Elliott State Forest Briefing

BACKGROUND

In December 2018, the State Land Board requested that Oregon State University (OSU)—led by the College of Forestry (COF)—explore with the Department of State Lands (DSL) the potential transformation of part of the Elliott State Forest into a state research forest managed by the university. Designated in 1930 as Oregon's first state-owned forest, the Elliott State Forest was named after Francis Elliott, the first state forester. Its 91,000 acres are located in Douglas and Coos counties between Coos Bay and Reedsport in the Oregon Coast Range. The proposed Elliott State Research Forest consists of the 82,520 acre subset of Elliott lands that are associated with the Common School Fund, which supports public education statewide.[1]

In 2013, a successful lawsuit challenging forest management in federally protected endangered species habitat significantly limited timber harvests on the Elliott State Forest. In 2017, the State Land Board, which consists of the governor, secretary of state, and treasurer, proposed the sale and potential privatization of the forest. The value placed on the forest through the sale process was $221 million, which was adopted as the compensatory obligation of the state for decoupling the forest from the Common School Fund. However, in response to public input, the State Land Board canceled the sale process and voted to keep the Elliott State Forest in public ownership. DSL was then instructed to explore public ownership options that would include development of a successful Habitat Conservation Plan[2] as well as full decoupling of the forest from the Common School Fund.

At the same December 2018 meeting, OSU was asked to lead the development of a proposal for a university-managed research forest. The State Land Board also approved a declaration to implement a statute enacted by the Oregon Legislature in 2017 that provided $100 million in bonding toward compensatory obligations to the Common School Fund in order to decouple the Elliott State Forest. President Ray also provided testimony at the December 2018 meeting summarizing issues that would need to be addressed if OSU is to assume management of a proposed research forest.

In February 2019, DSL and OSU signed a memorandum of understanding that provided a framework for collaboration in exploring the feasibility of an Elliott State Research Forest. The exploratory process was guided by the State Land Board's vision for the forest, which includes:

- Keeping the forest publicly owned with public access;
- Decoupling the forest from the Common School Fund and compensating the fund for the asset;
- Continuing habitat conservation planning to protect endangered species and allow for timber harvests; and
- Providing for multiple forest benefits, including research, recreation, education and ecosystem services.

[1] 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 to oversee these "school lands" and has been the trustee of the Common School Fund for more than 150 years.

[2] A Habitat Conservation Plan is a federal agreement regarding the management and use of threatened and endangered species habitat, with the governing agencies being US Fish & Wildlife Service and National Ocean and Atmospheric Administration. Compliance with an approved Habitat Conservation Plan provides some limitation of liability from certain legal challenges associated with protected species habitat—i.e., a 'take permit'.

In early 2019, in accord with the MOU, COF began to develop a plan in collaboration with DSL to engage local tribal nations, local governments, and other stakeholders to develop a research forest proposal consistent with the State Land Board's vision. This effort began as an exploratory process in 2019 in which the college hosted public listening sessions, conducted outreach to stakeholders, and engaged with local tribes around a potential research forest concept. Concurrently, DSL created and appointed an Advisory Committee to represent various stakeholder interests across the state, while the college formed an exploratory committee primarily composed of faculty and a science advisory panel composed of scientists outside of OSU. All of these groups, in addition to input from the public listening sessions, helped guide the development of an initial proposal for an Elliott State Research Forest (ESRF). The ESRF proposal was further developed and refined throughout 2020.

OSU presented the initial proposal to the State Land Board on December 8, 2020, with Provost Feser outlining the university's commitment to the collaborative effort and principles guiding its consideration of DSL's request and Dean DeLuca summarizing the proposal in detail. Following the presentation and public testimony, the State Land Board voted unanimously to affirm its intention to decouple the Elliot State Forest from the Common School Fund and to transfer management of the forest to OSU for an ESRF. The State Land Board further directed DSL to continue collaborating with OSU and members of the DSL advisory committee to finalize the proposal that would accomplish this outcome while fulfilling the State Land Board's original vision and direction. DSL was also directed to provide opportunities for additional public input and periodic progress reports prior to bringing the matter back to the State Land Board for authorization to complete the transfer.

This docket provides an overview of the December 8 ESRF proposal and a summary of key considerations and next steps for the university and State to refine elements of the proposed ESRF and land transfer. Creation of the ESRF and transfer of ownership of the land is contingent on the approval of the OSU President and OSU Board.

STATE RESEARCH FOREST PROPOSAL

The fundamental structure of the proposed ESRF would be based on a research design that balances the provision of multiple benefits of the forest, including recreation, education, local and regional economic support, and conservation of habitat and protection of species of concern (i.e., marbled murrelet, northern spotted owl, and coho salmon).

First and foremost, the ESRF will be a research forest. Practical, relevant and collaborative scientific research will yield critical insights into sustainable forest management. It is possible to accelerate high impact research that meaningfully guides and informs sustainable forest management if that work can be conducted on a landscape of sufficient scale and diversity. An ESRF could be that landscape and opportunity; it is a unique opportunity and would be a first of its kind and size in the world.

In the land allocation treatments, scientists at OSU and other universities would measure water quality (and flow), carbon storage, threatened and endangered species as well as a host of other plants and animals, landslides, fire risk, climate resilience, as well as social values including employment, recreation and education. In addition, using a landscape-scale approach that is adaptive, dynamic, and flexible, the ESRF could provide society with sustainable wood resources without compromising biodiversity, ecosystem function, climate resilience, and social benefits. Results from this research platform will inform future policy and decision making in

state, federal, indigenous and private forest landscapes throughout the Pacific Northwest, the nation, and globally.

Research Approach

The proposed ESRF is initially divided into two units as shown in Figure 1. The western unit is called the **Conservation Research Watershed** (dark green), acting as a reserve with very limited intervention and management except for initial restoration thinning of prior plantation areas to set them on a trajectory to achieve the structure and function of an older forest. Natural processes would be unmanaged and allowed to experience disturbances that create diverse seral stages.

The eastern unit is called a **Managed Research Watershed** wherein management treatments are experimentally applied at the landscape scale using a Triad (reserve, extensive, and intensive) design. All of the sub-watersheds (400-2,000 ac) in the Managed Research Watershed will receive one of four Triad treatments, as summarized in Figure 2. Treatments are designed to produce approximately equivalent timber volume yields using different combinations of stand-level treatments: reserves, extensive (ecological forestry) and intensive management (plantations).

The 'Extensive' Triad treatment (orange) will be 100% ecological forestry, the 'Reserve with Intensive' Triad treatment (light green) will comprise 50% intensive forestry and 50% reserve. 'Triad-E' (pink) and 'Triad-I' (light blue) will contain differing proportions of reserve, ecological and intensive forestry. Over 9,000 acres of the forest (dark green) are in partial watersheds (Managed Research Watershed-Partial) that are either less than 400 acres or not fully contained within the Elliott State Research Forest's boundaries and thus having multiple owners.

Figure 1. Proposed units and potential sub-watershed Triad treatment assignments.

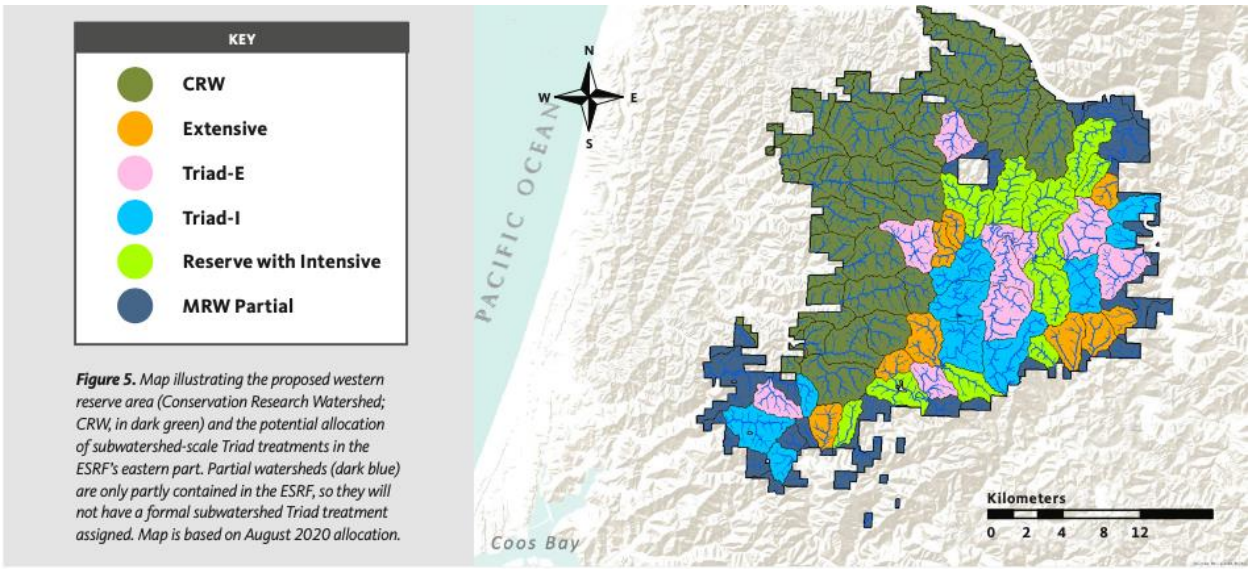
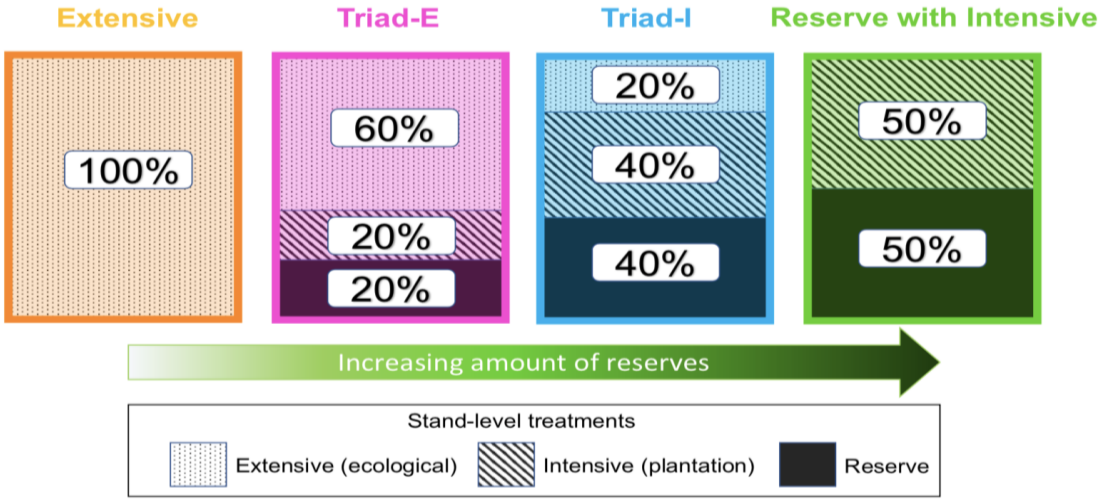


Figure 5. *Map illustrating the proposed western reserve area (Conservation Research Watershed; CRW, in dark green) and the potential allocation of subwatershed-scale Triad treatments in the ESRF's eastern part. Partial watersheds (dark blue) are only partly contained in the ESRF, so they will not have a formal subwatershed Triad treatment assigned. Map is based on August 2020 allocation.*

Figure 2. The four Triad treatments applied at the sub-watershed scale at the Elliott State Research Forest.

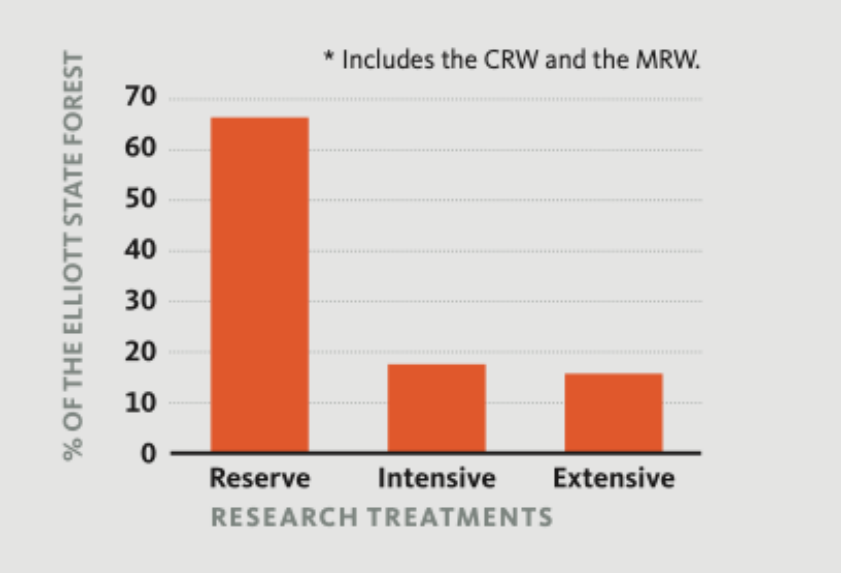


In addition, riparian conservation areas are identified and contain buffer widths of more than 100 feet and greater than 50 feet on fish bearing and non-fish bearing streams, respectively, which will exceed state and federal forest management practices by achieving greater than 70% wood recruitment in the Managed Research Watershed. The reserves both in the Managed Research Watershed and Conservation Research Watershed will achieve 100% wood recruitment given buffer widths of more than 200 feet.

With these designations, over 65% of the forest will be in reserve with approximately 34,000 contiguous acres in the northwest portion of the forest set aside, creating one of the largest forests in reserve in the Oregon Coast range (Figure 3). The remaining 15,000 acres of reserve are located within harvest areas protecting older trees and critical species habitat. The forest will grow older trees over time and, in 50 years, 73% of the forest will be 100 years old or older – nearly a 50% increase from today.

With 17% of the forest assigned intensive treatments and 16% assigned extensive treatments, harvests conducted within the forest as a part of the research design will be relatively small. The proposal assumes a harvest of approximately 1% (about 735 acres) of the forest per year. The harvest acres are higher initially given they include time-sensitive restoration-oriented thinning treatments conducted in former plantations of trees in the first 20 years. After restoration thinning treatments are complete, less than 1% of the forest will be harvested annually as a part of the research design.

Figure 3. Percentage of ESRF allocated to stand level research treatments as of August 2020 draft allocation.*



Governance

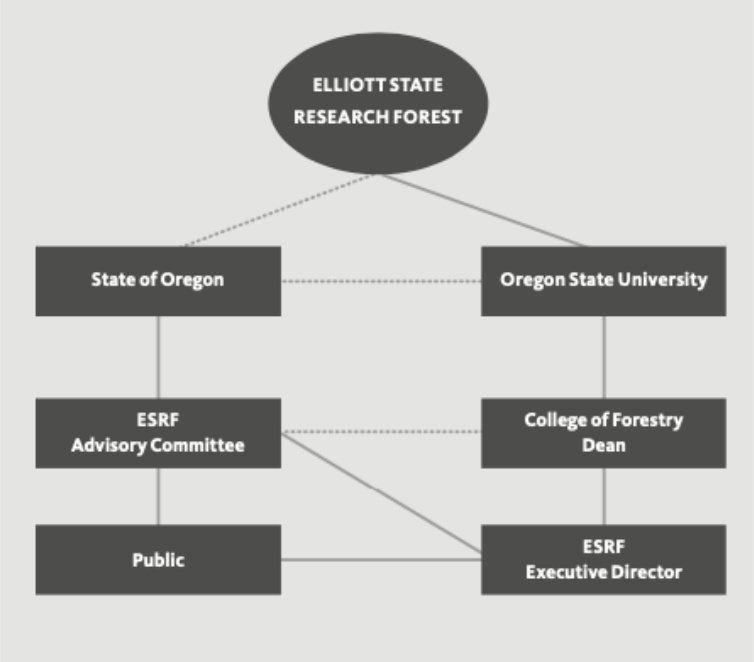
The ERSF proposal sets out a governance framework in which the university would hold the ESRF in the name of the state of Oregon and maintain public access, engagement, and accountability. OSU would make decisions regarding the management and operations of the ESRF using an adaptive forest research plan informed by input from a stakeholder advisory committee and ongoing assessment of the effectiveness of the management plan informed by the research activities conducted on the forest.

A set of ESRF foundational documents (i.e., research design/proposal, forest management plan, and habitat conservation plan) would be completed and approved by OSU and DSL to serve as the framework for OSU's implementation of the ESRF research design and management activities after the transfer from the Common School Fund.

Like its other research forests, OSU would make final decisions regarding the management and operations of the ESRF with the primary purpose to maintain the integrity of research and management activities on or associated with the forest consistent with the conceptual framework accepted by the State Land Board on December 8, 2020.

Accountability and transparency of the ESRF management and operations would be maintained through the proposed governance structure provided in Figure 4. The COF dean would seek delegated authority from the OSU president and provost to make decisions related to ESRF management and operations. A newly hired ESRF executive director would report to the COF dean and be responsible for specific delegated duties, including long-term planning, implementing research, maintaining and restoring the ecological health of the forest, harvesting, and access for recreation and education, overseeing forest management and operations (including facilities, staff, and contractor management), performing fiscal accountability duties (budget development and fundraising), assisting ESRF advisory committees, advancing partnership opportunities, and engaging the public.

Figure 4. Governance structure for the ESRF. Solid lines show direct relationships and dashed lines show indirect relationships.



OSU's management and implementation decisions on the forest would be guided by advisory committees and the public at large. An ESRF Advisory Committee would be established with appointments to the committee made by the DSL director in consultation with OSU and the Governor's Office to ensure a level of independence in its representation and function. The ESRF Advisory Committee would be responsible for fostering public dialogue, accountability, and communication on matters relating to the management of the forest and to raise matters of concern for constructive discussion with the university. The committee members would be composed of representatives of various interests concerned with the ESRF, including local governments, recreation groups, environmental/conservation groups, underrepresented local community members, educational interests, timber/forest product sector interests, Tribal governments, and a state agency representative with relevant management expertise.

The COF dean, on OSU's behalf, would determine research projects to be conducted on the ESRF. To assist with this determination, the dean would appoint a Science Advisory Committee composed of scientific experts representing a variety of disciplines internal and external to OSU. An internal OSU Research Advisory Committee may also be established by the dean to provide guidance and advice on research projects to be undertaken on the ESRF and to support research autonomy and academic freedom for scientific investigations on the ESRF. The external and internal science and research advisory committees would review proposed research on the ESRF and provide feedback to the dean.

The proposed ESRF did not specify a process for responding to written complaints regarding ESRF management by the university. OSU is currently developing a proposed administrative review hearing process for responding to complaints that will be similar to Oregon's Administrative Procedure Act (APA) statutes. In developing this process, OSU's strong preference is that the new process not include an award of a complainant's attorney fees.

Financials

The ESRF proposal included a preliminary financial analysis of annual operating costs and revenues (Table 1). This simplified analysis uses average annual potential harvest figures and projected forest management and research costs to demonstrate the likely level of additional resources necessary for the ESRF to be financially self-sufficient.

Table 1. Preliminary estimate of annual harvest revenue and operating and research costs for the Elliott State Research Forest

Category	Estimate
Total Harvest Revenue (MMBF Harvested)	$5.7M (16.6 MMBF)
Forest Management and Operations Costs	-$2.3M
Research Management and Operations Costs	-$5.5M
Total	**-$2.1M**

In addition to annual operating and research costs, the ESRF proposal highlighted the need for substantial start-up support from the state estimated at $34.8M to prepare the ESRF for OSU's research and forest management operations (Table 2). This includes:

- Working capital to begin the enterprise (three-years of forest management and research expenses);
- Facilities (offices, labs, lodging, classrooms, storage and maintenance) and vehicles,
- Completing a forest inventory using lidar technology and ground-based permanent and temporary research plots;
- Scientific instrumentation of the forest for long-term monitoring, with the four focal areas being carbon/climate, aquatic/riparian, wildlife, and social/recreation.

Table 2. Preliminary estimates of working capital and startup research costs

Category	Estimate
Working capital	$10M
Infrastructure/Research Station	$17.0M
Vehicles & Accessories	$0.5M
Research Plots & Inventory	$3.0M
Monitoring & Research Equipment Instrumentation	$4.3M
Total Start Up Expenses	**$34.8M**

KEY CONSIDERATIONS

Ownership and management of the ESRF presents a unique opportunity that aligns well with OSU's land grant mission and areas of research and academic distinction. An ESRF is also a significant opportunity for the state of Oregon:

- A first of its kind and size university research forest (82,500 acres);
- The largest forest reserve in the Oregon Coast range, with approximately 34,000 contiguous acres;
- An opportunity to advance critical climate action by storing carbon (sequestering 60,000 metric tons of CO_2 emissions annually);
- A 50% increase in forest acres within the ESRF over 100-years old by the year 2070;
- Support of the local economy, providing ~17 million board feet of timber (MMBF) annually as well as other jobs on or supported by the forest (e.g., inventory, monitoring, planning, recreation/tourism, education, etc.);
- The first replicated landscape-scale experimental assessment to generate and test concrete approaches to optimally balancing habitat protection, recreational use and timber production;
- Protection of all fish bearing streams and ~84% of non-fish bearing streams;
- Protection of critical habitat for supporting survival and possible recovery of endangered and other wildlife species; and
- Continued general public access for and investments in recreation.

Given the December 8 State Land Board action, the university is shifting to a deeper analysis of key factors related to the conveyance, creation, and operation of an ESRF to be managed by Oregon State University, a few of which are described as follows.

Land Conveyance Terms

It is anticipated that title for the property would be transferred through deed and legislative means. There are three key components necessary to complete the transfer of the ESRF land to OSU:

1) The university and State Land Board must reach agreement on the terms of the transfer and expectations for the management and use of the ESRF.

2) The state must also allocate funds to the Common School Fund to free the land from restrictions resulting from the Common School Fund's beneficial ownership. The State Land Board has determined the fair market value of the ESRF is $221M and has already sold $100M in Certificates of Participation to pay a portion of that amount. The state must secure the remaining $121M.

3) The state must also enact legislation to:
   a) Enable the transfer, including amending or repealing ORS 530.450, which limits the sale of lands within the Elliott State Forest;
   b) Require legal challenges to the transfer be raised and resolved before the land is transferred to OSU; and
   c) Confer additional powers to OSU similar to those granted to the state forester, including the right to adopt laws that will affect the public at large, the right to construct forest-related buildings on sites notwithstanding land use laws, the right to maintain and operate the ESRF without being subject to certain prevailing wage laws, and codifying an administrative hearings process as discussed below.

Additionally, the OSU Board must approve the transfer of the land to the university. The requirement for Board acceptance will be codified within the transferring legislation and made only after the time period for publicly and politically challenging the transfer has expired and the Board is comfortable with the final form of legislative action transferring the land, as well as all funding commitments. If the transfer is approved, the Board will want to consider how it will implement its fiduciary oversight of the ESRF and may require regular reports such as annual financial plans for the ESRF and biennial reports on the ESRF research, management, and operations.

Financial Sustainability

In order for the university to take ownership of the forest, the ESRF would need to be financially self-sustaining for the university, without reliance on tuition dollars or other OSU financial resources. The university will need to negotiate the provision of adequate resources from the State to achieve this objective.

To determine the level of assistance necessary in terms of start-up and any necessary recurring funding, a more robust and in-depth financial analysis will be required. This analysis will include annual harvest revenue and corresponding operating/research cost projections specific to particular time periods, along with appropriate escalations and reserves necessary for long-term financial sustainability.

Natural Disturbances

Natural disturbances such fire, wind, ice, and snow can affect the viability and risks associated with owning and managing a forest. Any natural disturbance that affects timber directly impacts revenue flow, increases costs (and liabilities if associated with on-forest management activities), and can have spillover effects on economies and communities dependent on the flow of sales, income and jobs associated with a forest.

The university is continuing to evaluate the risks associated with natural disturbances on a forest of this size and complexity. One approach being considered is the establishment of a reserve fund capable of covering direct management and operations costs for 30-years, the time necessary for timber stands to recover from a natural disturbance and begin generating revenue. Other aspects are already included in the university's proposal such as annual fire suppression costs ($340,000 per year based on the state's current costs for fire suppression through Coos Forest Protection Association).

Legal Challenges After Transfer

Before the university takes ownership of the ESRF, there must be a method in place for handling written complaints submitted by the public regarding ESRF management. There is disagreement between OSU and some stakeholders with a strong environmental interest in the land regarding the process that will be used to resolve allegations from the public regarding the ESRF. For example, complaints may be filed alleging that the ESRF is not being managed in compliance with the university's commitments or that the university is allegedly violating the terms of transfer, agreed upon plans, or applicable environmental or other laws. These stakeholders have advocated for legislation that provides a complainant with a special cause of action before an Oregon Circuit Court. These groups are also advocating for the Court to require OSU to pay their attorney fees if they prevail at court. Other key stakeholders representing local government and forest industry are opposed to this, and would prefer an efficient and effective process that limits delays in management actions on the forest due to public complaints. OSU is offering an administrative mechanism similar to Oregon's APA for the

purposes of these particular ESRF complaints. The APA is used by most state agencies, although it is currently not applicable to OSU. That mechanism will include a hearing and possible appeal to the Oregon Court of Appeals, and as discussed above, OSU's strong preference is to not be subject to paying complainants' attorney fees. Conversations with stakeholder groups regarding the mechanism for resolving legal challenges are expected to continue.

Carbon Market Participation

OSU and DSL are investigating the use of carbon credit sales to fund the ESRF. There are political, policy, financial and legal issues associated with deciding whether to use carbon credits. For example, the state has suggested that the sale of carbon credits could be used to contribute to decoupling (up-front payments prior to a transfer of the Elliott to OSU), and the COF/OSU preliminary financial modeling suggests that carbon sales could offset annual revenue shortfalls (annual payments after transfer of the Elliott to OSU). The parties need to determine that each party's intended use of carbon credits will not interfere with the other parties' use of carbon credits. Second, if the state intends to sell carbon credits based on the Elliott, OSU will need to analyze any impacts of the associated carbon credit encumbrances on its overall ESRF management plan before acceptance of the ESRF.

Regardless of whether the state sells carbon credits, if OSU decides to pursue carbon credit sales, it must decide whether it is going to focus on the California compliance market or a voluntary market.

There are challenges with entering the California compliance market such as:

- Pre-closing costs are substantial with no guarantee of approval.
- Registration and regulatory requirements tend to be more complicated and expensive than the voluntary market.
- Predicting prices for carbon credits coming from the ESRF is difficult. Offset registration will be time consuming, prices are set by private buyers (responsive to demand and supply) and demand for non-California offsets may decline because of policy and political changes within California. For example, California recently reduced the amount of offset credits that a covered entity can use from a project that does not provide "Direct Environmental Benefits" to California. This impact will likely substantially affect the price for projects that do not provide such benefits.
- Registered carbon vintages must be maintained for 100 years.

The voluntary market also has potential challenges such as:

- Registered carbon vintage must likely be maintained for 40 years.
- Voluntary markets tend to have low demand for larger quantities of offsets.
- Pricing yield from voluntary markets tends to be substantially lower than yield from a compliance market.
- Potential carbon credit market expenses and revenues must be integrated into the Elliott business plan.

The university and DSL have committed to assessing the opportunities and challenges associated with the use of carbon credit sales and resolving how any proceeds from carbon credit sales would be used before or after transfer.

NEXT STEPS

At the January 29, 2021 meeting, staff will brief trustees on the research forest proposal and gather their feedback on the proposal and key considerations.

Significant work remains before the university can bring forward a proposed land conveyance for Board consideration, including:

- Submission of a final research framework proposal;
- Agreement reached on an administrative review hearing process related to the management and operations of the research forest;
- Assurance of adequate resources to cover the university's working capital needs, research start-up costs, and annual operating costs, including the costs to complete a forest inventory and adopt the forest management plan;
- An investigation by OSU and DSL of the opportunity of entering the carbon credit market as a means of offsetting costs of decoupling the forest from the Common School Fund and/or recovering start-up, operating and research costs;
- Development, with input from an ESRF Advisory Committee and adoption by OSU, of a forest management plan to serve as the framework for implementation of the ESRF research design and management activities;
- Collaboration by OSU and DSL on the finalization of the Habitat Conservation Plan to protect endangered species; and
- Decoupling of the Elliott State Forest from the Common School Fund prior to transfer to the university as the ESRF, with recognition that OSU cannot financially assume compensatory obligations to the state or the Common School Fund.

Staff will provide regular updates to the Board as these efforts continue through the next two years.