wildlife habitat; protects water quality; and does not contribute to soil erosion, or the introduction or spread of noxious weeds or pests.

14. Compliance with Other Agreement and GRANTEE'S Applications. In all of its activities related to the Easement, including construction, maintenance and repair, GRANTEE shall strictly comply with the following:

(a) "Agreement between the Oregon Fishermen's Cable Committee, Inc. and Hawaiki Submarine Cable USA LLC as Relates to the Hawaiki Cable System" dated October 14, 2016 attached as Exhibit B;

(b) All of the information provided by or on behalf of GRANTEE in GRANTEE'S "Easement Application Form for 'Territorial Sea' Fiber Optic Cable," dated December 12, 2016;

(c) All of the information provided by or on behalf of GRANTEE in GRANTEE'S "Joint Permit Application," dated December 12, 2016; and

(d) All of the information provided by or on behalf of GRANTEE in GRANTEE'S February 27, 2017 letter from Cameron Fisher at 48 North Solutions to Scott Marion at the Oregon Department of Fish and Wildlife.

15. Prior Notification to GRANTOR. GRANTEE shall notify GRANTOR in writing at least ninety (90) days:

- (a) prior to any pre-planned change in the location of the Cable;
- (b) prior to any change in ownership of the Cable;
- (c) after discovery of any change in the location of the Cable resulting from accidental contact or geologic or other natural causes; or
- (d) prior to an abandonment or termination of the use of the Cable.

16. Prior Consent from GRANTOR. GRANTEE may not, without prior written approval from GRANTOR:

- (a) change the type of use authorized by this Agreement;
- (b) expand the number of authorized developments or uses of the Easement;
- (c) change the location of the Easement Parcel; or
- (d) permit other persons to utilize the Easement Parcel for uses and developments requiring separate written authorization by GRANTOR pursuant to the administrative rules governing the granting of easements or other GRANTOR requirements.

17. No Interference. Nothing in this document may be construed as permission, except during construction or maintenance periods, to GRANTEE to interfere with navigation or fisheries, or reduce the public's rights to the free and unimpeded use of the navigable waters of the State of Oregon within the area of the Easement Parcel; provided, however, that to the extent necessary to facilitate construction and maintenance of the Cable, GRANTEE may so interfere, but shall keep such interference to an absolute minimum. GRANTEE shall perform and complete all such construction and maintenance of the Cable as promptly as is reasonable.

18. Requirements of Regulatory Agencies. In its activities related to the Easement, GRANTEE shall comply with all applicable requirements of the regulatory agencies of the State of Oregon, including, without limitation, the Oregon Department of Fish and Wildlife.

19. Assessments. GRANTEE shall pay all assessments that may be legally charged on public lands which are levied against the Easement Parcel, whether or not such assessments have been levied against the Easement Parcel or GRANTOR by the assessing agency.

20. Nondiscrimination. GRANTEE shall use the Easement Parcel only in a manner, or for such purposes, that assure fair and nondiscriminatory treatment of all persons without respect to race, creed, color, religion, handicap, disability, age, gender or national origin.

21. Nonuse. If the Easement Parcel is not used for a period of five (5) consecutive years, this Agreement may be terminated by written notice from GRANTOR to GRANTEE at its last known address. Upon termination or expiration of this Agreement, GRANTEE shall have one (1) year to remove the Cable and appurtenances from the Easement Parcel. However, if

GRANTEE demonstrates to GRANTOR'S satisfaction that removal of the Cable will be more detrimental to the Easement Parcel than leaving it in place, GRANTEE shall be permitted to abandon the Cable in place.

22. Hold Harmless. GRANTEE shall indemnify, defend and hold GRANTOR harmless from any and all claims suffered or alleged to be suffered as a result of GRANTEE'S use of the Easement.

23. Open to Public. The Easement Parcel shall remain open to the public for recreational and other non-proprietary uses unless restricted or closed to public entry by GRANTOR.

24. GRANTOR'S Reservation of Rights.

(a) GRANTOR reserves the right to lease or otherwise utilize the Easement Parcel in a manner and for uses that will not be incompatible with the primary use for which the Easement is granted.

(b) GRANTOR has the right to grant additional easements within the Easement Parcel, subject to the provisions of the administrative rules governing the granting of easements.

(c) GRANTOR and its employees, agents and contractors shall have the right to enter into and upon the Easement Parcel at any time for the purposes of inspection or management.

25. Assignment of Agreement. This Agreement may be assigned, pursuant to the provisions of OAR 141-122-0080.

26. Default. A "Grantee Default" shall occur if:

(a) GRANTEE fails to comply with or fulfill any term, condition or obligation of this Agreement (except with regard to Section 17 above), within thirty (30) days after notice from GRANTOR specifying the nature of the failure with reasonable particularity or, in the event such failure cannot reasonably be cured within such thirty (30) -day period, then within such time as the failure can be cured with reasonable good faith and diligence; provided, however, that such cure period shall not exceed one hundred eighty (180) days; or

(b) GRANTEE fails to comply with Section 17 above within ten (10) days after notice from GRANTOR specifying the nature of the failure with reasonable particularity; or, in the event such failure cannot reasonably be cured within such 10-day period, then within such time as the failure can be cured with reasonable good faith and diligence; provided, however, that such cure period shall not exceed thirty (30) days.

27. Remedies. Upon any Grantee Default, GRANTOR may exercise any one or more of the following remedies:

(a) At GRANTEE'S cost and expense, GRANTOR may perform GRANTEE'S unperformed obligations that gave rise to the Grantee Default, and charge all such costs and expenses to GRANTEE pursuant to this Agreement, which GRANTEE shall pay within thirty (30) days after GRANTOR delivers an invoice therefor, together with reasonable supporting documentation of such costs and expenses.

(b) GRANTOR may terminate this Agreement.

(c) GRANTOR may sue periodically to recover damages as they accrue without barring a later action for further damages.

(d) GRANTOR shall be entitled to recover from GRANTEE any and all damages arising from a Grantee Default, including all costs and expenses of curing Grantee Default, with any amounts due and owing to accrue interest at the rate of eight percent (8%) per annum.

(e) The foregoing remedies in this Section 27 shall be in addition to and shall not exclude any other remedy available to GRANTOR in law or equity.

28. Governing Law; Consent to Jurisdiction. This Agreement is governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Any claim, suit action or proceeding ("Claim") between GRANTOR (or any other agency or department of the State of Oregon) and GRANTEE that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within the jurisdiction of the Circuit Court of Marion County in the State of Oregon. In no event shall this Section 28 be construed as a waiver by the State of Oregon of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the eleventh amendment to the Constitution of the United States or otherwise, from any Claim or from the jurisdiction of any court. GRANTOR and GRANTEE each hereby consents to the exclusive jurisdiction of such court, waives any objection to venue and waives any claim that such forum is an inconvenient forum.

[Remainder of page intentionally left blank]

GRANTOR:

WITNESS the seal of the Department of State Lands affixed this ____ day of _____, 20__.



STATE OF OREGON, acting by and through its Department of State Lands

Name: _____

Title: _____

Signature: _____

STATE OF OREGON)
) ss
County of Marion)

The foregoing instrument was acknowledged before me this ____ day of _____, 2017, by _____, the _____ of the Department of State Lands.

Notary Public-Signature

My Commission Expires _____, 20__.



Oregon

Kate Brown, Governor

Department of State Lands

775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
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State Land Board

State Land Board

Regular Meeting
May 9, 2017
Agenda Item 5

Kate Brown
Governor

Dennis Richardson
Secretary of State

Tobias Read
State Treasurer

SUBJECT

Elliott property ownership transfer opportunity status report.

ISSUE

To provide an update on the Department's work towards the potential ownership transfer of the Common School forestlands within the Elliott State Forest; and to request input and direction from the State Land Board on next steps.

AUTHORITY

Oregon Constitution, Article VIII, Section 5, specifies that the State Land Board is responsible for managing Common School Fund lands.

ORS 273.041 to 273.071; authorizing the Department of State Lands to exercise the administrative functions of the State Land Board; relating to the general powers and duties of department and board.

BACKGROUND

At the February 14, 2017 State Land Board meeting, the Department provided an update on the status of the Department's work toward a potential transfer of ownership of the Common School forestlands within the Elliott State Forest (see February 14, 2017 and December 13, 2016 State Land Board agenda items for details). At this meeting the Board directed the Department to continue to move forward with the Elliott Protocol, and to include the following three additional items in any negotiated purchase and sale agreement towards an eventual transfer of ownership to the Elliott Forest LLC:

1. The ability for the state to repurchase up to \$25 million in acreage land from the LLC for key conservation habitat.

2. Inclusion of Forest Stewardship Council principles and criteria as a component of the purchase and sale agreement, and prioritize that inclusion in the management of older tree stands.
3. A right of first refusal for the five federally recognized western Oregon tribes for any lands that the LLC might decide to sell after an ownership transfer.

Also at the February 14, 2017 meeting, the Governor directed the Department to consider a public ownership option going forward and to present the results at the next Board meeting.

SUMMARY

Over the past few months the Department has been proceeding, consistent with the direction from the February 2017 meeting. The Department has initiated negotiations with the proposers of the single proposal submitted under the Elliott Protocol, and convened multiple meetings and conversations in the course of the negotiations.

Work has also been proceeding towards consideration of a public ownership option, and the Department has been providing information and materials as appropriate in consideration of that work. At the time of the drafting of this staff report, the Department anticipates the results of this work and any supporting materials to be presented to the Board as part of this agenda item during the May 9 meeting.

RECOMMENDATION

The Department recommends that the State Land Board provide direction on how to proceed with the potential ownership transfer of Common School forestlands within the Elliott State Forest, based on the update and discussion of this topic during the May 9 meeting.



Oregon

Kate Brown, Governor

Department of State Lands

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State Land Board

State Land Board

Regular Meeting

May 9, 2017

Agenda Item 6

Kate Brown

Governor

Dennis Richardson

Secretary of State

SUBJECT

Annual Report on Common School Fund Investments and Distributions.

Tobias Read

State Treasurer

ISSUE

To provide the annual report on Common School Fund investments and distributions; and request input and direction on the next phase of the Common School Fund asset allocation and distribution policy review.

AUTHORITY

Section 2(2), Article VIII of the Oregon Constitution; authorizing the Common School Fund to be invested as provided by law; authorizing the Land Board to apply income from the investment of the CSF to its constitutional land management expenses; and directing the remainder of the investment income to be applied to the support of primary and secondary education as prescribed by law.

Section 4, Article VIII of the Oregon Constitution directing that, "Provision shall be made by law for the distribution of the income from the common school fund among several Counties of this state in proportion to the number of children resident therein between the ages, four and twenty years."

ORS 327.403 to .484; relating to the Common School Fund.

ORS 273.105: establishing the Distributable Income Account within the Common School Fund to be administered in accordance with Section 4, Article VIII of the Oregon Constitution and directing what moneys within the Common School Fund shall be credited to the Distributable Income Account.

ORS 293.701 to .810; relating to Investing State Funds, including funds under the control and administration of the Department of State Lands; general objective of investments; and standard of judgement and care in investments.

SUMMARY

The act of Congress admitting Oregon to the Union in 1859 granted nearly 3.4 million acres of the new state's land "for the use of schools." The State Land Board was established in Oregon's constitution to oversee these "school lands" and has been the trustee of the Common School Fund since statehood. These school lands and their mineral resources, unclaimed property held in trust, and the proceeds from escheated estates all contribute to the corpus of the Fund.

The Oregon Investment Council, within Oregon State Treasury, manages the Common School Fund (Fund) investments. In recent years, the Fund balance has ranged from about \$1.3 billion to \$1.5 billion, depending on market conditions (Appendix A).

In 2009, the State Land Board adopted a distribution policy that annually distributes four percent of the average balance of the preceding three years (Appendix B). If the average balance of the fund has increased by 11 percent or more, the annual distribution increases to five percent of the average balance of the preceding three years. Distributions in the 2015-17 biennium are expected to total about \$136.6 million.

For the 2016 calendar year, the Fund had a return of 6.09 percent, trailing the Fund's policy benchmark by 1.92 percent. Over 10 years, the Fund has returned 4.49 percent annually, lagging the policy benchmark by 25 basis points. At its core, the objective of the Fund portfolio is to deliver long-term investment returns that meet its distribution requirements, while allowing the Fund asset base to grow. See Appendix A for the complete results of the annual review.

The Oregon Investment Council continuously monitors the performance and risk of the Fund investments, and assesses the prudence of the Fund's asset allocation with the objective of holding a diversified portfolio aimed at seeking highest returns possible. To this end, a formal asset allocation study is being conducted with the intent of evaluating the existing diversification of the Fund asset allocation.

This year's annual review also includes the initial phase of a study to review the current Fund distribution policy (Appendix C). This review was initiated in 2016 as a result of direction from the State Land Board at their April 2016 meeting. At that meeting it was recognized that since the current policy was adopted in 2009, there have been exceptions made to it for three subsequent budget cycles. In order to ensure the policy is both in alignment with current market conditions and provides a sustainable formula for distributions, the Board directed Treasury to work with the Department to revisit the policy. This direction included a request for the Department to return to the Board with some potential ideas and answer questions about whether or not the current policy is supportive of an endowment model. (April 16, 2016 State Land Board meeting minutes)

The ultimate goal of the distribution policy review is to determine and recommend an appropriate policy that balances the growth of the corpus, with stable distributions for

beneficiaries that meet the intergenerational equity criterion. This criterion requires that distributions cannot benefit current students at the disadvantage of future students, or vice versa.

In light of the recent history with the Fund distributions, and exceptions made to the policy over the last three biennia, the Department is also requesting input and direction from the Board on distributions projected for the 2017-2019 biennium. The 2017-19 Governor's Recommended Budget assumes a 4% Fund distribution in accordance with the Board's current distribution policy. Unless otherwise directed by the Board, the Department will continue to apply the current policy.

The Department will take any feedback provided by the Board as a result of this agenda item and continue work with Treasury staff on reviewing the asset allocation and distribution policy. The intent is to complete this review and return to the Board with a recommendation(s) by the end of the year.

RECOMMENDATION

The Department recommends that the State Land Board accept the Common School Fund Annual Portfolio Review and provide input and direction on:

- the next phase of the Common School Fund asset allocation and distribution study; and
- the implementation of the current Board policy for distributions to Oregon's K-12 public schools for the 2017-19 biennium.

APPENDICES

- A. State Land Board Common School Fund Annual Portfolio Review
- B. 2009 Common School Fund distribution policy
- C. Oregon Common School Fund Asset Allocations and Distribution Study: Phase 1

**State Land Board
Common School Fund
Annual Portfolio Review**

Purpose

To provide the State Land Board an update on the performance, structure, and asset allocation of the Common School Fund for the period ended December 31, 2016.

Background

The objective of the Common School Fund, outlined in **OIC INV 901** Common School Fund: Asset Classes, Asset Allocation, and Reporting Requirements, is to optimize the Fund's long-term investment return and distributions, while enabling the CSF asset base to grow in real terms.

CSF Asset Allocation

CSF asset allocation is managed relative to a 70/30 equity-to-fixed income target. In 2007, OIC approved a target allocation of 10% in private equity for the Common School Fund. The objective was to increase expected returns while simultaneously gaining diversification benefits, and remaining sufficiently liquid in order to meet bi-annual distribution requirements. As of year-end 2016, the CSF's actual allocations relative to established targets were within policy tolerances, with the exception of Private Equity that was slightly above its upper range threshold level given its strong equity returns.

CSF Asset Allocation as of December 31, 2016

CSF	Policy	Target	\$ Thousands	Actual
Domestic Equities	25-35%	30%	445,692	30.4%
International Equities	25-35%	30%	403,399	27.5%
Private Equity	0-12%	10%	176,642	12.1%
Total Equity	65-75%	70%	1,025,733	70.0%
Fixed Income	25-35%	30%	427,104	29.2%
Cash	0-3%	0%	11,669	0.8%
TOTAL CSF			\$ 1,464,506	100.0%

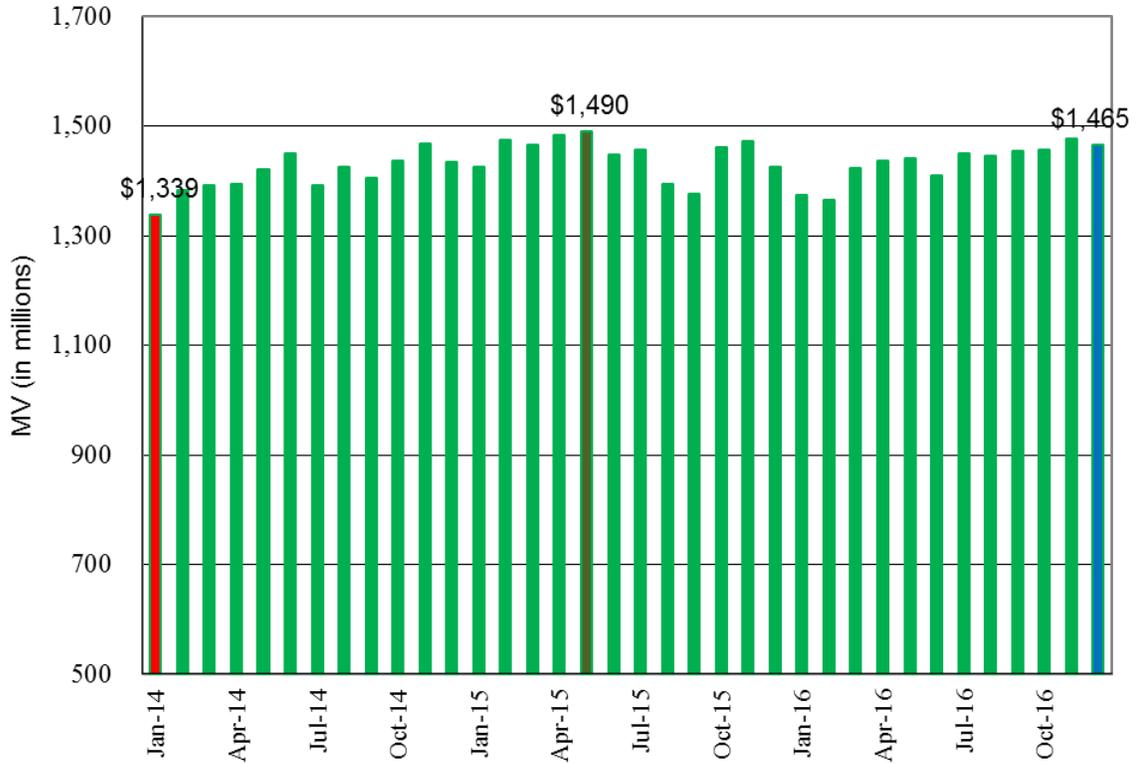
Staff and the OIC's consultant recently reviewed the Common School Fund's distribution policy. The goal of the study was to determine and recommend an appropriate distribution policy that would balance the growth of the corpus, with sustainable and stable for CSF intergenerational beneficiaries.

Staff and the OIC's consultant continue to monitor the performance and risk of the plan, as well as regularly assess the prudence of CSF's asset allocation with the objective of holding a diversified portfolio aimed at seeking highest returns possible. To this end, a formal asset allocation study is being conducted with the intent of evaluating the existing diversification of the CSF asset allocation.

CSF Market Value

Net of contributions and distributions, the fund has grown by 7.5 percent over the past three years, from \$1.34 billion in January 2014, to \$1.46 billion at year end 2016. The fund hit its low of \$1.07 billion in May 2012 before continuing a steady upward trend.

**CSF NAV
Three years ending December 2016**



CSF Performance

The Common School Fund had a calendar year return of 6.09 percent, trailing the fund’s policy benchmark by 1.92 percent. Over 10 years, the fund has returned 4.49 percent annually, lagging the CSF policy benchmark by 25 basis points. At its core, the objective of the CSF portfolio is to deliver long-term investment returns that meet its distribution requirements – currently set at 4% - while allowing the CSF asset base to grow in real terms.

CSF MANAGER PERFORMANCE VERSUS BENCHMARK							
	EMV						
	\$(000's)	%	1 Year	3 Years	5 Years	7 Years	10 Years
TOTAL COMMON SCHOOL FUND	1,464,506	100.0	6.09	4.36	9.13	7.98	4.49
OREGON CSF POLICY INDEX			8.01	4.39	8.85	7.64	4.74
TOTAL FIXED INCOME - CSF	427,104	29.2	4.07	3.38	3.61	4.96	5.01
BC US AGGREGATE			3.01	2.98	2.60	3.92	4.48
CSFS-WELLINGTON-FICORE	212,391	14.5	3.11	3.06	3.19	4.64	5.08
CSFS-WESTERN ASSET-FICORE	214,713	14.7	5.00	3.70	4.03	5.42	5.03
TOTAL DOMESTIC EQUITY	396,792	27.1	9.16	7.21	14.18	12.21	6.05
RUSSELL 3000			12.74	8.43	14.67	12.92	7.07
CSFS-BLACKROCK S&P 500-USLCCO S&P 500	115,241	7.9	11.96 11.96	8.88 8.87	14.68 14.66	12.88 12.83	6.95
CSFS-MFS INSTITUTIONAL-USLCVA RUSSELL 1000 VALUE	111,325	7.6	14.30 17.34	8.15 8.59	15.09 14.80	12.45 12.72	5.72
CSFS-JACKSON SQUARE-USLCGR RUSSELL 1000 GROWTH	97,320	6.6	-4.53 7.08	4.60 8.55	14.50	13.03	8.33
CSFS-CLEARBRIDGE-USSMID RUSSELL MIDCAP	34,448	2.4	10.10 13.80	7.92	14.72	13.68	7.86
CSFS-BOSTON CO.-USSCVA RUSSELL 2000 VALUE	38,459	2.6	26.75 31.74	7.01 8.31	14.73 15.07	12.75 13.14	6.26
TOTAL INTERNATIONAL EQUITY	361,221	24.7	3.76	-0.16	7.92	5.53	2.39
OREGON CSF CUSTOM INTL INDEX			4.50	-1.78	5.00	2.93	0.66
CSFS-PYRAMIS SELECT-NUSCOR MSCI WORLD EX US (NET)	134,949	9.2	-1.54 2.75	-2.45 -1.59	6.25 6.07	4.05 3.64	0.86
CSFS-ARROWSTREET-NUSCOR MSCI World Ex US IMI Net	162,123	11.1	5.83 2.95	2.67 -1.20	12.27 6.44	8.79 4.05	1.13
CSFS-GENESIS-EMKTEQ MSCI Emerging Markets IMI Index (Net)	32,470	2.2	11.88 9.90	-2.23 -2.40	2.73 1.54	2.74 0.59	
CSFS-ARROWSTREET EM-EMKTEQ MSCI EMERGING MARKETS	31,678	2.2	9.76 11.19	-1.76 -2.55	2.18 1.28	0.47	1.84
CSFS-BLACKROCK ACWI IMI-GLBCOR MSCI ACWI IMI NET	91,078	6.2	8.75 8.36	3.63 3.25	10.03 9.61	7.57	3.84
CSFS-PRIVATE EQUITY-PVTEQT	176,642	12.1	7.99	11.96	14.68	13.45	
RUSSELL 3000+300 BPS QTR LAG			18.37	13.73	19.80	16.55	10.99
CSF-CASH INVESTED IN OSTF 91 DAY TREASURY BILL	11,669	0.8	1.20 0.33	0.74 0.14	0.91 0.12	0.79 0.12	1.45 0.80

Market Performance Overview

(Provided by Callan Associates, Oregon Investment Council consultant)

Macroeconomic Environment

Trumponomics – Fact or Fiction?

Donald Trump is inheriting one of the strongest economies that has been handed to a new President in recent history (based on 3Q GDP). Since the 1970's, only George H.W. Bush and Jimmy Carter assumed the office with higher GDP growth rates. Further, investors have been cheered by Trump's anticipated business-friendly ambitions on taxes, trade and regulations and have driven U.S. stocks to record highs. The S&P 500 Index gained 3.8% for the fourth quarter of 2016 and 12% for the year. Small stocks, as measured by the Russell 2000, roared 8.8% for the quarter and surged 21.3% for the year. The bond market did not fare as well, especially post-election. The prospect of increased fiscal spending sparked concerns over higher inflation and tighter monetary policy, leading to a sharp sell-off in U.S. Treasuries. The 10-year Treasury yield climbed 85 bps, the largest quarterly increase since 1994. The year was a volatile one for bonds; the 10-year Treasury yield started the year at 2.27%, hit an all-time low of 1.37% in July (post-Brexit) and ended the year sharply higher at 2.45%.

The U.S. economic picture continued to improve during the final quarters of 2016. Third quarter GDP was revised up to 3.5% (1.7% year-over-year), the sharpest quarterly increase in two years. Unemployment reached a nine-year low of 4.6% in November and jobless claims remained relatively muted. Initial jobless claims fell to less than 300,000 in early 2015 and remained below this key level for more than 90 weeks, the longest streak since 1970. The Atlanta Fed's wage growth tracker index showed that wages advanced 3.9% in October, the fastest since November of 2008. Home prices hit a record high in October; the S&P CoreLogic Case-Shiller U.S. National Home Price Index rose 5.6% in October for the trailing 12-month period. The average price for an existing single family home was \$282,341 in November, the highest ever. New and existing home sales also posted strong gains, perhaps fueled by buyers rushing to lock in mortgage rates. Consumer confidence, as measured by the Conference Board Consumer Confidence Index, hit its highest level in 15 years in December. Auto sales are on pace to beat last year's record of 17.5 million light vehicles. Even the manufacturing sector showed signs of improvement with the ISM Composite Index of factory sector activity showing consistent gains through the quarter.

Inflation, while still benign, is rising. For the trailing 12-month period, the CPI rose 1.7% in November, the most since 2014. Core CPI (excluding food and energy) was slightly higher at 2.1%. The Fed's preferred metric, the Personal Consumption Expenditures Index, rose 1.4% over the same time period but remains short of the 2% target. Oil prices surged to their highest level in 17 months to close the year at \$54 per barrel. The U.S. dollar soared, hitting a multi-year high versus the euro and the yen and appreciating roughly 7% versus a basket of currencies for the quarter.

The Fed, in a widely anticipated move, raised the Fed Funds rate 25 bps to a range of 0.50% – 0.75% in December. This turned out to be the Fed's only move for the year although at the end of 2015 it had projected four hikes in 2016. As communicated in its "dot plot," the Fed expects three additional hikes in 2017, though the markets expect fewer. Interest rates began to creep up early in the fourth quarter as investors gained confidence that the Fed would make a move in response to encouraging U.S. economic data. Trump's win propelled rates sharply higher fueled by expectations for escalating inflation in tandem

with more debt. The 10-year U.S. Treasury closed the year at 2.45% but hit an intra-quarter high of 2.60%, the highest since September 2014.

Overseas, the European Central Bank announced that it would extend its asset purchase program beyond March, 2017 when it was set to expire, but purchases will be lower (€60 billion per month down from €80 billion per month). Italians voted "no" to reforms and a rescue fund was created for troubled banks in response to acute challenges at Monte dei Paschi di Siena. Deutsche Bank settled with the U.S. Department of Justice for its role in selling mortgages during the crisis, agreeing to a \$7.2 billion payment (roughly half of what was originally suggested). The unemployment rate in the euro zone declined to 9.8% in October, the lowest since July, 2009; it has been falling since reaching a record high of 12.1% in April, 2013. The range in unemployment rates is highly divergent among euro zone countries, with Spain's at 19% and Germany's at a 35-year low of 4%. Consumer prices in the euro zone increased 0.6% year-over-year in November, the highest since April 2014, but well below the 2% target. GDP is expected to have picked up in the final months of the year from the 0.3% (1.6% year-over-year) pace registered in the third quarter to 0.4% – 0.5%.

In Asia, the Japanese economy advanced 0.3% (1.0% year-over-year) in the third quarter, below the preliminary estimate of 0.5%. The economy continues to struggle in spite of aggressive stimulus measures. The Bank of Japan made no changes to its monetary policy but upgraded the outlook for 2017 given the yen's weakness versus the U.S. dollar, which should provide a boost to exports. The dollar reached a 14-year high versus the yen.

Despite worries at the start of 2016, China ended the year with growth expected to be in line with its target of 6.5%. Its stock market stabilized and is up 19% since its low in late January, 2016. Its currency has depreciated, but in an orderly fashion. However, challenges remain in the form of a high debt load and an overheated property sector.

Equity Market

Equities posted strong returns in the fourth quarter, cheered by relatively good economic data, a rebound in corporate earnings, and speculation that Trump's presidency will bring lower taxes, lighter regulation and increased spending. The S&P 500 climbed to an all-time high of 2,239 on December 30 and closed up 3.8% for the quarter. However, there were stark differences in sector returns. Financials (+21.1%) were beneficiaries of Trumponomics, riding expectations for a more lenient regulatory environment and higher interest rates while Health Care (-4.0%) was one of the worst performing sectors. While smaller cap bio tech stocks performed well, uncertainty over the future of Obamacare hurt hospitals. The newly established REIT sector (-4.4%) was punished by rising interest rates. Small capitalization stocks outperformed large by a wide margin; the Russell 2000 rose 8.8% in the quarter and is up 21.3% for the year while the Russell 1000 gained 3.8% and 12.1% for the same periods. Value gained favor after prolonged underperformance. While this trend was in place before the election, Trump's win boosted Financials and Energy stocks, which make up a significant portion of the value indices. The largest difference between growth and value was in small caps. The Russell 2000 Value outperformed its Growth counterpart by 10.5% (+14.1% versus +3.6%) in the quarter and by double that amount, 20.4%, over the year (+31.7% versus +11.3%).

Foreign developed and emerging market indices trailed the S&P 500. The MSCI ACWI ex-US fell 1.3%, modestly below the MSCI EAFE's -0.7% result. Dollar strength was broad-based and thus detracted from

returns for U.S. investors. In developed markets, Italy (+11%) was the top performer in the fourth quarter, although it remains at the bottom of the pack for the year (-11%). The MSCI Emerging Markets Index dropped 4.2% for the quarter. Among emerging markets, Russia posted the best return (+19%) while Turkey (-14%) sank. Turkey's economy shrank 1.8% in the third quarter, its first year-over-year decline since 2009. Mexico, hurt by Trumponomic concerns, was down 8%.

Fixed Income Market

Interest rates in the U.S. rose sharply in the fourth quarter, driven both by encouraging economic data and worries that the pro-growth agenda put forth by President-elect Donald Trump will have an inflationary effect. The 10-year U.S. Treasury yield rose 85 bps and returned -6.8% for the quarter in the sharpest quarterly selloff in more than two decades. TIPS outperformed nominal Treasuries, bolstered by rising expectations for inflation. The Bloomberg Barclays TIPS Index returned -2.4% for the quarter but ended the year up 4.7%. The 10-year inflation breakeven rate was 1.95% as of December 30th.

The Bloomberg Barclays U.S. Aggregate returned -3.0% for the quarter but was up 2.6% for the year. The Corporate sector returned -2.8% and +6.1% for the same periods. Issuance by U.S. corporations hit another record high in 2016 at roughly \$1.3 trillion. Long maturity bonds performed the best, in relative terms, with long corporates outperforming like-duration Treasuries by 436 bps. Mortgages underperformed Treasuries as durations extended with the increase in interest rates. The Bloomberg Barclays High Yield Index gained 1.8% in the quarter and more than 17% for the year.

The municipal bond sector faced headwinds in the fourth quarter with robust supply, concerns over Trump's desire for lower taxes, and rising interest rates contributing to outflows from the sector. Supply in 2016 was \$445 billion, breaking its record from 2010 (\$443 billion). The Bloomberg Barclays Municipal Bond Index fell 3.6% for the quarter and was essentially flat (+0.2%) for the year.

Overseas, yields were also higher though dollar strength was the primary driver of sharply negative returns for unhedged indices. The Bloomberg Barclays Global Aggregate ex-US Index fell 10.3% for the quarter (-1.9% on a hedged basis). The U.S. dollar benefited from higher interest rates as well as prospects for growth. The yen lost more than 13% versus the dollar over the course of the quarter and the euro depreciated by more than 6%. Emerging markets debt underperformed developed markets. The JP Morgan EMBI Global Diversified Index dropped 4.0% for the quarter and the local currency GBI-EM Global Diversified lost 6.1%.

Other Assets

Commodities benefitted from OPEC (Organization of the Petroleum Exporting Countries) announced cuts as well as the prospect of increased infrastructure spending. In November, OPEC agreed to production cuts to reduce output by 1.2 million barrels per day or roughly 1% of global output. Several non-OPEC nations also agreed to cut output by around half a million barrels per day. Oil closed the year at \$54 per barrel, the highest level since July, 2015. The S&P GSCI Commodity Index rose 5.8% for the quarter and 11.4% for the year. MLPs were up modestly during the quarter (Alerian MLP Index +2.0%) with stronger results for the year (+18.3%).

Closing Thoughts

We enter 2017 with U.S. stock markets at new highs, rising interest rates and historically low volatility. The U.S. economy continues to gain traction and there are glimmers of hope that a bottom has been reached

overseas. However, a whole host of geopolitical challenges continue to cause angst. Further, the election of Donald Trump has resulted in widespread speculation as to the impact his policies will have on markets, but much uncertainty remains with respect to the scope, implementation and timing of these policies. With this in mind, we caution investors to maintain a long-term perspective. As always, prudent asset allocation with appropriate levels of diversification remains Callan's recommended course.

**OREGON STATE LAND BOARD
COMMON SCHOOL FUND DISTRIBUTION POLICY
Adopted April 14, 2009**

Effective with the December 31, 2009 distribution, the amount of the distribution shall be equal to 4% of the average balance of the preceding 3 years. If the average balance of the fund has increased by 11% or more, the distribution amount shall be 5% of the average balance of the preceding 3 years.

The average value of the Fund will be determined as of December 31 for the three preceding years (e.g., to determine average value for distributions in FY 2010, average value of the Fund would be determined as of December 31 for the calendar years 2006, 2007, 2008).

Fund growth is determined on the basis of a 3-year rolling average, comparing the most recent 3-year period to the 3-year period ending on the previous December 31 (e.g., to determine the Fund value for distributions in FY 2010, average value of the Fund would be determined as of December 31 for the calendar years 2006, 2007, 2008 and compared to the average value of the Fund for calendar years 2005, 2006, and 2007).

May 9, 2017



**Oregon Common School
Fund**

Asset Allocation and Distribution
Study: Phase 1

Janet Becker-Wold, CFA
Senior Vice President

Julia Moriarty, CFA
Senior Vice President

Uvan Tseng, CFA
Senior Vice President

Goal of the Study

Focus is on the Distribution and Investment Policies

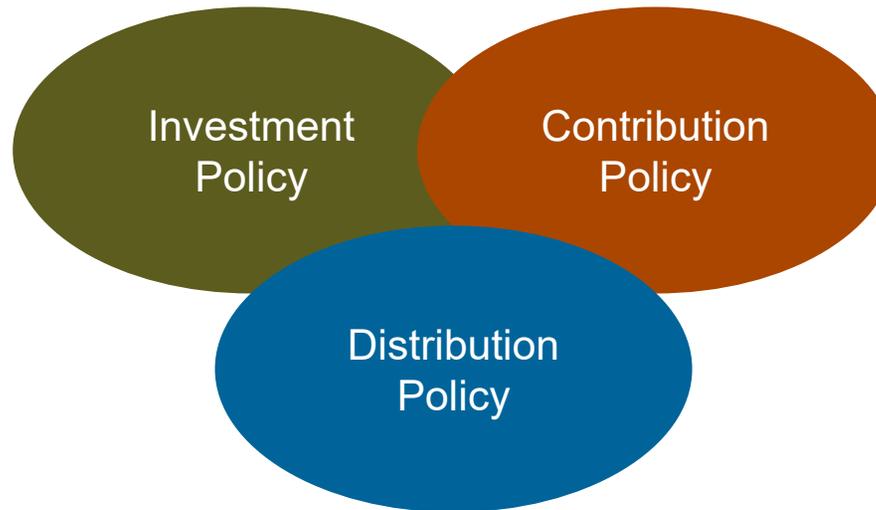
- The goal of this asset allocation and distribution study is to identify appropriate long-term distribution and investment policies for the Oregon Common School Fund.
 - Phase 1 has focused on the distribution policy and in this presentation the focus is on the distribution rate.
- The distribution and investment policies are two of the three key components of a fund (along with the contribution policy).
- Well-engineered distribution and investment policies consider:
 - The Fund’s investment objectives
 - All appropriate asset classes for inclusion
 - Liquidity needs, asset class limitations, implementation challenges, administrative and legal burdens, size or capacity constraints
 - Rebalancing discipline
- The appropriate distribution and investment policies should strike a balance between growth in the corpus and sustainable, stable distributions that result in intergenerational equity for beneficiaries.
- The appropriate distribution and investment policies will vary by each fund’s unique circumstances, preferences, and priorities.
 - No “one-size-fits-all” solution exists.

Three Key Policies

We evaluate the interaction of the three key policies that govern the Fund with the goal of establishing the best distribution and investment policies.

Investment Policy

- How will the assets supporting distributions be invested?
- What risk and return objectives?
- How to manage cash flows?



Contribution Policy

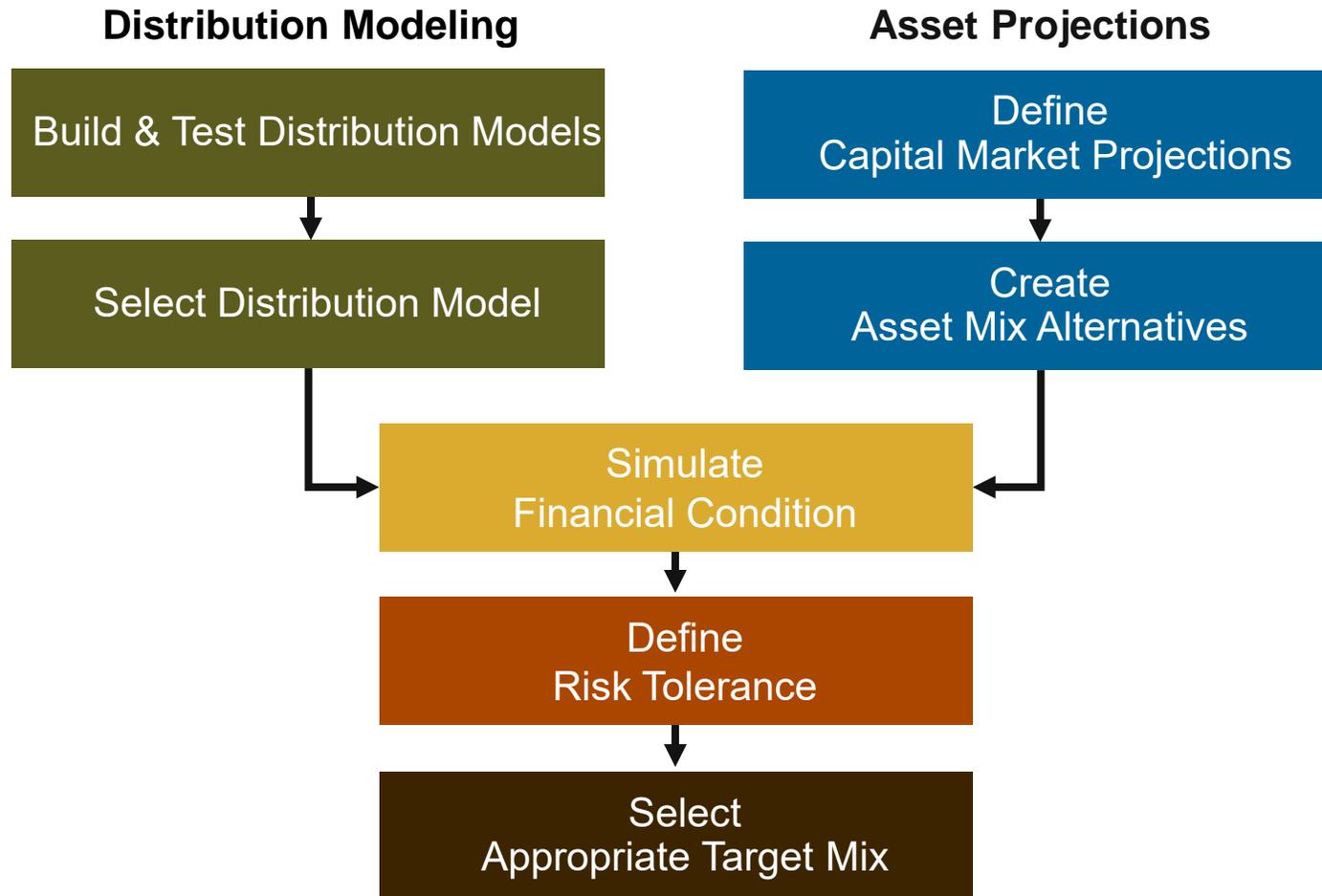
- What is the source of contributions?
- What level of contributions can be expected?

Distribution Policy

- What type of distribution policy?
- What level of distributions?

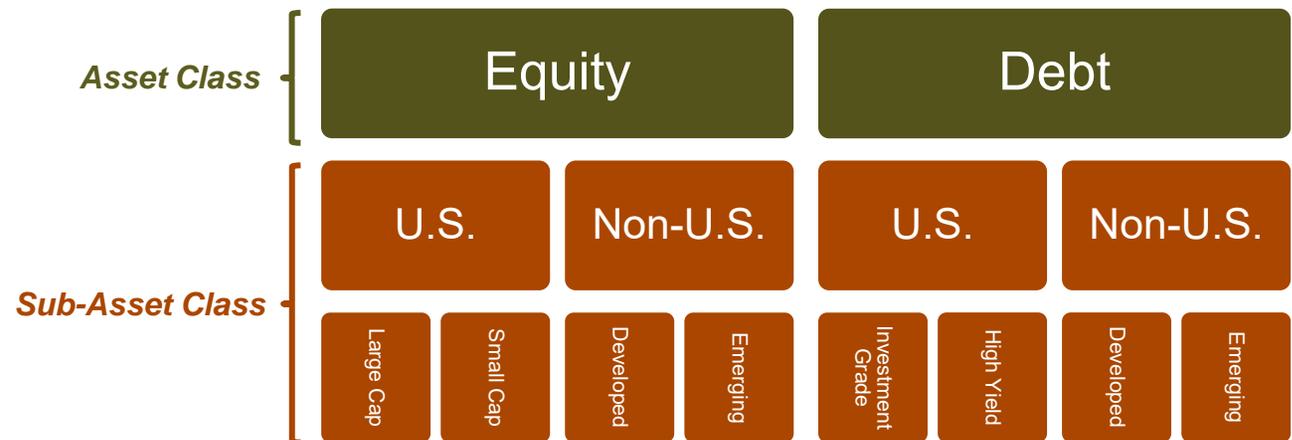
Asset Allocation and Distribution Process

- Distributions and assets are evaluated and tested separately, then integrated into a single model.



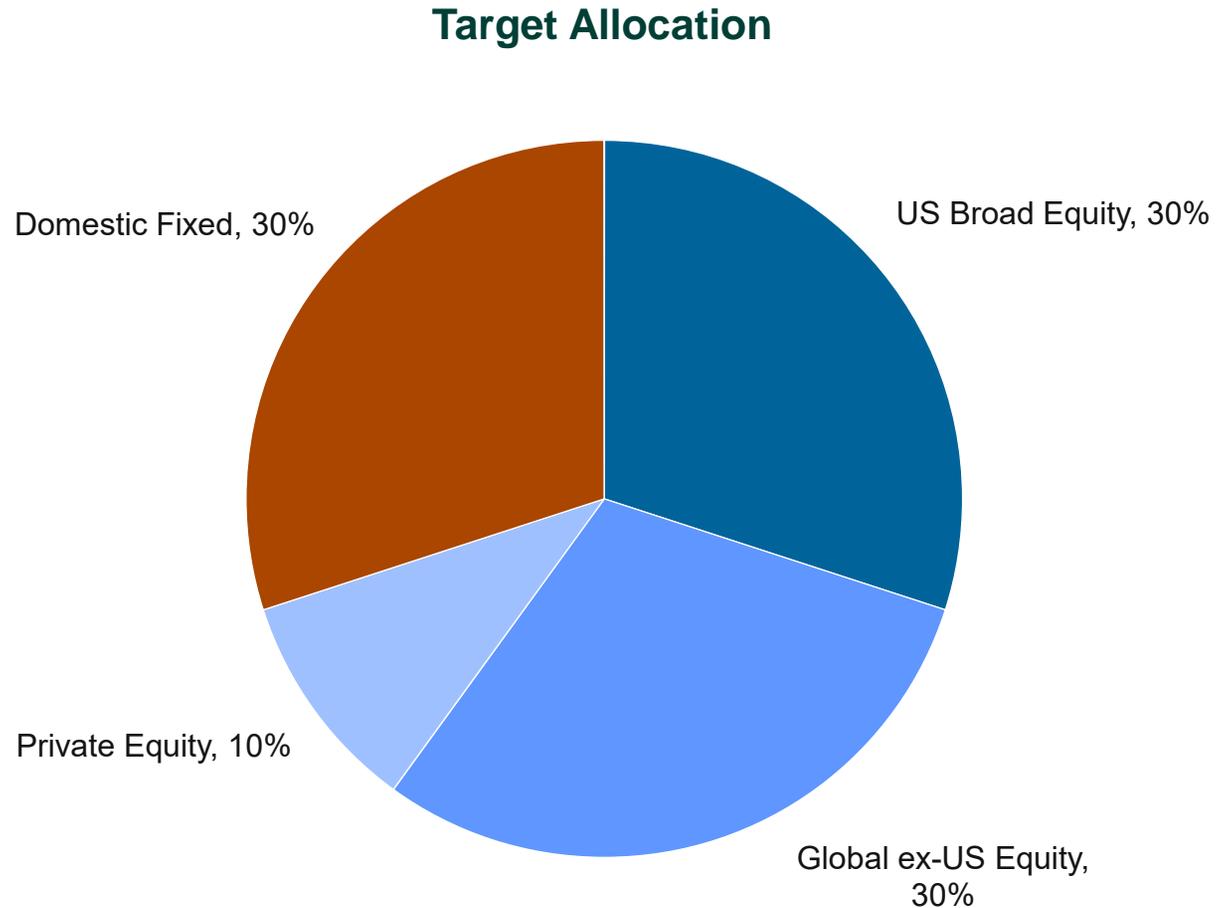
The Focus is on Broad Asset Classes

- Breakdowns between investment styles within asset classes (growth vs. value, large cap vs. small cap) are best addressed in a manager structure analysis.
 - Asset allocation assumes a net-of-fee investment in the relevant index fund (passive management).
 - Manager structure reflects the investor’s decision about the use of active and/or passive management within an asset class; the number of different mandates within the asset class; the styles within the asset class; and whether or not to implement “tilts” that differ from the broad asset class benchmark.
- Primary asset classes and important sub-asset classes include:
 - U.S. stocks
 - U.S. bonds
 - Non-U.S. stocks
 - Non-U.S. bonds
 - Alternative investments
 - Real estate
 - Private equity
 - Hedge funds
 - Cash



Current Situation and Assumptions

- The Fund has approximately \$1.465 billion in assets as of December 31, 2016.
- The Target asset allocation is 70% equity (60% public and 10% private) and 30% fixed income.
- Distributions in recent years have equaled 4-5% of the three-year average market value.
- Oregon student population growth is projected to grow at an annualized rate of 0.7% over the next 35 years versus approximately 0.2% for the nation as a whole.
- Net inflows to the Fund are expected to be \$25 million a year.



Expected Return = 6.5%
Expected Risk = 14.5%

Current Distribution Policy

Overview

- The current policy distributes 4% of the 3-year average market value if the annual percentage growth in the 3-year average market value is less than 11%.
- If the annual percentage growth in the 3-year average market value is 11% or more the Fund will distribute 5% of the 3-year average market value.
 - The distribution rate mechanism is tied to the change in the 3-year average market which is influenced not only by investment performance but by contributions and distributions.
- Below is an **example** of the distribution calculation for fiscal year 2017.

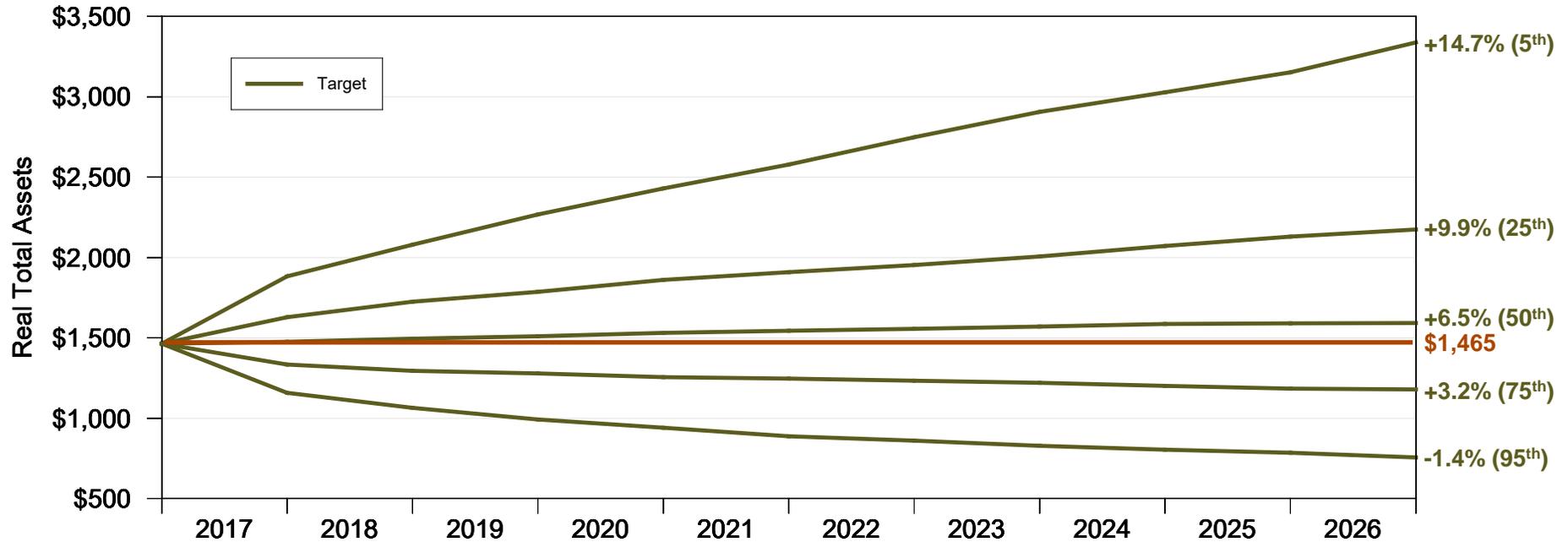
FY17 Distribution					
December 31	Market Value	3 Year Avg MV	Change in 3 Yr Avg MV	4%	5%
2012	1,178,826,000	1,119,481,333	5.41%	44,779,253	55,974,067
2013	1,362,190,000	1,204,259,333	7.57%	48,170,373	60,212,967
2014	1,433,677,000	1,324,897,667	10.02%	52,995,907	66,244,883
2015	1,424,195,000	1,406,687,333	6.17%	56,267,493	70,334,367

- The analysis which follows also takes into account positive net inflows to the Fund.

Real Assets (Millions)

Current Distribution Policy plus \$25 Million Net Cash Inflow

Simulated Real Total Assets

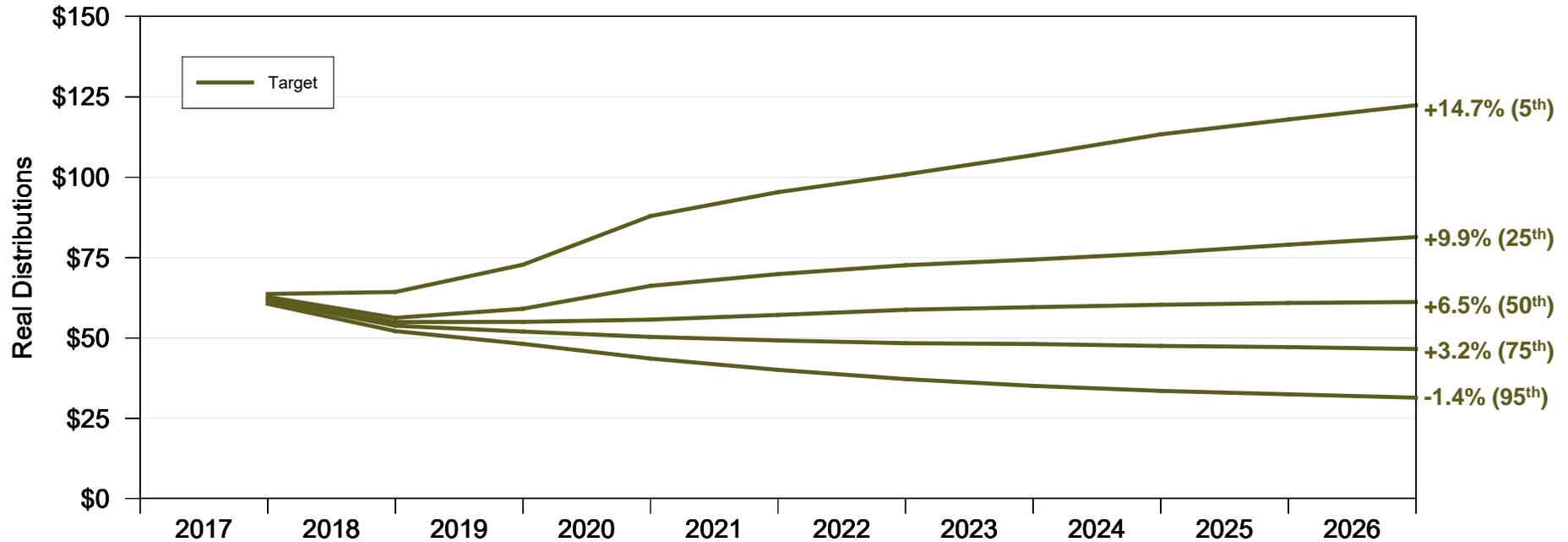


- The graph above discounts nominal values by price inflation and student population growth.
 - Callan’s price inflation (CPI-U) forecast is 2.25%.
 - Oregon student population growth is projected to grow at an annualized rate of 0.7% over the next 35 years versus approximately 0.2% for the nation as a whole.
- Aided by strong inflows, the real value of the corpus is expected (median-case outcome) to rise over the next 10 years.

Real Distributions (Millions)

Current Distribution Policy plus \$25 Million Net Cash Inflow

Simulated Real Distributions

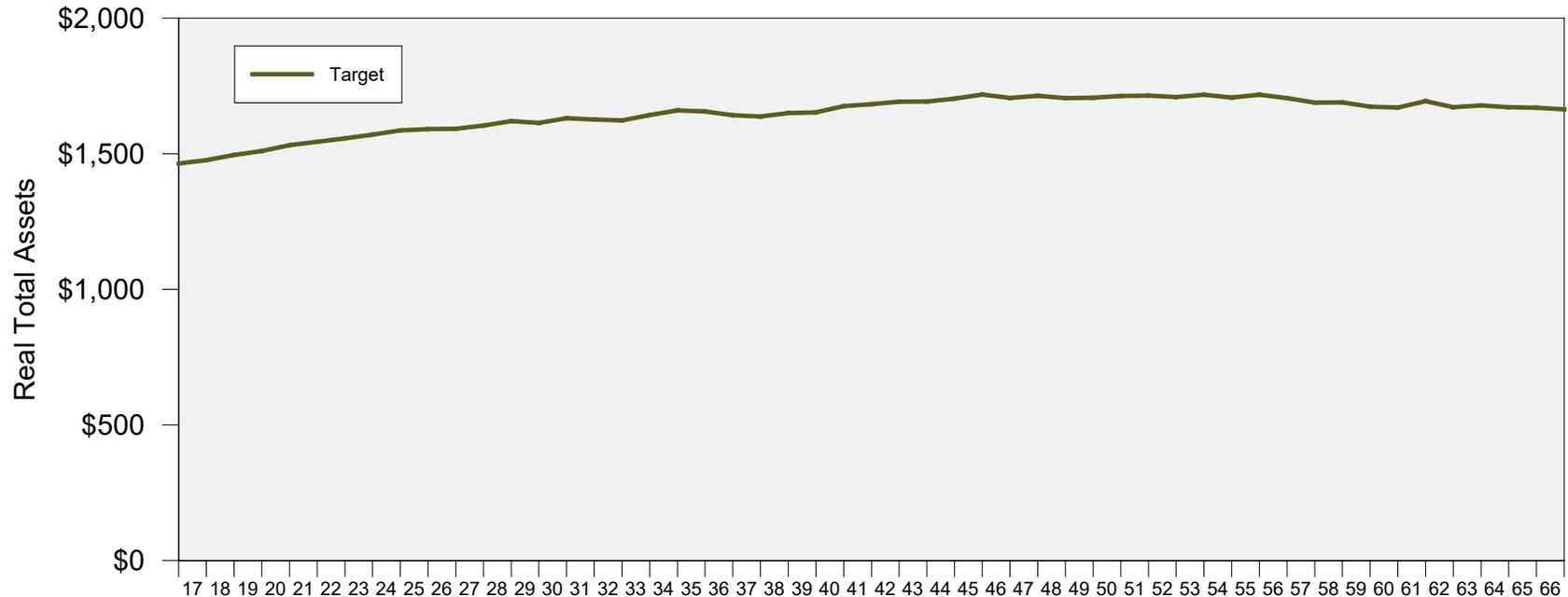


- The graph above discounts nominal values by price inflation (2.25%) and student population growth (0.70%).
- Given the expected rise in the real value of the corpus, it's not surprising that annual real distributions are also expected to rise over time.
 - The big decline in 2018 is due to a 5% distribution rate for the first half of 2017.

Median Real Assets (Millions)

Current Distribution Policy plus \$25 Million Net Cash Inflow

Simulated Median Real Total Assets

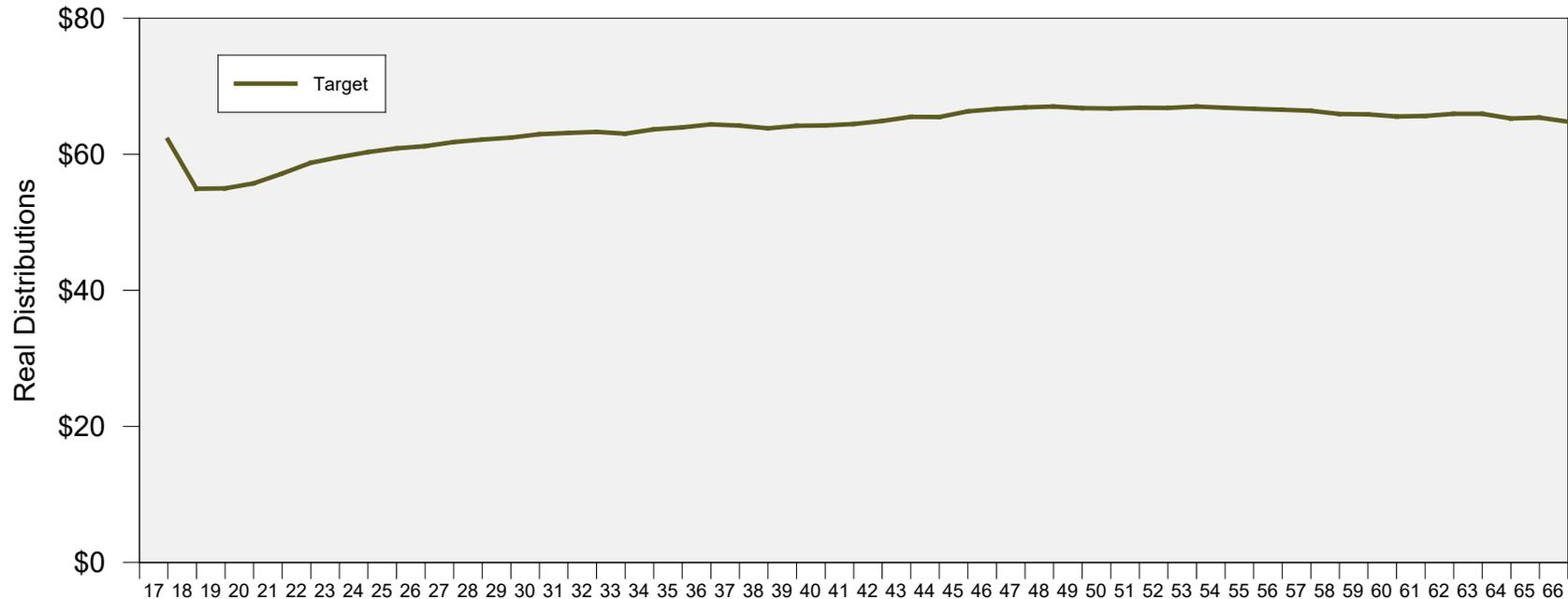


- To get a longer-term perspective of the real value of the Fund, the above chart looks out 50 years while employing Callan's 10 year capital market projections.
- The real value of the Fund is expected to eventually decline as annual inflows become a smaller percentage of total assets and investment returns alone are unable to keep pace with distributions and inflation.
- Not factored into the above chart is the expectation that longer-term capital market performance will be above the numbers Callan has projected over the next 10 years.

Median Real Distributions (Millions)

Current Distribution Policy plus \$25 Million Net Cash Inflow

Simulated Median Real Distributions

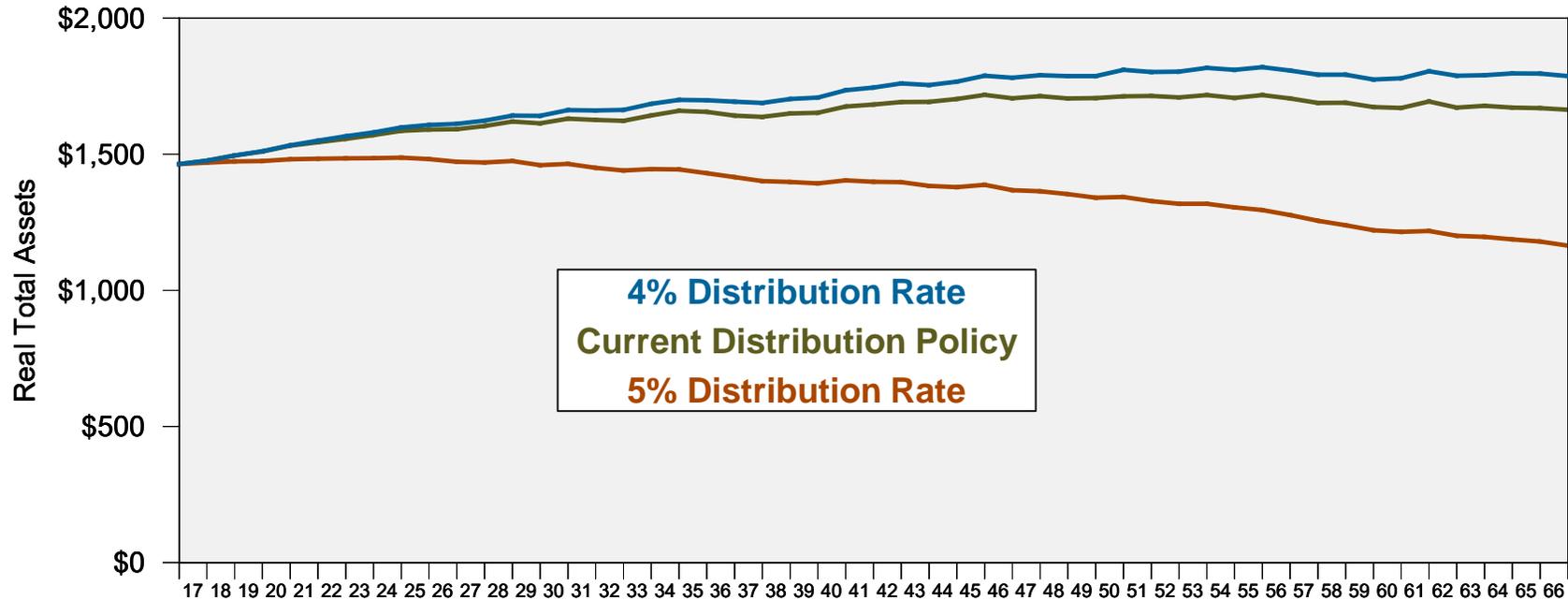


- To get a longer-term perspective of annual real distributions from the Fund, the above chart looks out 50 years while employing Callan's 10 year capital market projections.
- Similar to real assets, the real value of distributions eventually declines as annual inflows become a smaller percentage of total assets and investment returns alone are unable to keep pace with distributions and inflation.
- Not factored into the above chart is the expectation that longer-term capital market performance will be above the numbers Callan has projected over the next 10 years.

Median Real Assets (Millions)

Current Distribution Policy and 4% & 5% Distribution Rates (Target Allocation)

Simulated Median Real Total Assets



- The **current distribution policy** distributes 4% of the 3-year average market value unless the annual percentage growth in the 3-year average market value is 11% or more in which case the Fund distributes 5% of the 3-year average market value.
- Both the **current distribution policy** and a flat **5% distribution rate** (also applied to the 3-year average market value) eventually result in declining real asset values. A **4% distribution rate** (applied to the 3-year average market value) was found to maintain a relatively stable real asset value towards the latter part of the projection period.
- Not factored into the above chart is the expectation that longer-term capital market performance will be above the numbers Callan has projected over the next 10 years.

Summary Conclusions

- Aided by strong inflows, the real value of the Fund is expected (median-case outcome) to rise over the next 10 years under the current distribution policy.
- A flat 5% distribution rate, however, is expected to result in declining real asset values over the next 10 years despite the support of strong inflows.
- Extrapolating Callan's 10 year capital market projections over a 50-year period illustrates that 4% would be the maximum distribution rate to maintain a relatively stable real asset value.
- While maintaining purchasing power over the next 10 years would be challenging were it not for the strong expected cash inflows to the Fund, longer-term expectations support the current distribution policy in the absence of any inflows.

Next Steps

- Examine the distribution policy:
 - Beneficiary perspective
 - The “11% rule”
 - Number of years in the rolling average market value calculation
 - “Rails”
- Examine the investment policy:
 - Risk and return profile
 - Additional asset classes
- Examine the distribution and investment policies in conjunction.
- Identify reasonable long-term distribution and investment policies for the Oregon Common School Fund.

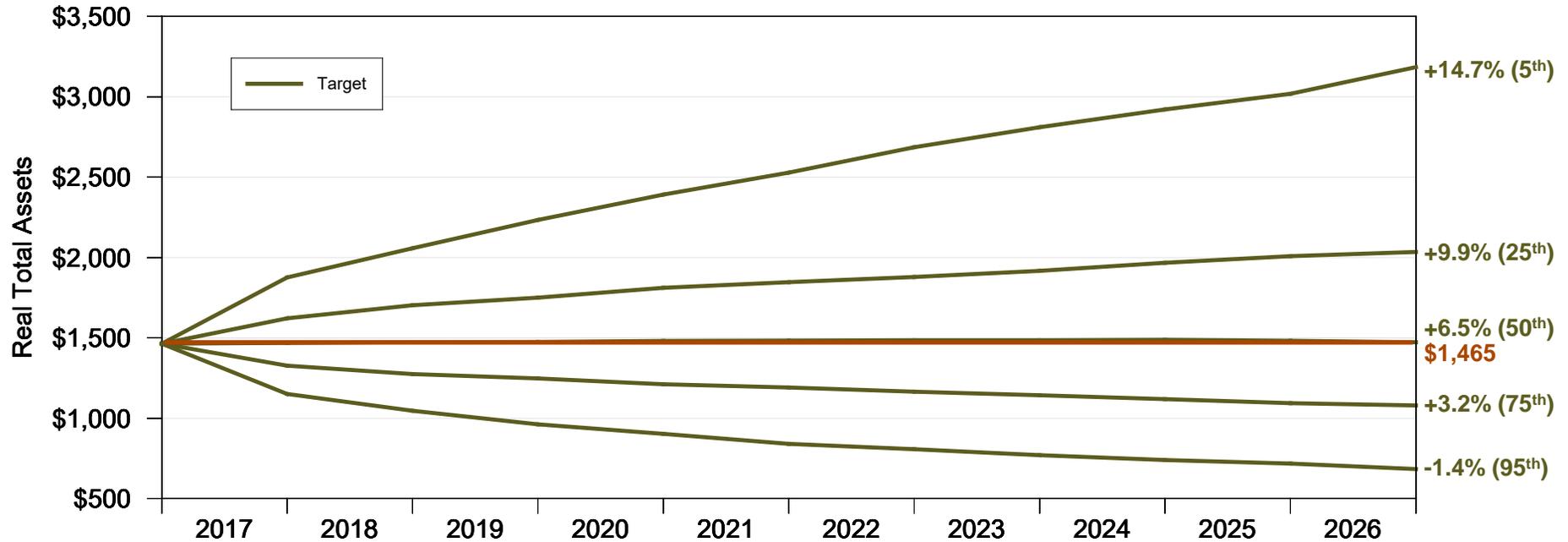


Appendix

Real Assets (Millions)

5% Distribution Rate plus \$25 Million Net Cash Inflow

Simulated Real Total Assets

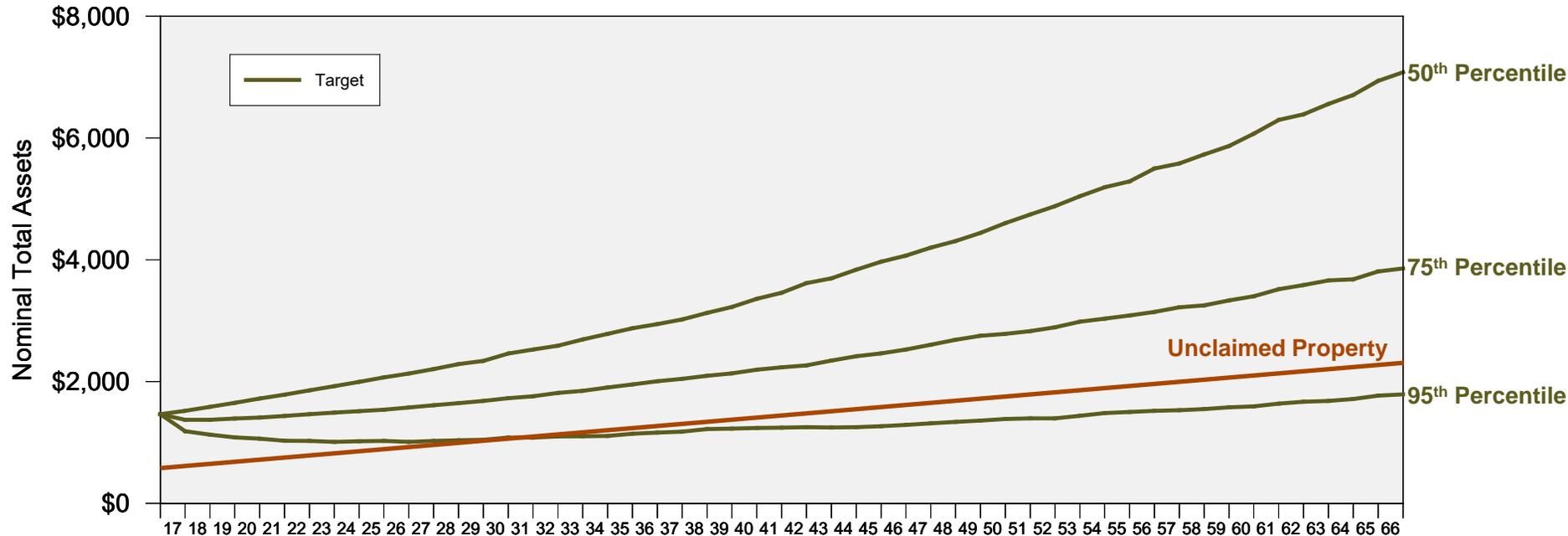


- The graph above discounts nominal values by price inflation and student population growth.
 - Callan’s price inflation (CPI-U) forecast is 2.25%.
 - Oregon student population growth is projected to grow at an annualized rate of 0.7% over the next 35 years versus approximately 0.2% for the nation as a whole.
- Despite the aid of strong inflows, the real value of the corpus is expected (median-case outcome) to begin declining by 2025 under a 5% distribution rate.

Nominal Assets (Millions)

Current Distribution Policy plus \$25 Million Net Cash Inflow

Simulated Nominal Total Assets



- The above chart compares the nominal value of the Fund in the 50th (expected), 75th, and 95th percentile outcomes to the value of unclaimed property.
 - Unclaimed property grows by \$33.3 million per year from \$599 million at December 31, 2016 to \$2.231 billion at December 31, 2066.
- Unclaimed property cannot be distributed.
- Distributions would be limited or curtailed in the event the value of the Fund neared or fell below the value of unclaimed property.
- Not factored into the above chart is the expectation that longer-term capital market performance will be above the numbers Callan has projected over the next 10 years.

How are Capital Market Projections Constructed?

Guiding Objectives and Process

- Projections consist of return and two measures that contribute to portfolio volatility: standard deviation and correlation.
- Projections cover most broad asset classes and inflation.
- Underlying beliefs guide the development of the projections:
 - An initial bias toward long-run averages
 - A conservative bias
 - An awareness of risk premiums
 - A presumption that markets ultimately clear and are rational
- Reflect our beliefs that long-term equilibrium relationships between the capital markets and lasting trends in global economic growth are key drivers to setting capital market expectations.
- Long-term compensated risk premiums represent “beta”—exposure to each broad market, whether traditional or “exotic,” with limited dependence on successful realization of alpha.
- The projection process is built around several key building blocks:
 - Advanced modeling at the individual asset class level (for example, a detailed bond model, an equity model)
 - A path for interest rates and inflation
 - A cohesive economic outlook
 - A framework that encompasses Callan beliefs about the long-term operation and efficiencies of the capital markets

2017 Capital Market Projections

Return and Risk

- The basis for asset allocation are the long-term expected characteristics of each asset class and how they interact with one another.
- Public market expectations represent passive exposure (beta only).
- Return expectations for private market investments such as real estate and private equity reflect active management premiums.
- All return expectations are net of fees.

Summary of Callan's Long-Term Capital Market Projections (2017 - 2026)

Asset Class	Index	Projected Return*	Projected Risk
Equities			
Broad Domestic Equity	Russell 3000	6.85%	18.25%
Large Cap	S&P 500	6.75%	17.40%
Small/Mid Cap	Russell 2500	7.00%	22.60%
Global ex-US Equity	MSCI ACWI ex USA	7.00%	21.00%
International Equity	MSCI World ex USA	6.75%	19.70%
Emerging Markets Equity	MSCI Emerging Markets	7.00%	27.45%
Fixed Income			
Short Duration	Bloomberg Barclays 1-3 Yr G/C	2.60%	2.10%
Domestic Fixed	Bloomberg Barclays Aggregate	3.00%	3.75%
Long Duration	Bloomberg Barclays Long G/C	3.20%	10.90%
TIPS	Bloomberg Barclays TIPS	3.00%	5.25%
High Yield	Bloomberg Barclays High Yield	4.75%	10.35%
Non-US Fixed	Bloomberg Barclays Gbl Agg xUSD	1.40%	9.20%
Emerging Market Debt	EMBI Global Diversified	4.50%	9.60%
Other			
Real Estate	Callan Real Estate Database	5.75%	16.35%
Private Equity	TR Post Venture Capital	7.35%	32.90%
Hedge Funds	Callan Hedge FoF Database	5.05%	9.15%
Commodities	Bloomberg Commodity	2.65%	18.30%
Cash Equivalents	90-Day T-Bill	2.25%	0.90%
Inflation	CPI-U	2.25%	1.50%

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

2017 Capital Market Expectations

Correlations

Summary of Callan's Long-Term Capital Market Projections (2017 - 2026)

Correlation Matrix		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1	Broad Domestic Equity	1.00																			
2	Large Cap	1.00	1.00																		
3	Small/Mid Cap	0.97	0.94	1.00																	
4	Global ex-US Equity	0.87	0.87	0.84	1.00																
5	International Equity	0.84	0.84	0.80	0.99	1.00															
6	Emerging Markets Equity	0.87	0.86	0.85	0.94	0.87	1.00														
7	Short Duration	-0.25	-0.24	-0.27	-0.27	-0.25	-0.29	1.00													
8	Domestic Fixed	-0.11	-0.10	-0.14	-0.13	-0.11	-0.16	0.87	1.00												
9	Long Duration	0.13	0.14	0.12	0.10	0.12	0.07	0.73	0.93	1.00											
10	TIPS	-0.05	-0.05	-0.08	-0.05	-0.03	-0.09	0.53	0.60	0.53	1.00										
11	High Yield	0.64	0.64	0.61	0.63	0.61	0.62	-0.14	0.02	0.22	0.06	1.00									
12	Non-US Fixed	0.01	0.05	-0.10	0.01	0.06	-0.09	0.48	0.51	0.54	0.34	0.12	1.00								
13	EMD	0.57	0.57	0.56	0.58	0.55	0.58	-0.04	0.10	0.16	0.18	0.60	0.01	1.00							
14	Real Estate	0.73	0.73	0.71	0.68	0.66	0.65	-0.17	-0.03	0.19	0.00	0.56	-0.05	0.44	1.00						
15	Private Equity	0.95	0.95	0.92	0.93	0.90	0.91	-0.26	-0.20	0.02	-0.11	0.64	-0.06	0.57	0.72	1.00					
16	Hedge Funds	0.80	0.80	0.77	0.76	0.73	0.76	-0.13	0.08	0.30	0.08	0.57	-0.08	0.54	0.61	0.78	1.00				
17	Commodities	0.15	0.15	0.15	0.16	0.16	0.16	-0.22	-0.10	-0.04	0.12	0.10	0.05	0.19	0.20	0.18	0.21	1.00			
18	Cash Equivalents	-0.04	-0.03	-0.08	-0.04	-0.01	-0.10	0.30	0.10	-0.05	0.07	-0.11	-0.09	-0.07	-0.06	0.00	-0.07	0.07	1.00		
19	Inflation	-0.01	-0.02	0.02	0.01	0.00	0.03	-0.20	-0.28	-0.29	0.18	0.07	-0.15	0.00	0.10	0.06	0.20	0.40	0.00	1.00	

- “Correlations” measure relationships between asset classes.
- These relationships will have a significant impact on the generation of efficient asset mixes using mean-variance optimization.
- Correlations are what define the diversification benefit – or lack thereof – of asset combinations.

Disclaimers

This report is for informational purposes only and should not be construed as legal or tax advice on any matter. Any decision you make on the basis of this content is your sole responsibility. You should consult with legal and tax advisers before applying any of this information to your particular situation.

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Past performance is no guarantee of future results.

The statements made herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties such that actual results may differ materially from these statements. There is no obligation to update or alter any forward-looking statement, whether as a result of new information, future events or otherwise. Undue reliance should not be placed on forward-looking statements.

Other Management Highlights

The Elliott State Forest

Pictured below is the Coos district State Forests field team lead by acting District Forester Ryan Greco and supported by the Southern Oregon Area Biologist, Randy Smith.

In FY 16 the district continued to implement the Elliott State Forest Management plan. This included managing all aspects of the forest such as reforestation, stream enhancement, wildlife and timber management. The district's employees are dedicated professionals that have a long history of managing the Elliott State Forest which has resulted in some of the highest quality habitat for native fish and wildlife, while contributing to economic and social benefits.



From left to right: Erik Larsen, Chris Hall, Eric Hamner, Roger Johnson, Jon Haynes, Jeanette Riding

CSFL Status

Swiss Needle Cast Trends: The area with SNC symptoms increased over the last two years and is consistent with the statewide trend across all ownerships. Weather has been highly conducive to disease intensification in coastal Douglas-fir forests. The impact of SNC on Douglas-fir growth has not changed much over the past 15 years.

Instream Wood Placement Projects:

FY14: 2 FY15: 0

Resident Spotted Owl Sites:

FY14: 26 FY15: 25

Acres Planted:

FY15: 321 acres FY16: 311 acres

Aquatic Habitat Restoration:

FY14: 5.8 miles FY15: 4.2 miles

Marbled Murrelet Management Areas:

FY14: 67 FY15: 68

Marbled Murrelet Management Acres:

FY14: 21,938 ac. FY15: 21,962 ac.

State Forests Division



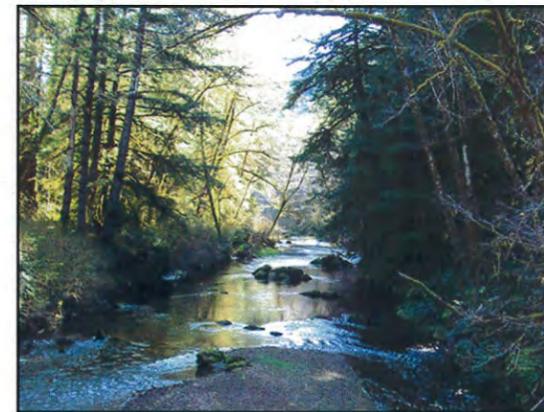
Common School Forest Land Annual Report

Fiscal Year 2016

Prepared for the Department of State Lands

The Oregon Department of Forestry manages 117,218 acres of Common School Forest Land under an agreement with the State Land Board to “manage lands under its jurisdiction with the object of obtaining the greatest benefit for the people of this state, consistent with the conservation of this resource under sound techniques of land management.” This report contains business and management highlights that took place in Fiscal Year 2016.

Full Report at www.oregon.gov/ODF/Pages/Reports.aspx



Fiscal Year 2016 — By The Numbers

FOREST MANAGEMENT: ODF continues stewardship of Common School Fund forestlands through active management while DSL plans for a change of ownership of the Elliott State Forest. ODF foresters continue to supervise and administer timber operations, monitor environmental successes and sustain critical wildlife habitat areas. In 2016, timber harvest levels decreased but revenue increased from the previous year, providing additional economic returns for the Common School Fund. Young stand management and a number of reforestation and replanting projects were completed successfully. These activities continue to actively grow healthy, sustainable forests for future generations – providing a range of longer-term natural benefits such as wood products, diverse ecosystems, habitat, clean air and water.

VOLUME HARVESTED

14.1 MMBF of timber volume was removed from CSFL, of which 8 MMBF came from the Elliott State Forest.

REVENUE TRANSFERRED

\$6,447,245 were transferred to the Common School Fund through DSL.

Performance Measure: NET OPERATING INCOME (Revenue – Costs)

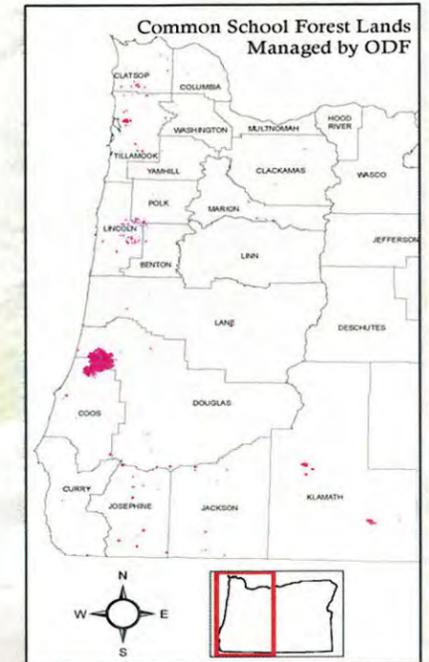
Fiscal Year	Net Operating Income
2016	\$2,935,860
2015	\$909,258
2014	-\$174,410
2013	-\$2,353,775
2012	\$6,299,086
5 Yr Avg	\$1,523,203

SOLD SALES

- 10 timber sales were sold that included CSFL and five were from the Elliott.
- Estimated to produce a volume of 11.5 MMBF with a net value of \$3.8 million.
- Total project costs from sales sold in FY 2016 will be about \$236,879.
- During FY 2016, approximately 73 percent of the statewide CSFL volume and 72 percent of the value sold was generated on the Elliott State Forest.

Fire Protection Assessment

\$433,883



REVENUE FROM CSFL BY DISTRICT

District	CSFL Acres	FY14	FY15	FY16
Tillamook District	5,384	\$3,964	\$44,188	\$24,748
Astoria District	2,060	\$134	\$62,831	\$27,118
Forest Grove District	610	\$171	\$1,399	\$3,164
West Oregon District	6,800	\$206,154	\$215,388	\$931,851
North Cascade District	923	-\$43,786	\$121,270	\$937,821
SW Oregon District	7,457	\$96,485	\$33,821	\$0
Coos District / Elliott	86,250	\$2,357,623	\$2,128,342	\$4,230,051
Western Lane District	907	\$958,821	\$1,372,255	\$158
Klamath-Lake District	6,827	\$310	\$250,525	\$292,334
TOTAL REVENUE	117,218	\$3,579,875	\$4,229,969	\$6,447,245

COSTS BY DISTRICT

District	CSFL Acres	FY14	FY15	FY16
Tillamook District	5,384	\$138,111	\$132,897	\$132,713
Astoria District	2,060	\$60,268	\$68,236	\$65,785
Forest Grove District	610	\$18,183	\$19,133	\$18,199
West Oregon District	6,800	\$286,840	\$292,381	\$263,039
North Cascade District	923	\$36,034	\$37,533	\$37,466
SW Oregon District	7,457	\$247,892	\$216,723	\$250,521
Coos District / Elliott	86,250	\$2,749,339	\$2,313,784	\$2,547,397
Western Lane District	907	\$37,541	\$57,258	\$52,009
Klamath-Lake District	6,827	\$156,587	182,766	\$145,035
TOTAL (EXP + TRNS)	117,218	\$3,730,795	\$3,320,711	\$3,512,163

CSL REVENUE



Common School Forest Land Annual Report

FISCAL YEAR 2016



**Prepared by the Oregon
Department of Forestry**

May 2017

Table of Contents

Executive Summary	Pg 1
Financial and Asset Management	Pg 3
Forest Land Management and Planning	Pg 8
Links To More Information	Pg 12

Annual Report Located at:

<http://www.oregon.gov/ODF/Pages/Reports.aspx>

Executive Summary

DATE: May 9, 2017

TO: Governor Kate Brown
Secretary of State Dennis Richardson
State Treasurer Tobias Read

FROM: Peter Daugherty, Oregon State Forester

SUBJECT: Fiscal Year 2016 Annual Report for Common School Forest Land

The Oregon Department of Forestry (ODF) manages 117,218 acres of Common School Forest Land (CSFL), most of which (86,250 acres) is within the ODF Coos District, which includes the Elliott State Forest. These lands are managed to maximize revenue through elements of an agreement among ODF, the State Land Board (Land Board) and the Department of State Lands (DSL). As trustee of this Common School Forest Land, the Land Board oversees management to provide Oregonians the greatest benefit, including conservation values and sound forestland management strategies. The DSL 2012 Real Estate Asset Management Plan directs that these lands provide a sustained, even flow of timber harvest. ODF achieves this mandate through goal-driven forest management plans approved by the Oregon Board of Forestry and the Land Board. Net revenues generated from Common School Forest Land are dedicated to the state's Common School Fund (CSF).

This agreement and partnership among ODF, DSL and the Land Board requires ODF to present an annual report regarding the status of management of Common School Forest Land. This status report includes information related to timber management (volume and value of harvested, sold and planned timber sales), fiscal year operating costs, revenue transferred to the Common School Fund, reforestation, intensive management accomplishments and costs and other information affecting Common School Forest Land management and operations.

Fiscal Year 2016 Harvest and Revenue

ODF continues stewardship of Common School Fund forestlands through active management while DSL plans for a change of ownership of the Elliott State Forest. ODF foresters continue to supervise and administer timber operations, monitor environmental successes and sustain critical wildlife habitat areas. In 2016, timber harvest revenues increased from the previous year, providing additional economic returns for the Common School Fund.

A number of reforestation and replanting projects were completed successfully, and young stand management activities continue to actively grow healthy, sustainable forests for future generations – providing a range of longer-term natural benefits such as wood products, diverse ecosystems and habitat, and clean air and water.

1. CSFL Harvest Volume:
 - a. 14.1 MMBF (8 MMBF from the Elliott State Forest)
 - b. 7 percent decrease from FY 2015

2. Revenue Transfers to CSF:
 - a. \$6.4 million
 - b. 52 percent increase from FY 2015

3. Net Operating Income (NOI): NOI is the total revenue transfers to the CSF minus ODF management costs. It is influenced by the same factors that affect volume and value, as well as management expenses.
 - a. \$2,935,860
 - b. 223 percent increase from FY 2015

4. CSFL Management costs:
 - a. \$3.5 million
 - b. 6 percent increase from FY 2015

5. CSFL sales sold in FY 2016
 - a. 11.5 MMBF
 - b. Approximately \$3.8 million

Other Forest Management Activities

Reforestation and young stand management are integral to ensuring a sustainable flow of wood and future habitat development. On CSFL in FY 2016, 311 acres were reforested and 1,800 acres received young-stand management treatment, improving overall forest health and future growth.

Forest management operations on CSFL also supported investments in stream restoration. Elliott State Forest foresters and community partners continue to collaborate with local watershed associations and the Oregon Department of Fish and Wildlife to design and implement wood placement projects to improve fish habitat.

This annual report summarizes CSFL management activities from July 1, 2015 through June 30, 2016.

Financial and Asset Management

Overview

This report primarily focuses on FY 2016 (July 1, 2015 through June 30, 2016). However forest management often requires evaluating trends in revenue and costs for previous biennia (e.g., sales approved in one year's operating plan may be harvested over one to three subsequent years). Revenue transferred to the CSF from management of CSFL has varied over the past 10 years from \$2.1 million to \$13.6 million annually.

The primary factors influencing revenue fluctuations include: housing starts, lumber prices, harvest timing, individual sale volumes and value, changing ratios between harvests on CSFL and Board of Forestry lands (BOFL), endangered species act protection measures and uncertainty and constraints associated with litigation.

State Land Board Performance Measures

Performance measures and targets provide a tool for measuring progress in meeting established goals. Department of State Lands (DSL) established performance measures in the Real Estate Asset Management Plan (REAMP) approved by the State Land Board (SLB) in 2012. These REAMP measures are used to evaluate management actions, inform decision-making on land reclassifications, and guide decisions on investment, retention and divestment of lands. The SLB has established four separate measures for assessing performance of CSFL.

Net Operating Income (NOI)

NOI for CSFL for FY 2016 was \$2,935,860. Net Operating Income is calculated by subtracting all costs from revenue. Since 2012, NOI ranged from negative \$2.4 to \$6.3 million for CSFL (Table 1).

Table 1: Net Operating Income	
FY2016	\$2,935,860
FY2015	\$909,258
FY2014	-\$174,410
FY2013	-\$2,353,775
FY2012	\$6,299,086
5 Year Average	\$1,523,203

Annual Revenue

Annual revenue is reported throughout this report, with influencing factors included for context.

Land Value Appreciation (LVA) and Return on Asset Value (ROAV)

ODF does not calculate LVA or ROAV for CSFL.

Fiscal Year 2016 Revenue and Investment Costs

During FY 2016, \$6.4 million in revenue was transferred to DSL (Table 2). Total charges for managing the CSFL totaled \$3.5 million during FY 2016 (Table 2). During FY 2016, \$2.5 million of the \$3.5 million in costs were related directly to operational expenditures for managing the Elliott State Forest. These expenditures include State Forests Division personnel in Salem, three regional areas, and nine districts. The units are responsible for timber sale contract development and compliance, reforestation and intensive management activities, Endangered Species Act compliance, research and monitoring, forest planning and overall program administration.

Other charges to the CSF, referred to as “Net Revenue Transfers,” totaled \$752,033 in FY 2016 (Table 3). This is approximately 21 percent of total overall costs. Revenue transfers include a prorated portion of ODF’s total costs for capital improvement projects, debt service, fire protection, and seed orchard management for reforestation and genetically improved seed.

Revenue transfers also include a portion of overall agency administration prorate which totaled \$663,508. It is ODF’s goal to ensure that allocation of agency administrative costs accurately reflects work performed by administrative and managerial staff, and that each program pays their appropriate share of administrative costs.

J.E. Schroeder Seed Orchard costs for FY 2016 were \$23,152. These funds were used to produce genetically improved seed (superior growth, wood quality, and disease tolerant characteristics as identified through traditional breeding and selection methods) appropriate for reforesting state forestlands.

The ODF Fire Protection Division assessed DSL \$433,883 for CSFL wildfire protection.

Table 2: Expenditures, Transfers, and Revenue

BREAKDOWN OF COSTS					
COSTS	FY12	FY13	FY14	FY15	FY16
All District Expenditures	\$3,146,191	\$2,758,290	\$1,879,302	\$1,676,363	\$1,825,312
T & E Surveys (Included in Salem Expenditures)	\$498,013	\$441,933	\$347,898	\$693,229	\$616,137
Salem Expenditures	\$922,108	\$1,016,343	\$1,182,116	\$992,421	\$934,818
Administrative Transfer Costs (Includes Admin Prorate)	\$680,947	\$675,980	\$669,377	\$651,927	\$752,033
TOTAL COSTS	\$4,749,246	\$4,450,613	\$3,730,795	\$3,320,711	\$3,512,163

ALL EXPENDITURES AND TRANSFERS (COSTS) PRORATED BY DISTRICT CSL ACRES					
DISTRICT	FY12	FY13	FY14	FY15	FY16
51 - Tillamook District	\$117,014	\$123,478	\$138,111	\$132,897	\$132,713
52 - Astoria District	\$53,852	\$54,796	\$60,268	\$68,236	\$65,785
53 - Forest Grove District	\$15,782	\$17,717	\$18,183	\$19,133	\$18,199
55 - West Oregon District	\$287,446	\$284,525	\$286,840	\$292,381	\$263,039
58N - North Cascade District	\$34,015	\$36,424	\$36,034	\$37,533	\$37,466
71 - SW Oregon District	\$286,613	\$253,857	\$247,892	\$216,723	\$250,521
74 - Coos District / Elliott	\$3,792,574	\$3,441,723	\$2,749,339	\$2,313,784	\$2,547,397
78 - West Lane District	\$20,758	\$37,560	\$37,541	\$57,258	\$52,009
98 - Klamath-Lake District	\$141,193	\$200,532	\$156,587	\$182,766	\$145,035
TOTAL COSTS	\$4,749,246	\$4,450,613	\$3,730,795	\$3,320,711	\$3,512,163

REVENUE					
DISTRICT	FY12	FY13	FY14	FY15	FY16
51 - Tillamook District	\$0	\$4,663	\$3,964	\$44,188	\$24,748
52 - Astoria District	\$60,830	\$2,701	\$134	\$62,831	\$27,118
53 - Forest Grove District	\$448	\$19	\$171	\$1,399	\$3,164
55 - West Oregon District	\$564,292	\$473,367	\$206,154	\$215,338	\$931,851
58 - North Cascade District	\$0	\$532,833	² -\$43,786	\$121,270	\$937,821
71 - SW Oregon District	\$491,402	\$669,026	\$96,485	\$33,821	\$0
74 - Coos District / Elliott	\$9,598,688	\$409,509	\$2,357,623	\$2,128,342	\$4,230,051
78 - West Lane District	\$0	\$87,260	\$958,821	\$1,372,255	\$158
98 - Klamath / Lake District	\$52,999	\$150,653	\$310	\$250,525	\$292,334
¹ TOTAL CSL REVENUE RECEIVED	\$10,768,659	\$2,330,031	\$3,579,875	\$4,229,969	\$6,447,245
¹ REVENUE TRANSFER TO DSL	\$11,048,329	\$2,096,838	\$3,556,385	\$4,246,450	\$6,448,023

¹ The difference in revenue received and transfers is a timing issue. Revenue received is posted by ODF and dollars transferred to DSL within a week.

² A refund in the amount of \$43,810.85 was processed in FY14 for an overpayment on timber sale 341-13-15 named Air Abiqua in the North Cascade district.

Table 3: Details of FY 2016 Administrative Transfer Costs	
Administrative Revenue Transfers	Amount
Administrative Prorate Charge	\$663,508
J.E. Schroeder Seed Orchard	\$23,152
Residual Equity	\$4,150
Bond Principal	\$53,132
Bond Interest	\$8,091
ADMINISTRATIVE TRANSFER COSTS TOTAL	\$752,033

Financial Administration and Reporting

The 2005 CSFL Management Agreement, and 2010 sub-agreement, between ODF and DSL provide operational and administrative guidance for the management of CSFL to ensure fiscal accountability and appropriate exchange of information between agencies. ODF and DSL continue to enhance business practices to ensure understanding of operations, fiscal reporting and budgeting.

Future Market Trends

Timber harvests climbed steadily after 2009 until peaking around four billion board feet (bbf) in 2013. This peak held for two years before dropping back below 4bbf in 2015. This decrease was most prominent on privately owned forestlands (industrial and non-industrial). There are a few reasons for the decline including a housing market that has plateaued for the time around 1.5 million starts, an export market that declined in 2015, and the expiration of the Softwood Lumber Agreement between the United States and Canada. Oregon's timber harvest predominantly stays in the western United States, which is a concern since most housing starts, are on the east coast. Oregon has compensated in recent years by exporting roughly fifteen percent of its private logs to Southeast Asia. However, demand for these logs decreased as China's building boom started to cool.¹

In 2015, the only increase in harvest came from state owned lands (predominantly those managed by ODF). There was a 26 percent increase from 2014 to 2015 on these lands. This can be attributed to purchasers being active on awarded contracts to fulfill demand as private harvest decreased. Private landowners are very price sensitive and responded to prices that at times were over \$600/mbf in 2013 and 2014. However, in 2015, these prices began to stabilize in the low to mid-\$500 range. In the first two quarters of 2016, prices have risen back to the \$600/mbf mark due to an uptick in exports and assumption that the United States and Canada will sign a new Softwood Lumber Agreement. However, it is expected that the total Oregon harvest in 2016 will remain below 4bbf.

¹ Sources: Random Lengths, IHS Global, ODF Exports Report (Lettman), US ITC, ODF Timber Harvest Report

**Table 4: Common School Forest Land Historical Timber Harvest Value,
Volume and Average Stumpage Price
Fiscal Years 2007 through 2016**

Fiscal Year	¹ Timber Sales Value of Timber Removed	Timber Harvest Volume (MMBF) Removed	Average Sold Sale Stumpage Price/MBF
2016 Elliott State Forest (Coos District)	\$3,416,945	7.99	\$327
2016 Other CSFL	\$2,454,497	6.17	\$347
Total 2016	\$5,871,441	14.16	\$332
2015 Elliott State Forest (Coos District)	\$3,592,162	8.26	\$436
2015 Other CSFL	\$2,367,124	6.99	\$356
Total 2015	\$5,959,286	15.25	\$375
2014 Elliott State Forest	\$2,524,725	6.96	\$434
2014 Other CSFL	\$1,503,429	4.00	\$205
Total 2014	\$4,028,154	10.96	\$411
2013 Elliott State Forest	\$1,606,932	4.51	\$288
2013 Other CSFL	\$1,992,098	6.56	\$328
Total 2013	\$3,599,030	11.08	\$308
2012 Elliott State Forest	\$10,939,550	28.54	\$313
2012 Other CSFL	\$1,064,931	3.71	\$314
Total 2012	\$12,004,481	32.25	\$313
2011	\$11,569,905	32.12	\$317
2010	\$8,221,998	24.81	\$263
2009	\$12,419,783	29.29	\$232
2008	\$11,988,895	22.97	\$421
2007	\$12,760,992	27.08	\$485
Last 5 Year Average	\$6,295,361	16.75	\$348
10 Year Average	\$8,843,838	22.00	\$346

¹ Timber Sale Value is gross timber sale's value before project work credits have been subtracted

Forest Land Management

ODF manages 117,218 acres of CSFL (Table 5). The majority of CSFL are located in the ODF Coos District (86,250 acres). Activities conducted on CSFL managed by ODF include: timber harvest, reforestation and intensive management, and road construction and maintenance. These lands are composed of four DSL Asset Management Plan forestland classifications: General Stewardship, Focused Stewardship, Special Use and High Value Conservation Areas.

Timber Management Activities

A total of 23 active sales were harvested in FY 2016, producing 14.16 mmbf with a value of \$5.9 million (Table 7). There was very little change in overall value from the FY 2015 harvest. Of these sales, 8 mmbf were harvested in The Elliott State Forest. In addition, there were 10 sales sold in FY 2016, producing approximately 11.5 mmbf (Table 6).

There are no sales planned in FY 2017 on Elliott State Forest CSFL. All planned sales on CSFL in FY 2017 are estimated to produce 4.1 mmbf with a net value of \$1.3 million (Table 8).

Reforestation and intensive management activities such as site preparation, planting and thinning are used to promote healthy and productive forest land. Table 9 summarizes planned and completed acres and costs for these activities on CSFL.

Table 10 provides information about the road system management on CSFL by District and County.

COUNTY	CSFL ACRES
BENTON	563
CLACKAMAS	113
CLATSOP	2,060
COLUMBIA	80
COOS	53,057
CURRY	1,352
DOUGLAS	33,715
JACKSON	1,622
JOSEPHINE	3,961
KLAMATH	6,827
LANE	907
LINCOLN	4,546
LINN	90
MARION	720
POLK	1,690
TILLAMOOK	5,584
WASHINGTON	250
YAMHILL	80
GRAND TOTAL:	117,218

Source: Patty Cate, ODF, 02/23/16

Note: Report is based on legal acres not GIS acres

Timber Sales Sold During FY 2016

Table 6. Common School Forest Lands Timber Sales Sold in Fiscal Year 2016										
Sale Name	ODF District	CSFL % of Sale	Total Sale Volume (mbf)	CSFL Volume (mbf)	CSFL Acres Partial Cut	CSFL Acres Regen.	Total Project Costs	CSFL Project Costs	Net Sale Value (BOF + CSFL)	Net CSFL Value
Little Salander Headwtrs	COOS	100%	1,961	1,961	0	66	\$50,855	\$50,855	\$613,935	\$613,935
Salander Ridge	COOS	100%	1,908	1,908	0	51	\$43,804	\$43,804	\$563,344	\$563,344
Lower West Glenn	COOS	100%	2,312	2,312	0	101	\$23,702	\$23,702	\$844,503	\$844,503
Eleven Creek Headwaters	COOS	100%	1,991	1,991	0	92	\$29,014	\$29,014	\$677,862	\$677,862
Deer Creek Headwaters	COOS	100%	209	209	0	15	\$5,191	\$5,191	\$38,883	\$38,883
Bale Out Thin	WEST OREGON	55%	1,534	844	128	0	\$48,287	\$26,558	\$141,561	\$77,858
Big LYR	WEST OREGON	69%	2,598	1,793	0	45	\$74,528	\$51,424	\$1,222,703	\$843,665
Lake Ridge Combo	WEST OREGON	10%	1,080	109	6	5	\$27,683	\$2,788	\$227,197	\$22,879
Switch Up	WEST OREGON	21%	1,247	262	0	12	\$8,704	\$1,828	\$475,987	\$99,957
Toddzilla	KLAMATH-LAKE	3%	3,063	92	18.3	0	\$57,182	\$1,715	\$1,058,325	\$31,750
TOTALS:			17,903	11,481	152	387	\$368,950	\$236,879	\$5,864,300	\$3,814,635

This data is produced from an ODF sale plan database. All dollar amounts were rounded to the nearest whole dollar.

Activity Summary for FY 2016

**Table 7. Active Timber Sales on Common School Forest Lands
Volume and Value, Fiscal Year 2016**

Sale Name	District	Sale No.	%CSFL	MMBF Harvested	Value CSFL
Bergsvik	Astoria	1-15-030	4.0%	.15	\$39,593
Purdy Slim	Coos	1-13-096	100.0%	.09	\$19,809
Ash Valley Overlook	Coos	1-14-052	100.0%	1.11	\$516,250
Glenn Again	Coos	1-15-041	99.3%	2.35	\$1,008,046
Eleven Creek No. 3	Coos	1-15-042	100.0%	0.99	\$329,428
Dean Scholfield	Coos	1-15-044	61.0%	1.68	\$890,026
Lower West Glenn	Coos	1-16-013	100.0%	1.10	\$434,036
Eleven Creek Headwaters	Coos	1-16-016	100.0%	0.44	\$159,654
Deer Creek Headwaters	Coos	1-16-018	100.0%	0.23	\$59,697
Top Step	Forest Grove	1-15-023	2.0%	0.003	\$1,538
Piggyback R/W	Forest Grove	2-16-005	100.0%	0.02	\$7,353
3-Way	Klamath-Lake	1-15-012	100.0%	1.47	\$348,517
Around Gates Hill	North Cascade	1-15-048	70.0%	1.77	\$987,497
AGH Area 2 Salvage	North Cascade	2-16-599	100.0%	0.07	\$3,486
AGH Areas 1 & 3 Salvage	North Cascade	2-16-600	25.0%	0.01	\$477
Cougar Camp	Tillamook	1-13-067	2.0%	0.13	\$22,177
BLM Head East R/W	Tillamook	2-15-237	25.0%	0.003	\$1,132
SS Johnson Combo	West Oregon	1-15-049	15.0%	0.15	\$57,094
Mill Cat	West Oregon	1-15-052	28.0%	1.09	\$512,396
Tower of Power	West Oregon	1-15-072	54.4%	0.94	\$389,194
Bale Out Thin	West Oregon	1-16-023	57.0%	0.23	\$28,453
Big Lyr	West Oregon	1-16-024	68.2%	0.02	\$9,780
Switch Up	West Oregon	1-16-060	21.3%	0.12	\$45,811
				14.16	\$5,871,441

Planned Timber Sales for FY 2017

Table 8: Annual Operation Plan Timber Sales Planned On CSFL in FY 2017

Sale Name	ODF District	CSFL Percent of Sale	Timber Sale Volume (MBF)	CSFL Volume (MBF)	CSFL Acres Regen Cut	CSFL Acres Partial Cut	Total Sale Value	CSFL Project Costs	Net CSFL Value
Woods Way	Forest Grove	31%	4,813	1,515	35	0	\$1,684,704	\$55,336	\$474,949
Southwest Kerby	Southwest Oregon	100%	541	541	34	0	\$162,192	\$22,000	\$140,192
High Standards	Tillamook	15%	3,938	574	35	0	\$900,371	\$21,584	\$109,642
Goat Shot	West Oregon	70%	2,037	1,434	42	0	\$821,448	\$35,900	\$542,331
Total			11,329	4,064	146	0	\$3,568,714	\$134,819	\$1,267,114

Reforestation and Intensive Management

Table 9: Intensive Management Activities On CSFL - FY 2016

Management Activity	Acres Planned	Acres Completed	Total Cost
Initial Planting*	244	311	\$104,008
Interplanting* **	107	83	\$15,253
Invasive Plant Control	29	35	\$530
Precommercial Thinning	0	0	\$0
Pruning	5	0	\$0
Release-Chemical- Aerial	75	0	\$0
Release-Chemical-Hand**	25	15	\$760
Release-Mechanical-Hand**	40	74	\$11,200
Site Prep –Mechanical	30	7	\$1,575
Site Prep -Slash Burning**	30	7	\$527
Site Prep-Chemical- Aerial	329	371	\$16,629
Site Prep-Chemical- Hand	0	13	\$336
Surveys - Invasive Plants	0	0	\$0
Surveys – Reforestation	265	253	\$506
Tree Protection-Barriers**	20	108	\$4,644
Tree Protection-Direct Control**	510	523	\$26,400
Underplanting*	0	0	\$0
Total	1,709	1,800	\$182,369

*Planting costs include all costs including seedlings & seed.

** Some districts used inmate labor. Inmate crew costs are covered in this table.

Road Management Activities

Table 10: FY 2016 Annual Road Work – CSFL

District & County	Aggregate/Paved Surface (miles)			Dirt Surface (miles)			Bridge	Fish Pipes
	Constructed	Improved	Vacated	Constructed	Improved	Vacated	Installed	Installed
Astoria/Clatsop	0.10	1.60	0	0	0	0	0	0
Coos/Coos	0	2.86	0	1.25	3.81	0	0	0
Coos/Douglas	0	0.58	0	0.70	0.52	0	0	0
Klamath-Klamath	0	0.40	0	0	0	0	0	0
Totals	0.1	5.4	0.0	2.0	4.3	0.0	0.0	0.0

Links To More Information

Stand Level Inventory

The FY 2016 Stand Level Inventory report is still being developed, and is expected to be completed and released in spring 2017. The [2015 report](#) is available. It covers the fiscal 2015 year-end stand level inventory estimates on Board of Forestry and Common School Land for each district.

Stream and Watershed Restoration

[Restoration reports](#) summarize all restoration activity reported to OWEB by State Forest Districts since 1995.

Research and Monitoring

[R&M Webpage](#) lists recent research and monitoring reports.

Forest Health

- [Aerial Survey Summary Reports](#) by ODF Area
- [Forest Health Highlights Report](#) -Joint Publications of Oregon Department of Forestry and USDA Forest Service, Pacific Northwest Region



M E M O R A N D U M

State Land Board

May 9, 2017

Kate Brown
Governor

To: Governor Kate Brown
Secretary of State Dennis Richardson
State Treasurer Tobias Read

Dennis Richardson
Secretary of State

From: James T. Paul, Director

Tobias Read

Subject: Annual Report on Common School Fund Real Property for
Fiscal Year 2016 (July 1, 2015 to June 30, 2016).

State Treasurer

The primary purpose of this report is to provide the State Land Board a year-end summary of the financial performance of the Common School Fund (CSF) trust lands under the Department of State Lands' oversight. Included in the summary are the overall revenues and expenditures associated with these lands, which are the result of a broad range of real property management activities including leases, easements, licenses, special uses, and land sales and exchanges. This annual report presents outcomes from the 2016 fiscal year (July 1, 2015 to June 30, 2016), and includes discussion of future real property management direction and priorities.

Status of Real Property Asset Classes

Under the direction of the 2012 Real Estate Asset Management Plan, the Department of State Lands (DSL) manages approximately 2.8 million acres of state-owned lands, which includes both "trust" and "statutory" lands. These lands are further categorized into seven different real property land classifications: Forestlands; Agricultural Lands; Rangelands; Industrial, Commercial, Residential (ICR) Lands; Mineral and Energy Resource Lands; Waterways; and Special Stewardship Lands (Appendix A shows a map of the distribution of these across the state):

Table 1. Summary of total acres of state land ownership administered by DSL, by land classification and land type (trust vs. statutory lands),

	Trust Lands (acres)	Statutory Lands (acres)	Total
Forestlands	121,032	119	121,151
Agricultural Lands	7,848	111	7,959
Rangelands	596,784	23,569	620,353
Industrial/Commercial/Residential	6,468	369	6,837
Mineral and Energy Resources	767,092		767,092
Waterways		1,264,558	1,264,558
Special Stewardship Lands	5,480	7,686	13,166
Total	1,504,704	1,296,412	2,801,116

Trust Lands

Trust lands (Table 1) are those lands granted by the federal government to Oregon “for the use of schools” upon its admission into the Union – also known as “Admission Act” lands. Trust lands make up 98% of all the uplands managed by DSL for the Land Board, and also include sub-surface minerals and energy resources. The Land Board is directed by Oregon’s Constitution to manage these lands for the primary purpose of generating revenues for K-12 public education. This mandate places a trust obligation on the Board to maximize revenue to benefit multiple generations of K-12 students, and requires obtaining market value from the sale, rental or use of Admission Act lands.

Statutory Lands

Statutory lands (Table 1) – also referred to as “non-trust” lands – includes 1,264,558 acres of waterways (navigable waters, tidally influenced waters, and the territorial sea). These lands are held and managed by the Land Board for the greatest benefit of all Oregonians. The Land Board has considerably more latitude in managing statutory lands than it does in managing trust lands. Neither the Oregon Constitution nor statutes require that statutory lands be managed principally for generating revenue for the Common School Fund, and allows such lands to be used for a variety of purposes. Revenues produced from statutory lands, however, are used to protect the public trust values on these lands, in accordance with the Oregon Public Use Doctrine. Additionally, the state’s management of these waterways is conducted so as to avoid unreasonable interference with public navigation, recreation, fisheries and commerce¹.

FY 2016 Revenue and Expenditures By Land Class from Authorizations

Appendix B includes a summary of revenues and expenditures organized by land classification for Fiscal Year 2016 (FY2016).

FY 2016 Land Sales and Exchanges

In FY2016, the Department conducted a total of three land sale transactions, generating a total of \$1,149,022 in gross revenues. These transactions resulted in a total net divestment of 161 acres of Common School Fund trust lands.

2012 REAMP Asset Management Performance Measures

Summarized below are the four different financial performance measures identified in the 2012 Real Estate Asset Management Plan (REAMP). The stated aim of the REAMP is to show improvement in these measures over the ten-year timeframe of the plan. In addition, the REAMP recognizes that year-to-year fluctuations will likely occur that may deviate from a long-term positive trend for these measures:

¹ DSL’s Aquatic Resource Management Program is responsible for managing all authorizations in the “statutory” category of state-owned lands, and for updating the State Land Board regarding activities on these lands separate from this report.

1. Return on Asset Value (ROAV)

Appendix C includes an estimate (by land class) of total asset value for the Common School trust lands. Market value estimates allow for a Return on Asset Value (ROAV) calculation for four trust land classes (forestlands, agricultural lands, rangelands, and ICR lands), and for these land classes combined. In FY2016, the ROAV for all trust lands averaged 0.4%. This measure was primarily influenced this year by a combination of rangeland fire suppression costs and forestland revenues.

2. Annual Increase in Net Operating Income (NOI)

The total NOI for FY2016 was about \$1.90 million, an increase of \$1.26 million (or 195%) from FY2015 primarily due to an increase in revenues from forestlands. When considering land classifications other than forestland, the NOI for FY2016 decreased by about \$1.01 million (or -222%) as compared to FY2015. (Appendix B)

3. Annual Increase in Gross Annual Revenue (AR)

The FY2016 Gross Annual Revenue was approximately \$9.13 million, an increase of about \$2.63 million (or 40%) as compared to FY2015. An increase of about \$0.40 million (or 22%) occurred for all land classifications when excluding forestlands. The increase on non-forestlands was primarily due to an increase in gross revenues from rangelands. (Appendix B)

4. Annual Land Value Appreciation (LVA)

This performance measure is not reported for FY2016 due to the frequency and general nature of the methodology used by DSL to assess land values for the different land classifications. (Appendix C)

2012 Real Estate Asset Management Plan (REAMP) Implementation

Information on the general implementation categories defined in the 2012 REAMP and the distribution of the trust lands across these categories is summarized in Table 2 (excludes waterways and sub-surface mineral rights).

Approximately 118,000 acres of trust lands (or 15%) are currently not generating positive revenues for the Common School Fund, and it's estimated these acres make up about 60% of the total asset value of the Common School Fund trust lands. The large majority of these acres are forestlands managed for DSL by the Oregon Department of Forestry, also referred to as "certified" forestlands, which include lands within the Elliott State Forest. Current projections do not anticipate a change in the performance of these lands in the future.

The 2012 REAMP Implementation Outcomes include "a rebalanced portfolio through acquisition of assets with high performance potential and the strategic disposal of selected non- or lower-performing assets." DSL will continue to evaluate these non-performing lands in the "none/minimal" category for potential divestment. Net proceeds

from trust land sales are deposited into the land revolving account (a sub-account within the Common School Fund), unless otherwise directed by the State Land Board.

Table 2. Summary of revenue potential for lands managed by DSL, by land classification and asset performance category (APC), excluding mineral and energy resources and waterways ownership.

LAND CLASSIFICATION	PROPERTY REVENUE POTENTIAL (acres)				
	Long-term ¹ Potential	Short-term ² Potential	Current ³	None/ Minimal ⁴	Total Acres
Forestlands		120	19,153	102,878	122,151
Agricultural Lands		275	7,491	193	7,959
Rangelands ⁵	3,508	2,696	612,412	1,737	620,353
Industrial/Commercial/ Residential	1,260	1,180	3,033	1,364	6,837
Special Stewardship Lands	278		891	11,997	13,166
Total Acres	5,046	4,271	642,980	118,169	770,466

¹ Not currently producing revenue, but with strong potential to produce revenue within 10 years.

² A strong potential to produce revenue within two years, but not presently generating revenue.

³ Currently producing annual revenues for the Common School Fund.

⁴ Generating minimal or no annual revenue, and low potential for generating revenue in the future.

⁵ Included here are the statutory rangelands (see Table 1), managed by the Real Property program with the trust lands.

About 9,300 acres across all five upland land classes are currently classified as having either short- or long-term potential to generate revenues. DSL will continue to actively evaluate potential opportunities to manage those lands in the future in order to improve revenue performance. If at a future point in time it's determined these acres are unlikely to be able to generate revenues, they would then be reclassified as "none/minimal" category lands and shifted into the pool of acres to be evaluated for possible divestment.

The balance of the remaining lands – about 643,000 acres – are currently generating revenue, and DSL will continue to manage these lands accordingly (also see Appendix B, and three-year average net revenues). DSL will look for opportunities to increase revenues and decrease expenditures from these lands, consistent with the REAMP Implementation Outcome for "a more aggressively managed portfolio, including evaluation of all lands, with a focus on ICR and agricultural lands and mineral and energy resources to generate new revenues." A current example of this is the Eastern Region's continued efforts to identify opportunities to develop rangelands into irrigated agricultural production, which can result in as much as a 30-fold increase in per-acre income.

The primary factor affecting the reduced performance on rangelands (see Appendix B) was payment of fire suppression expenditures totaling \$1.8 million dollars from wildfires in 2014 and 2015 that were invoiced in 2016. Fluctuations in leasing rates and drought conditions are also important factors that affect the financial performance of these lands. Uncertainty in future conditions relative to these three factors will impact their potential performance. Fire protection costs are unique in that there are steps DSL can

take to potentially reduce such costs in the future, and thereby improve the performance of these lands. The Department currently has an agreement with the Bureau of Land Management for providing fire protection for rangelands, and that agreement is up for renewal in 2017. The Department will be exploring various options towards reducing fire protection costs as part of the agreement-renewal process. The goal will be to explore options for reducing fire protection costs, while still maintaining an appropriate level of resource protection across these lands in the future.

Finally, DSL will continuously re-evaluate the entire portfolio of trust lands to ensure the revenue generating status is properly categorized (Table 2). The Real Property program will make on-going adjustments as needed to reflect changes in our knowledge of the lands, any physical changes to the lands (ex. infrastructure investments), and any changes to potential revenue-generating opportunities.

Current and Future Real Property Management Priorities

Moving forward, the Department will continue implementing the 2012 REAMP's General Management Principles, which include the following (pp.17-18):

1. The Land Board and Department will continue to meet their obligations on trust lands.
2. The Land Board and Department will continue to manage CSF lands to create a sustained and consistent stream of revenue to assist in building the principal of the CSF, thereby increasing annual distributions to schools.
3. The plan balances revenue enhancement and resource stewardship.
4. Consistent with the legacy of the Admission Act, the Land Board will maintain a real property asset portfolio of CSF lands. The allocation of land among land classifications may change over time based on management, reinvestment and disposal [i.e. divestment] strategies.
5. The Land Board and Department will actively strive to increase the total annual revenues from the real property asset portion of the CSF portfolio through the disposal of trust lands that are not actively managed or are low revenue producers.

The Common School Fund trust land property portfolio, with an estimated value of approximately \$538 million (Appendix C), is a substantial asset of the Common School Fund as a whole. This \$538 million value is equivalent to about one-third of the Common School Fund investment holdings, currently valued at approximately \$1.5 billion.

Common School trust lands hold a unique position with the primary role of providing revenue for Oregon's public schools. A key element of meeting this mandate is maintaining an accurate and comprehensive inventory of all real property assets and asset values, and continually evaluating their current and potential revenue-generating

status. The primary framework for this will be the regular asset performance category (APC) review as discussed in the previous section of this report. These reviews are intended to further fine-tune the evaluation of the various APCs for these lands over time.

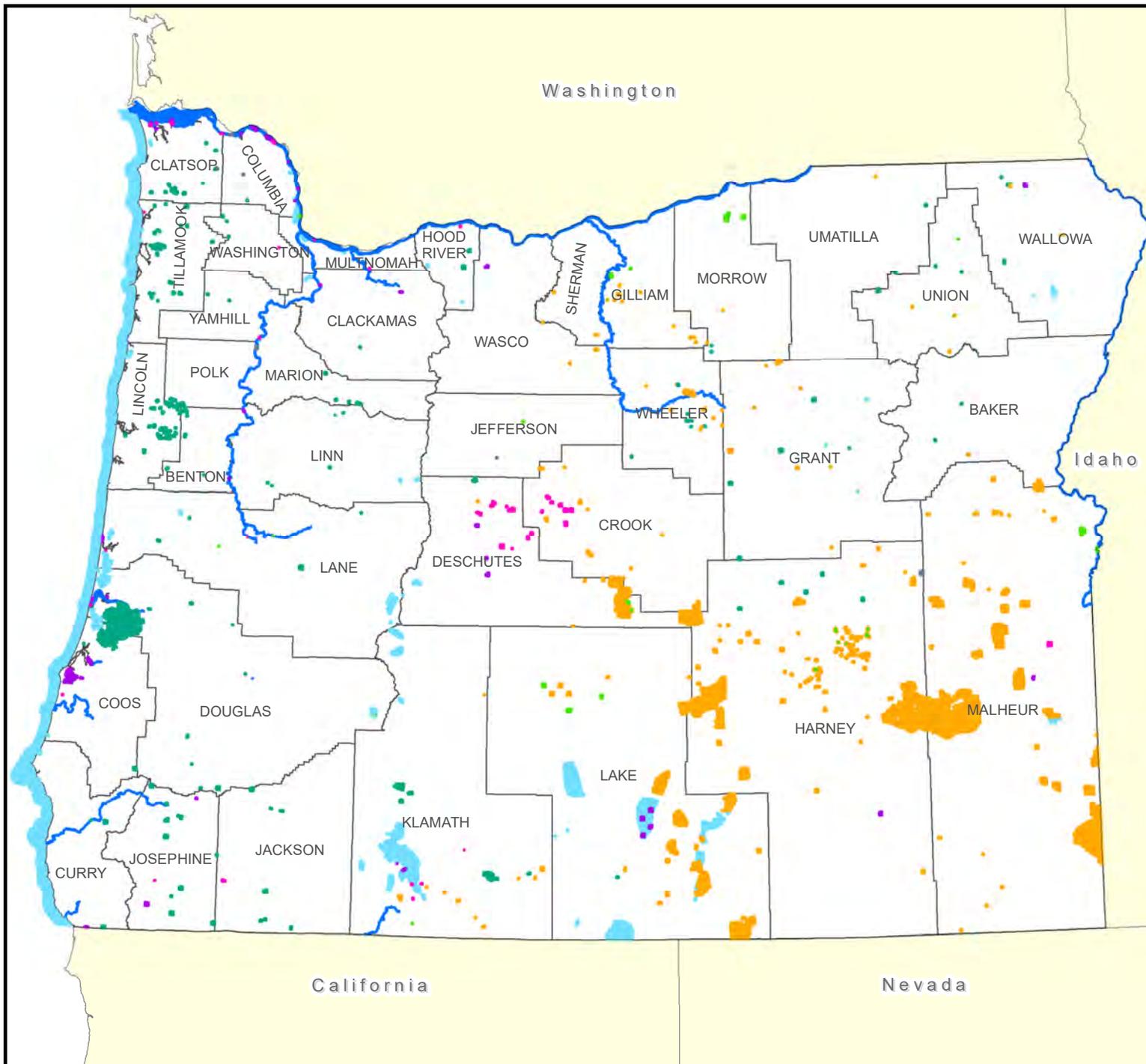
For example, consider the overall performance of lands in the “current” category (Table 2). Although they are providing a positive benefit to the Common School Fund over time, the relative performance of these lands is currently low. In FY2016, the three-year average return on asset value for agricultural, rangelands and ICR lands is 0.6%, -0.3%, and 0.4%, respectively. Given these are averages, there are parcels performing at both higher and lower levels than this, and some potentially at a net deficit to the Common School Fund. To the extent that DSL can conduct a more sophisticated approach to the asset performance category review of these lands in the future, there is the potential to parse out sub-categories within land classification categories to allow for a more refined assessment of specific lands that are higher- versus lower-performing. This would better inform future Department and Land Board decision-making concerning land retention and divestment.

Summary

The Department continues to work through finding a resolution to the revenue challenges associated with trust lands within the Elliott State Forest. Revenue streams from some of the rangeland properties continue to improve by converting several hundred acres of rangeland to irrigated agriculture by construction of wells and placement of irrigation pivots. Additional property improvement efforts include noxious weed treatment and removal of juniper trees. These activities result in increased site productivity of the property, which in turn result in the potential for a higher rate of revenue as well as property value. The Department will continue to focus on identification of low revenue-producing properties for transferring out of the Common School Fund portfolio, and where possible improve the potential for revenues to be generated from those lands that are retained in the portfolio.

APPENDICES

- A. Map of all lands under the authority of the Department of State Lands, by Land Use Class
- B. FY 2014 – 2016 Real Property Revenue, Expenditures, and Net Operating Income by Land Class
- C. FY 2016 Financial Performance by Land Class



State of Oregon Department of State Lands

Land Use Class

- Agriculture
- Forest
- ICR
- Mineral Energy
- Rangeland
- Special Stewardship
- Navigable Rivers
- Meandered Lakes & Territorial Sea



Printing Date: March 17, 2017

Map Projection:
Oregon Lambert Conformal Conic
Datum NAD 83
International Feet



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APPENDIX B

FY2014-FY2016 Real Property Revenues, Expenditures (Direct only) and Net Operating Income by Land Class

(Does not include land sales/exchanges, South Slough expenditures/revenues, or capital expenditures. Also excludes associated agency administrative expenditures.)

Land Classification	Fiscal Year 2014			Fiscal Year 2015			Fiscal Year 2016			<u>3-Year Avg. Annual Net Operating Income (\$)</u>
	Gross Revenue (\$)	Expenditures (\$)	<u>Net Operating Income (\$)</u>	Gross Revenue (\$)	Expenditures (\$)	<u>Net Operating Income (\$)</u>	Gross Revenue (\$)	Expenditures (\$)	<u>Net Operating Income (\$)</u>	
Agricultural Land	\$ 225,398	\$ 119,772	\$ <u>105,626</u>	\$ 237,244	\$ 127,229	\$ <u>110,015</u>	\$ 242,752	\$ 127,449	\$ <u>115,303</u>	\$ <u>110,315</u>
Rangeland	\$ 578,940	\$ 420,391	\$ <u>158,549</u>	\$ 586,907	\$ 716,223	\$ <u>(129,316)</u>	\$ 919,624	\$ 2,165,581	\$ <u>(1,245,957)</u>	\$ <u>(405,575)</u>
ICR*	\$ 1,139,053	\$ 826,819	\$ <u>312,234</u>	\$ 1,037,108	\$ 849,944	\$ <u>187,164</u>	\$ 1,112,497	\$ 865,370	\$ <u>247,127</u>	\$ <u>248,842</u>
Forestland	\$ 3,573,368	4,208,891	\$ <u>(635,523)</u>	\$ 4,270,904	4,080,482	\$ <u>190,422</u>	\$ 6,499,393	4,037,200	\$ <u>2,462,193</u>	\$ <u>672,364</u>
Mineral & Energy Resource**	\$ 559,291	\$ 86,650	\$ <u>472,641</u>	\$ 352,726	\$ 70,509	\$ <u>282,217</u>	\$ 342,569	\$ 30,681	\$ <u>311,888</u>	\$ <u>355,582</u>
Special Stewardship**	\$ 13,672	\$ 10,511	\$ <u>3,161</u>	\$ 14,875	\$ 9,481	\$ <u>5,394</u>	\$ 14,172	\$ 374	\$ <u>13,798</u>	\$ <u>7,451</u>
Revenues do not include land sales or mineral releases.										
Totals	6,089,722	5,673,034	<u>416,688</u>	6,499,764	5,853,868	<u>645,896</u>	9,131,007	7,226,655	<u>1,904,352</u>	\$ <u>988,979</u>
Totals without Forestlands	2,516,354	1,464,143	<u>1,052,211</u>	2,228,860	1,773,386	<u>455,474</u>	2,631,614	3,189,455	<u>(557,841)</u>	\$ <u>316,615</u>

*Figure reported for FY 2016 expenditures reflects an accounting adjustment of \$523,117, to ensure reporting is comparable to previous years.

** Figure reported for FY2016 expenditures reflects an adjustment in payroll expense allocation, in addition other miscellaneous reduced costs.

Appendix C: FY 2016 Market Value and Performance by Land Class

Land Classification	Total Acres	Approximate Market Value (millions)	% of Total Market Value	Annual Net Operating Income (NOI)	Return on Asset Value (ROAV)
Forestlands: Elliott State Forest	82,500	\$220.8 ⁽¹⁾	41%	\$1,378,936	0.6%
Forestlands: Other than Elliott SF	38,000	\$103.3 – 113.9 ⁽²⁾	20%	\$1,083,257	1.0%
Agricultural Lands	8,000	\$18.0 – 19.0 ⁽³⁾	3%	\$115,303	0.6%
Rangelands	620,000	\$117.8 – 136.4 ⁽⁴⁾	24%	(\$1,245,957)	-1.0%
ICR Lands	6,800	\$59.7 – 65.7 ⁽⁵⁾	12%	\$247,127	0.4%
Special Stewardship Lands	13,200	(6)	-	\$13,798	-
Mineral and Energy Resources	767,100	(6)	-	\$311,888	-
Totals	1,540,000	\$538	100%	\$1,904,352	0.4%⁽⁷⁾

Notes:

- (1) Final appraised value as determined by a Department-contracted appraisal process in 2016.
- (2) Values reported in the FY 2011 Annual Report, using the per-acre equivalent. These are the most recent estimated values with documented DSL methodology.
- (3) Value estimate is based on figures provided by USDA's report on land sales of Oregon's farm land. The 2016 average price per acre for Oregon's farm land is \$2,200 as determined by USDA which collects land sales information. This includes all types of farming from dry farming to irrigated produce farming which is very lucrative. Irrigated farm land sales reflect values of \$2,500 to \$6,600 per acre in the areas in which DSL owns agricultural land. Most of DSL's agricultural land has water rights but does not own the irrigation equipment so the USDA average value has been adjusted to \$2,500 to \$2,700 per acre for the range of values.
- (4) Blocked ranch values per acre are increasing (\$500 per acre for ranches over 3,000 acres with recreational appeal is typical) but can take years to market successfully with a very limited number of these selling annually. Individual properties with smaller acreage average around \$200 to \$300 per acre. An average individual tract value was designated for each county. DSL's rangeland ownership would take over 50 years to sell and would depress rangeland values because of the large supply. To reflect this, a discount of 30% to 35% has been used to create the value range. The values in LAS reflect a more individual tract value.
- (5) Each property was valued individually through research of comparable sale properties and those properties with lease income were valued by the income approach. DSL's land in Bend is still rebounding in value despite the addition of the Stevens Road tract to the UGB. The Forked Horn property was sold last year. The Eugene motorpool property and the Helvetia property were valued with full USPAP-compliant appraisals.
- (6) Data not available.
- (7) The total ROAV does *not* include NOI derived from special stewardship lands, since the asset value of those lands are not reported here. The NOI for mineral and energy resources is included here because those revenues are derived from parcels in one of the other surface land classifications.