To: Shannon Murray, Program Director, Elliott State Research Forest — November 8th, 2023

Oregon State University, College of Forestry

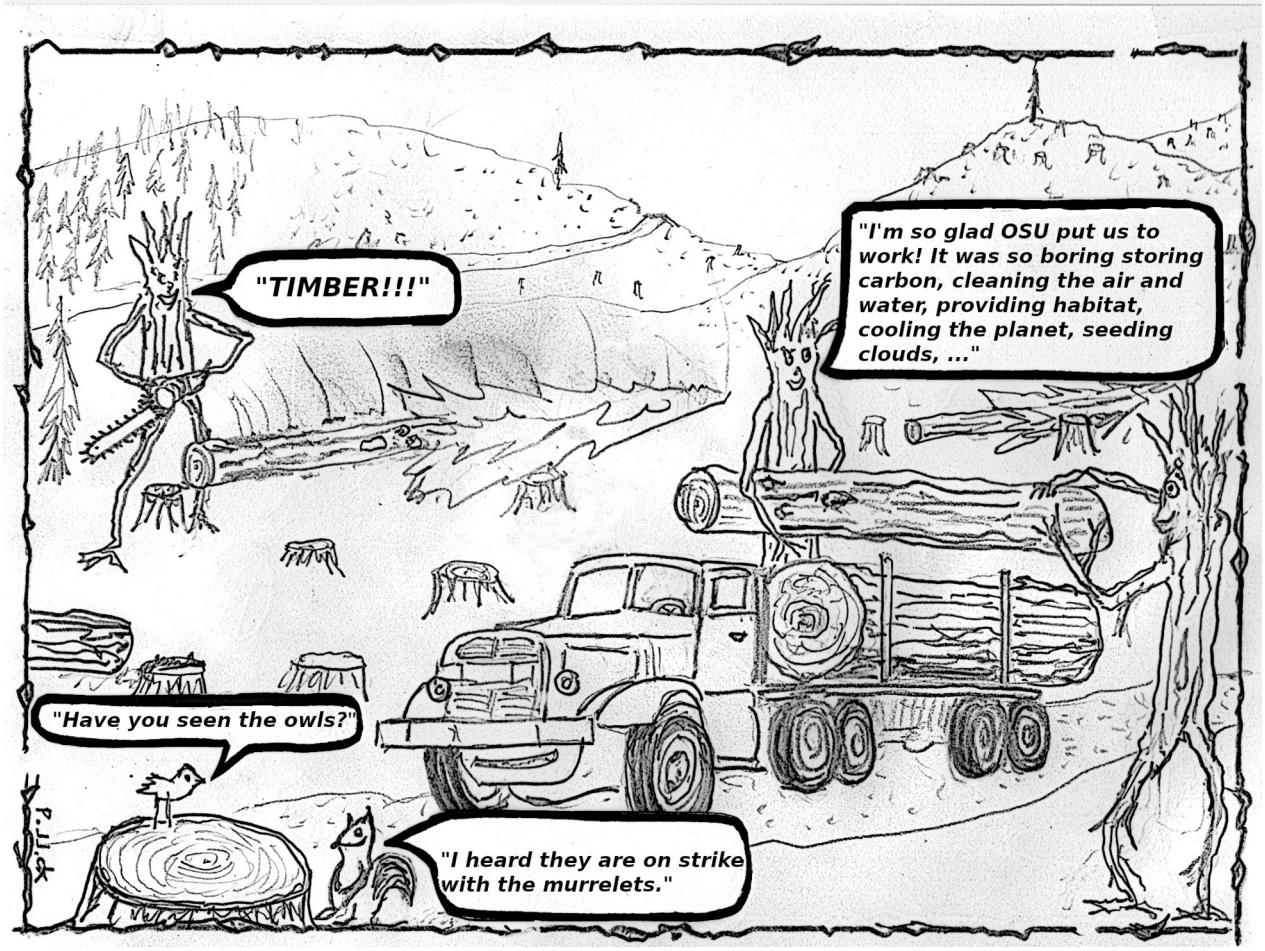
Cc: Ali Hansen, Communications Director

Oregon Department of State Lands

RE: Comments on Elliott State Research Forest October 2023 draft Forest Management Plan

From: Doug Pollock, founder, Friends of OSU Old Growth (www.friendsofosuoldgrowth.org)

OSU's "Working Forest" Plan Brings Full Employment to the Elliott



It has been nearly four years since I first wrote comments about OSU's plans for the Elliott State Research Forest (ESRF), in preparation for the Oregon Land Board's (December 10th, 2019) meeting in Salem. Like many in the conservation community, I naively believed my comments would be thoughtfully considered – and reflected in the resulting process and plans for the Elliott. Unfortunately, that did not occur. As I've come to understand, the general outcome of the Elliott process was already decided well before the 2019 Land Board meeting.

Oregon Land Board Meeting Sparks Discontent with Elliott Process: As I later described in a blog post about the Land Board's 2019 meeting, we saw clear signs that something was seriously amiss when public comments were truncated and relegated to the end of the day:

> "Unfortunately, the governor restructured the meeting on the fly, squeezing public comments in at the end. She left before the end of the meeting, missing all of the public testimony. Most of the meeting was taken up by predictable formalities and the various representatives expressing their appreciation for each other's efforts – while the public waited patiently to voice their concerns. This disconnect between the process "insiders" and the public at large characterized the meeting. While OSU's interim dean, Anthony Davis, quoted Aldo Leopold and spoke of climate change and sustainability, many shook their heads in disgust. One veteran observer reflected, "*It was kabuki theater, until the peasants revolted!*"
>
> When the public was finally allowed to speak (for a scant 2 minutes each), those in charge got an earful. Two icons of Northwest forestry, Dr. Jerry Franklin and OSU Professor Emeritus Dr. K. Norman Johnson, presented a 3-page letter stressing the need to protect older, natural forests in the ESF. They wrote,
>
> "***There is no ecological or environmental rationale for harvesting the older, natural forests on the ESF… Harvest of naturally regenerated forests that are greater than 100 years of age has essentially ceased on public lands in the Pacific Northwest…The strong opposition that inevitably occurs whenever such harvests are proposed makes clear that there is no longer social license for such logging… Attempts to justify harvest of these forests on the ESF in the name of science will be viewed as academic license at best or yet another attempt by foresters to cut older forests despite social opposition. We expect that such an attempt will be incredibly divisive – within the University and College as well as within Oregon society at large — and the conflict will ultimately make implementation of such a research plan infeasible***."

"Working Forest" Research Concept is Antiquated and Irrelevant: Despite overwhelming public criticism and the ominous predictions of these venerable forestry experts, OSU and their collaborators within the Oregon Department of State Lands (DSL) forged ahead with the development of their "working forest" concept for an Elliott State Research Forest (ESRF). The "working forest" approach that the Land Board asked for and OSU has promoted is both outdated and fundamentally inconsistent with a modern research forest. It reflects a bygone, extractive era and mentality that judged a forest ecosystem based largely on how much timber it produced.

Andy Kerr, perhaps our state's most famous conservationist, described the folly of OSU's "working forest" concept in his Nov 2020 piece, "An Elliott State "Research" Forest?":

> "*Let's get one thing straight right now: all forests are working forests.* ***The term "working forest," as used by the OSUCF in the draft proposal, is offensive.*** *All forests "work" for society, whether they produce fiber or not. The term suggests that forests not subject to logging are not working and occupy the same ranks as welfare cheats, trustifarians, and dilettantes. Use of the term shows the fundamental bias of the OSUCF against natural forests and for wood production. But what can one expect from an institution that in 2013 set up the "Institute for Working Forest Landscapes"?*
>
> *As noted in the forestry textbook Ecological Forest Management (ironically, by three authors who have had very long associations with OSU):*
>
> *All forests are working forests, because they all carry out multiple functions that create a broad array of services and products valued by humans—for example, by capturing the sun's energy through photosynthesis and using it to grow and sustain this architectural wonder that sequesters carbon, stabilizes soils, and regulates hydrological cycles, including moderating the effect of storms.*
>
> *In fact, the non-raw-material ecosystem goods or services from a temperate forest are on the order of sixteen times more valuable to society than the raw material (fiber, fuel, or fodder) (Costanza et al. 2014, cited in Kerr 2019). Foresters, heal thyselves*!"

OSU Claims Revenue Need Will NOT Drive Elliott Research: At the same time OSU has promoted its "working forest" approach, dean Thomas DeLuca (who assumed the top position in the College of (de)Forestry in June 2020) has repeatedly assured stakeholders that timber revenue will be an *outcome* of research, not a *driver* of it. Indeed, the dean's "Vision for an Elliott State Research Forest" (from July 2020) clarified this relationship in his third "pillar" of the research forest:

> 3 While the forest must be self-supporting, harvest will not take place for the purpose of generating revenue. Only when there is certainty and transparency that revenue from harvests is a derivative of maintaining and implementing the research design platform can management reflects public expectations for what the research forest is supposed to represent.

Clearcutting Research has Little Relevancy: Perhaps OSU's biggest problem is that research about clearcutting (a necessary part of OSU's "working forest" concept for the Elliott) has little relevancy for society or industry. After several centuries of clearcutting on this continent, the methods have been optimized and the impacts are indisputable. Clearcutting (and associated aerial spraying) has devastated drinking watersheds of our Oregon Coast Range. It has released enormous amounts of stored carbon, making the wood products industry our state's largest emitter of climate-warming CO2. It has driven species like the northern spotted owl and marbled murrelet toward extinction. It has destroyed much of our natural heritage, leaving many timber communities bankrupt and surrounded by ecologically-desolate tree farms and shuttered mills (while the profits of Wall Street's tax-avoiding timber funds, TIMOs and REITs, have soared). OSU's own research has also found that plantation forestry (based on clearcutting) increases both the severity and risk of wildfires. Finally, there's now a substantial body of research showing how clearcutting devastates the mycorrhizal network which connects and nourishes our forests via the soil.

The dean and his Elliott team would have us believe that the adverse impacts of industrial forestry are precisely why they should do more of it in the Elliott - presumably so they can figure out how to lessen the adverse impacts. Unfortunately, they just haven't made a compelling or convincing case. Doing more of the wrong thing (even with loads of "research" behind it) won't yield a positive outcome – especially when the institution running it has a long history of industry-sponsored bias!

In Section 6.2 of the Elliott FMP (page 172), OSU attempts to justify the roughly 10,000 acres of forest to be dedicated to "intensive" (clearcut) forestry in perpetuity. The stated goal is to:

> "*maximize wood productivity per acre and explore management practices relevant to industrial forestland management [and] Concurrently...assess methods to reduce the impact of intensive harvest regimes [clearcutting] on other attributes such as biodiversity, habitat, carbon cycling, recreation, and rural well-being. These intensively managed forest stands within the ESRF...will serve as benchmarks for wood production potential and tradeoffs relative to extensive and reserve treatments*."

How will more clearcuts in this public "research forest" improve the efficiencies and management practices of industry behemoths like Weyerhaeuser, which are already making record profits? Does anyone seriously believe that some OSU study years from now will convince large timber companies (or their Wall Street swindlers) to change their already lucrative practices? These companies have already optimized plantation forestry far beyond anything OSU can hope to achieve.

Problem Analysis for OSU Research is Missing: These questions remind me of OSU's 2020 tour of the McDonald-Dunn Research Forests. At the end of the tour, a participant asked the CEO and chief forester of Starker Forests, Inc. (one of the College's largest donors whose patriarch helped found OSU's forestry program) if they could point to *any* OSU research that had informed their forestry practices. Despite being graduates of the College of (de)Forestry and experienced foresters, neither of them could provide an answer. This, in a nutshell, symbolizes the problem with OSU's approach in these public research forests.

As Dr. Jerry Franklin wrote (about OSU's research proposal):

> ***"Activities on the ESRF should begin with development of a problem analysis to identify what research and experiments are needed to address problems of importance to Oregonians. The current document "puts the cart before the horse" by proposing a major experiment before conducting such an analysis..."***

The type of comprehensive problem analysis that Dr. Franklin points to would take many years of effort. It would entail substantial outreach to Oregonians as well as private industry. Due to profound institutional bias, it would have to be conducted by parties unaffiliated with OSU's College of (de)Forestry. How does OSU's FMP team justify moving forward without an independent, comprehensive problem analysis to first determine what research would be meaningful? Having faculty within the College (or other so-called forestry experts) decide on the appropriate research for this public research forest just doesn't pass the "smell test" as far as the public is concerned. A significant number of Oregonians simply do not trust the College of (de)Forestry.

Research Basis for Clearcutting is Unconvincing: It is absurd (and exceptionally revealing) for OSU to maintain that ~10,000 acres of the Elliott must be sacrificed in order to research the destructive impacts of clearcutting on "*biodiversity, habitat, carbon cycling, recreation, and rural well-being*". The impacts of clearcutting have already been thoroughly studied and are obvious to even the casual observer. We don't need OSU's timber-centric studies to tell us that clearcuts have enormous adverse impacts. What relevance does this "research" have for a society that reached a guilty verdict on clearcuts long ago?

As for "*benchmarks for wood production potential and tradeoffs*" relative to less-destructive forestry practices (i.e. experimental controls), even 1,000 acres seems like overkill when much of the Oregon Coast Range has already been converted to industrial forestry. OSU has been predominantly conducting clearcuts in their existing research forests for generations. Why is it necessary to perpetuate the fragmentation and clearcutting of a substantial portion of the Elliott for this purpose? Both the FMP and original research proposal for the Elliott give a strong impression that research associated with "intensive" zones is pseudo-science designed to provide a steady supply of timber to local mills. This impression undermines the foundational integrity of OSU's approach to the ESRF. Regardless of whether or not OSU, DSL, and the Land Board feel this conclusion is justified, OSU has clearly not made a convincing case for *research* requiring substantial, perpetual clearcutting in the Elliott. The primary purpose of the ESRF, after all, is to be a *research* forest!

Compromise Yields Further Fragmentation and Mistrust: One of the most obvious shortcomings of both OSU's RP and FMP for the ESRF concerns the artificial division (and associated fragmentation) of the Elliott. I wrote extensively about this fragmentation in my blog piece from November, 2020, "Compromising the Elliott State Forest". Fig. 12.1 from the FMP (below) shows the distribution of age classes across the ESRF. Note: the youngest age category is 88 years and the ODF data may be outdated, so many areas colored grey are either in or approaching "late successional" status.

The US Forest Service has largely stopped cutting "late successional" forest since the 1994 Northwest Forest Plan. One wonders why OSU won't commit to this same limit in the Elliott and the other research forests they steward (trees up to 160 years of age remain unprotected in the McDonald-Dunn, for comparison). By conducting active forest management scattered across a wide swath (roughly half) of the Elliott, the FMP will perpetuate the historic fragmentation of the forest. Threatened and endangered species that depend on the older stands will be forced to navigate a mosaic of adjacent industrial forest lands with the associated impacts (of aerial spraying, slash burning, and disruptions from logging equipment).

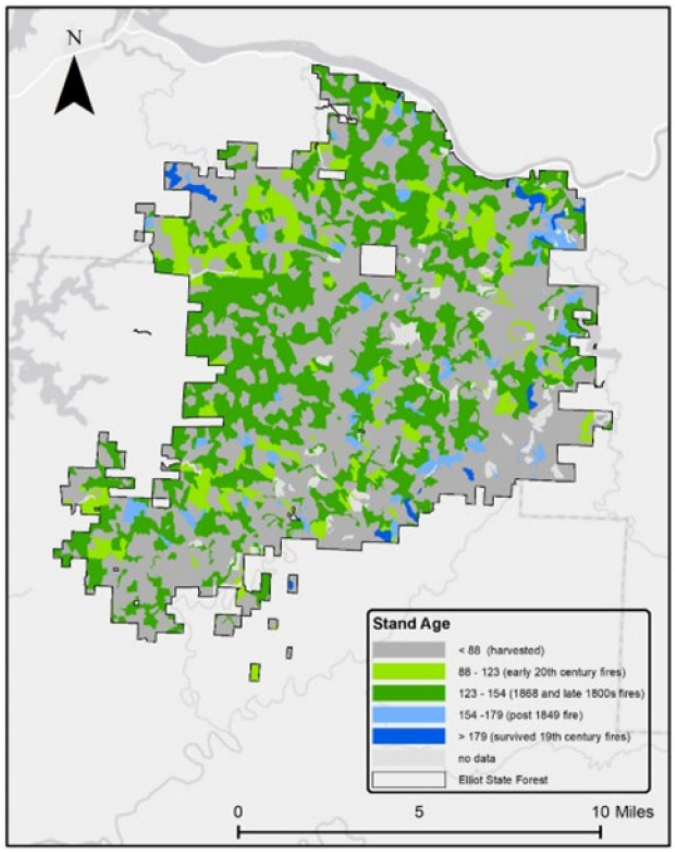
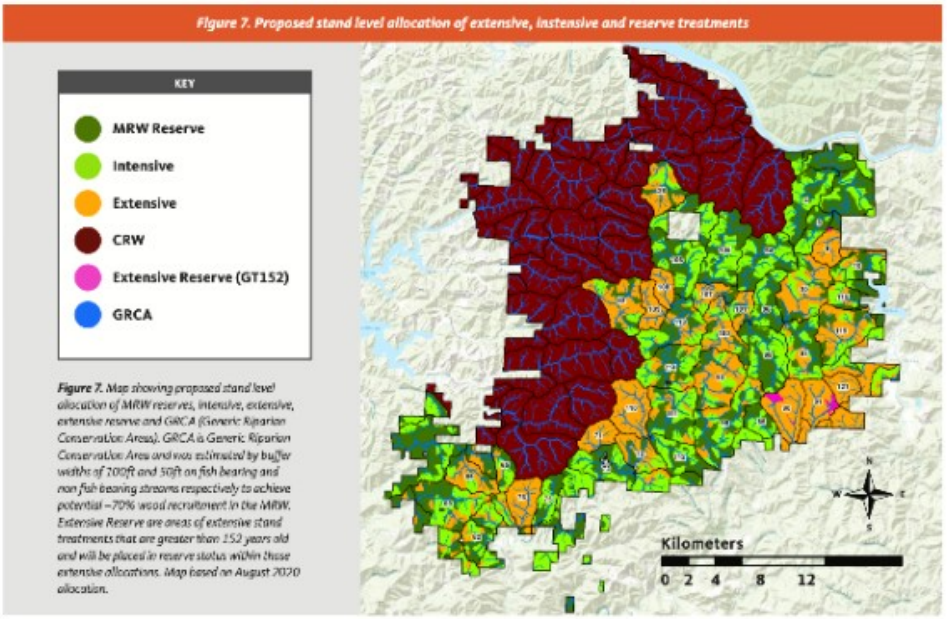


Fig. 12.1 From OSU's FMP – showing age classes of the ESRF



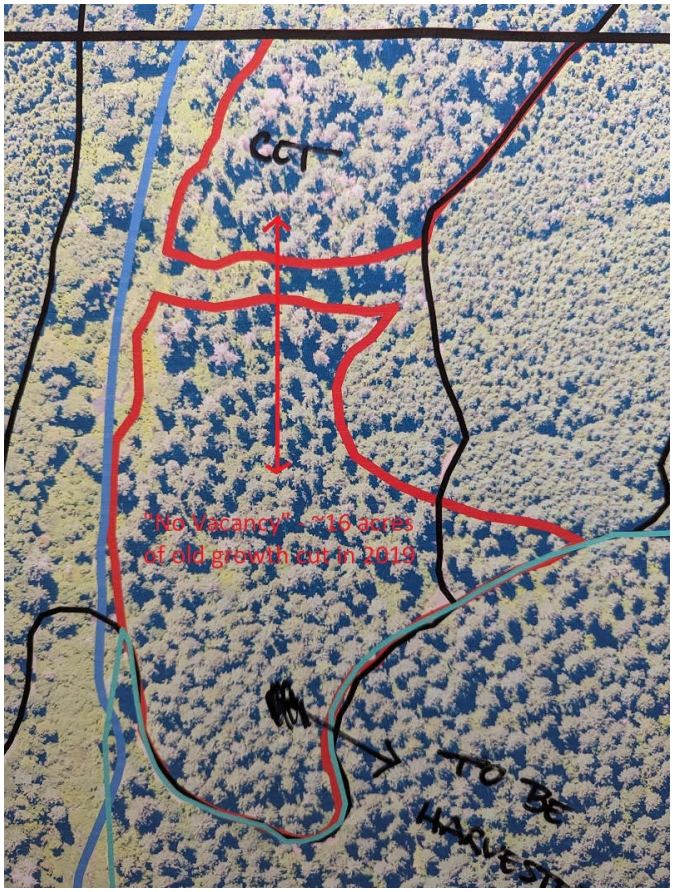
Map 3. *Purple, magenta, and dark green good. Brownish orange and light green bad.* Source: OSU College of Forestry.

Map 3. from OSU's FMP shows how the eastern portion of the Elliott will continue to be fragmented by OSU's research and forest management plans.

Those who came up with this compromise solution have tried to convince us it is both fair and scientifically relevant. The conservation rep's on the advisory committee sold it as the best deal they could get. They claimed the eventual protection of roughly 40% of the Elliott in the western "conservation reserve" is a huge environmental victory. Others lauded the protections of the Habitat Conservation Plan (HCP), the verbal commitments of College leaders, and unproven legal "side boards". What the imperiled species think of all this remains to be seen.

Public Perceives Compromise and Collaboration of "Insiders" as Collusion: While the Land Board, dean, DSL director, and Elliott Advisory Committee members all prided themselves on their willingness to compromise when it comes to the Elliott, many citizens see their collaboration as collusion. Rather than being something to celebrate, we see it as a sign of how our bureaucratic institutions failed us by perpetuating the influence of corporations and the degradation of nature. Oregon's per capita corporate giving (largely from the timber industry) is the highest in the nation. The dean of the College of (de)Forestry is paid from a ($5M) endowment donated by the former CEO of Roseburg Forest Products (which has logged in the Elliott). Our former State Treasurer (who reportedly came up with the idea of giving the Elliott to OSU) received substantial donations from Lone Rock Timber Management, a company that once tried to purchase the Elliott with his support. DSL also has a history of selling public forest lands to private timber companies (occasionally on terms very favorable to the buyers). Given the many conflicts of interest, why should citizens have any trust in the countless compromises that got us to this point?

OSU's Management of McDonald-Dunn Raises Grave Concerns: Oregonians should know that OSU has already operated a sizable "research forest" (the ~11,250-acre McDonald-Dunn, near Corvallis) for nearly a century. Having frequented the McDonald-Dunn for nearly 40 years, I can attest that industrial forestry practices are the norm (even today). I have also seen the research forest directors deliberately target old-growth stands on a number of occasions (not just in 2019). For nearly a century, the College of Forestry has been conducting clearcuts in The McDonald-Dunn under the guise of research. OSU's management of these public lands has resulted in a number of notable failures, including the abandonment of their 2005 Research Forest Plan, the subsequent clearcutting of 13 parcels (comprising ~166 acres of northern spotted owl habitat) the plan had promised to protect, and the infamous cutting of 16 acres of old growth forest in 2019. What does OSU hope to learn about clearcutting in the Elliott that they have not already studied ad nauseum in the existing research forests? Why must all of OSU's public "research forests" be operated with the same antiquated "working forest" approach?



Map showing relatively even distribution of old growth forest across OSU's (~16-acre) cut in the McDonald Forest in 2019. Photos above show a small portion of (old-growth) logs from the cut. The College's own forest inventory and timber cruise also indicated the entire stand consisted predominantly of old growth. Despite this evidence, the dean has falsely claimed, "*only a hand of old-growth trees were cut*". When the leader of the College tries to rewrite history, it does not build public trust.

Elliott Management Plan is Based on Outdated Research Model: Like OSU's research proposal for the Elliott (from November 2020), the FMP is structured around a 30+ year old model (called "Triad") which purports to study the pressing research needs of both society and industry by dividing the forest into three broad categories:

- conservation reserves
- intensive forestry (clearcuts on regular rotations)
- extensive forestry (varying amounts of thinning, which OSU is now claiming is "ecological forestry")

Our veteran Oregon conservationist, Andy Kerr, described OSU's approach to the Elliott in his Nov. 20, 2020, blog piece:

> "*The OSUCF proposes yet another share versus spare experiment because it didn't like the earlier answer. Share versus spare has been decisively answered to the satisfaction of ecologists, but not of foresters: single value management is best for nature. However, it's bad for the profession of forestry as it would be relegated solely to pesticide- and fertilizer-fueled short-rotation monoculture plantation forestry where foresters are the running dog lackies of Wall Street.*"

OSU's Experts Eviscerate Research Approach for the ESRF: The most powerful indictment of OSU's Triad approach came from two renowned alumni of the College, Dr's. Jerry F. Franklin and K. Norman Johnson. I have included their scathing, 5-page critique of OSU's research proposal for the Elliott (from November of 2020) in **Appendix A**. Notably, both men have strong historical connections to OSU. Dr. Johnson graduated from OSU with a PhD. in forest management, and later became a professor, then professor emeritus at OSU. He also served on OSU's Elliott team until July of 2019. Dr. Franklin earned bachelor's and master's degrees in forest management from OSU and later taught there, as well. Franklin and Johnson expanded upon their concerns expressed at the December 2019 Land Board meeting to question nearly every aspect of OSU's timber-centric research proposal. Here is but one paragraph of their critique:

> "***Activities on the ESRF should begin with development of a problem analysis to identify what research and experiments are needed to address problems of importance to Oregonians. The current document "puts the cart before the horse" by proposing a major experiment before conducting such an analysis and without developing on-the-ground familiarity with the property. In addition, the experiment OSU has proposed is badly flawed, compromises development of the long-term research potential of the forest, and lacks significant relevance to management of Oregon's forests. The proposed experiment violates basic principles essential to production of statistically valid and socially convincing outcomes. Furthermore, the focus on Triad, an academic concept related to land allocations at regional scales, has no relevance to pressing forestry issues facing Oregonians.***"

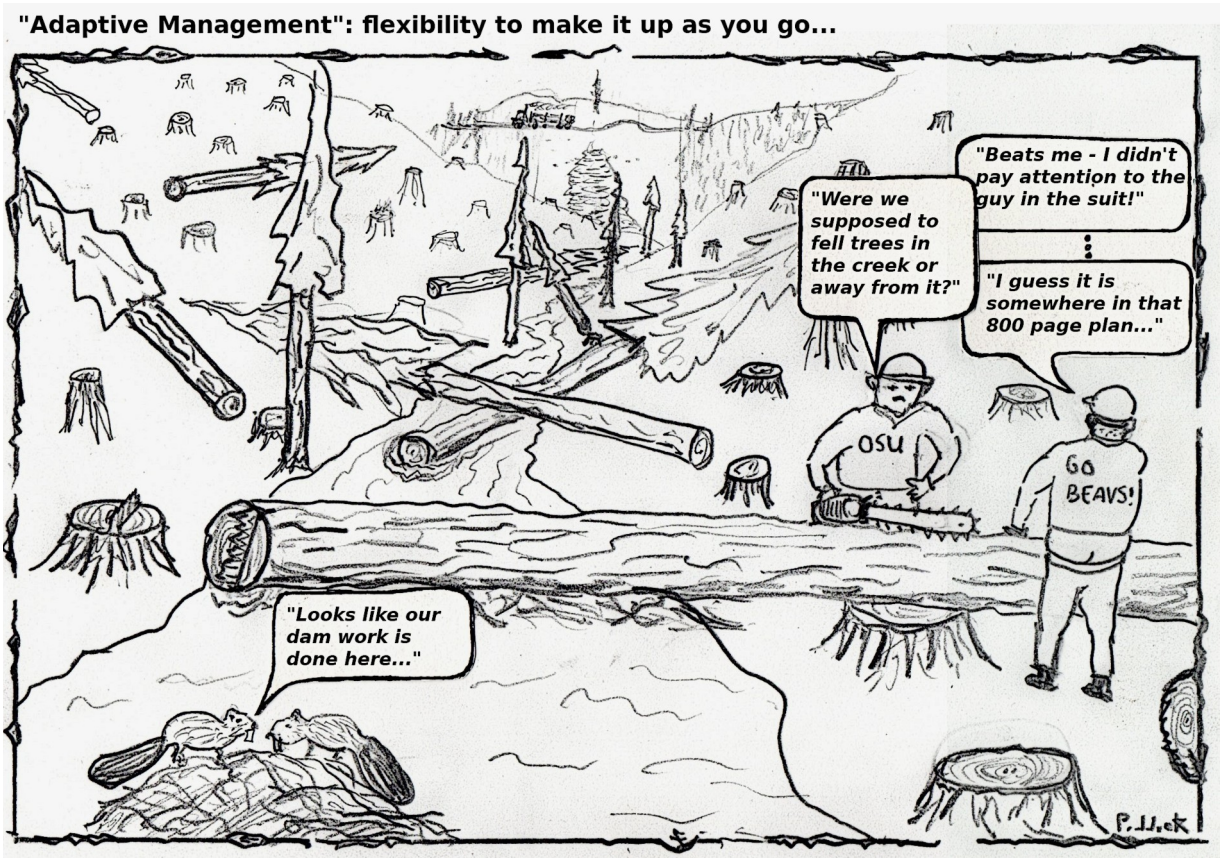
Public Overwhelmingly Rejects OSU's RP for the Elliott: The public overwhelmingly agreed with the experts in condemning OSU's research proposal for the Elliott. More than 1700 individuals submitted over 3,000 pages of comments about OSU's draft research proposal for the ESRF. People soundly rejected OSU's plans to do extensive clearcutting and destroy ~3,200 acres of older forest in the name of marbled murrelet research. A vast majority of citizens called on OSU to prioritize ecological values, older forests, wildlife, and recreation, NOT logging under the guise of research.

This unprecedented response was extraordinary considering the exceptionally short review period (originally 2-½ weeks, then extended by about a week and a half) and OSU's "moving target" approach (OSU's research proposal grew ~3X in size during the public review period). While the dean and his team claimed they were incorporating public comments on the fly, the lack of substantive changes in the final version showed they were stubbornly digging in their heels. In a telling violation of protocol and integrity, OSU's Elliott Exploratory Team tried to undermine their most renowned critic by presenting a 6-page rebuttal of Dr. Franklin's criticisms in the research plan itself.

Oregon Land Board Endorsed OSU's Flawed Research Proposal for the ESRF: Despite the flood of public opposition, the Oregon Land Board unanimously endorsed OSU's research proposal for the ESRF in their December 8th, 2020, meeting.

It was clear to observers that the Land Board members had made their minds up long ago. Despite the substantial (~$120M) planned pay-off of the Common School Fund (to release the Elliott State Forest from its CSF obligation), our former state treasurer, Tobias Read, did not have a single question for the OSU dean. So much for fiscal due diligence! A senior member of the OSU Elliott team later consoled me by confiding, "*It was baked from the start.*" He explained that the Land Board had made it clear to OSU and the Oregon Department of State Lands that a regional, timber-focused research approach must be the foundation of the Elliott State Research Forest. With Oregon's per capita corporate giving more than any other state in the U.S., it should come as no surprise that our largest research forest was designed with a timber-centric research agenda – and that the ESRF Authority has a pro-timber majority (with two members of the same, conservative Douglas Co. timber family).

It is important for the public to understand the enormous ramifications of the Land Board's vote (which was later codified into law by the Oregon Legislature in Senate Bill 1546). By approving OSU's antiquated research proposal (which perpetuates clearcut forestry in a substantial portion of the Elliott in perpetuity), the Oregon Land Board fundamentally undermined the scientific integrity of the research forest they helped to create. The research proposal is the foundation of the entire Elliott enterprise. **Since the current forest management plan is based on the underlying research plan, it follows that it, too, is deeply compromised. A house built on a crumbling foundation cannot stand.**



Legal "Side Boards" Depend on a Scientifically Sound Plan: I'd like to point out that any discussion of legal "side boards" (e.g. provisions designed to ensure compliance with OSU's plans for the Elliott) are also substantially undermined by the profound shortcomings of OSU's research proposal. It isn't especially helpful to have legal guarantees when the guiding framework is fundamentally flawed. Conservation groups that are relying on these "side boards" for the Elliott are missing the logical flaws in their thinking. While legal "side boards" may protect against egregious violations of the plan, many see the plan itself as the biggest violation.

ESRF Reports and Process Present Considerable Barriers to Public Participation: It is important for everyone involved in this process to acknowledge the profound biases of language and barriers to inclusivity presented both by the technical reports (e.g. OSU's research and forest management plans) and the bureaucratic procedures employed by those in positions of authority throughout the Elliott process.

Both the OSU RP and FMP are laden with technical jargon, acronyms, figures, and language which greatly diminishes public interest and involvement. This is characteristic of the field of forestry which often follows a traditional, condescending communication model (*"We're the experts, we have the knowledge, you have the questions"*). I provided extensive comments about these shortcomings when reviewing OSU's research proposal (three years ago). The overall readability of the FMP has been improved compared to the RP, but many of the same problems remain. I have included a few confusing sections from OSU's Elliott FMP in **Appendix B**. Authors of the OSU Elliott FMP would be well-advised to employ the services of technical writers (and some English majors) to overhaul their plans *before* presenting them to the public. OSU has clearly failed to understand that a primary audience of their plans for the Elliott is the public to whom these forests belong.

"Extensive" Treatments NOT "Ecological Forestry": It also seems presumptuous to claim that the "extensive" treatments planned for the Elliott now qualify as "ecological forestry". The field of ecological forestry is complex and diverse. How have you determined the extensive thinning qualifies as "ecological forestry"? Surely you understand that cutting frequency and severity are only part of the criteria. Will herbicide spraying and slash burning be done in these extensive zones? Which trees will be selected for thinning, how frequently will thinning occur, and how will trees be removed (without compacting/disturbing the soil and impacting wildlife)? Will the extensive stands eventually be clearcut? Any forestry that relies on clearcutting cannot be considered "ecological forestry", as it destroys the forest ecosystem (both above and below ground). What grounds does OSU have to use the "ecological forestry" label when it has never managed its own research forests following ecological practices? OSU's effort to label the "extensive" treatments as "ecological forestry" seems deceptive and inappropriate, given the lack of common standards and agreement in the field.

Word Choice and Counts Reveal Exceptional Bias: Some of the language of the FMP seems designed to mislead and obfuscate the true ecological impacts and intentions. In the FMP, clearcuts are widely referred to with euphemisms like: "regeneration"- (156 times) and "intensive" (289 times). Many people find the word "harvest" itself (which appears a whopping 905 times in the FMP) inflammatory and highly offensive. Its use has been favored by generations of foresters who believe in the arrogant righteousness of their "active management approach" to forestry. Trees are not cut, killed, or destroyed – they shall be "harvested" on regular rotations, like a crop of corn or beans. This kind of language seems designed to avoid any consideration of trees as sentient organisms or forests as thriving, interconnected communities (as recent research has revealed).

The relative scarcity or prevalence of key words tells us a great deal about the motives and priorities of the OSU authors. Forms of the word "mycorrhizal" appear only 4 times in the FMP (compared to 0 in the RP), while "fungi" now appears 29 times (up from 2 in the RP). Conversely, "timber" appears 197 times in the FMP (vs. 112 in the RFP) and "manage" appears an astounding 1,500 times (vs. 537 in the 106-page RP). By comparison, "steward" appeared only 4 times in the RP, but now appears 71 times in the FMP (mostly in relationship to "co-stewardship" with the Tribes). "Sustainable" appears 47 times (vs. 31 times in the RP).

"Research" is one the most prevalent technical terms, appearing 1,359 times in the forest management plan and 768 times in OSU's research plan. Yet there appears to be no in-depth description of what constitutes valid "research" (at least from society's perspective). One can imagine an infinite multitude of misguided, agenda-driven research projects when it comes to forestry. Indeed, most of the academic history of forestry has been characterized by research predicated on the extractive nature of the field (e.g. how to maximize timber production for human use). For generations, OSU's College of (de)Forestry (like its collaborators in our state and federal forestry institutions) has prioritized timber production over ecological values. While this has begun to change, the College is still a bastion of conservative values when it comes to forestry education. One has only to look to the management of the McDonald-Dunn Forests to see proof in abundance.

Data on Projected Timber Harvests Missing: The Elliott FMP is relatively murky when it concerns annual timber volumes to be cut. I understand that the Oregon Land Board has insisted there be a maximum timber harvest of no more than 17 million board feet (mmbf) per year, while some at OSU have pushed for substantially more cutting (over 30 mmbf). The

lack of transparency and clarity regarding the annual timber cut levels has led to mistrust (and appears to violate the stated commitments in the FMP regarding transparency). At the same time, any financial modeling that relies on or dictates a set amount of logging per year (whether to guarantee logs to local mills or to generate revenue to support the ESRF operations) will give the impression that research is driven by revenue needs.

How does OSU reconcile the pressure to have set revenue targets (and harvest levels) with the dean's assertion that, "*harvests will not take place for the purpose of generating revenue*"? If there is an annual cap on timber harvests, what is it and how does OSU ensure it won't be surpassed? How will these numbers be reported in a way that is easy for the public to access? College leaders have long resisted sharing timber harvest data and associated financial information with the general public. The dean and his research forest director for the McDonald-Dunn Forests have routinely used the public records request process as a shield to prevent the public from obtaining information OSU ought to be providing freely to the public it serves. Why should we expect OSU (or the ESRF Authority) to do any better when it comes to the Elliott?

Marbled Murrelet Research – Whose Agenda Will it Serve?: Critics of OSU's plans for research in the Elliott have often cited what I refer to as a timber-centric approach. For example, in my previous Elliott testimony, I presented an in-depth discussion of OSU's proposed marbled murrelet (MAMU) research. Based on the information presented in OSU's research proposal from November 2020, it appeared that OSU's MAMU research was largely focused on seeing how much disturbance (logging/thinning) the threatened birds could tolerate in or adjacent to their habitat. I concluded that OSU's planned research would have little or no benefit for wildlife conservation and could very possibly benefit the timber industry (which would be inclined to promote any data showing the birds might tolerate diminished protections).

It is unclear whether OSU's approach to MAMU research has been modified in the FMP. In any case, there are fundamental, systemic provisions (provided by SB 1546) which ensure that OSU and the (pro-timber majority on the) ESRF authority promote and prioritize research which fits their timber-centric approach. SB 1546 requires that all research in the ESRF conform to OSU's research proposal (approved by the Land Board in their Dec. 8th, 2020, meeting). Since OSU's research proposal has substantial shortcomings and bias, the "research" label used in the Elliott FMP must be viewed with considerable skepticism. Research is neither good nor bad in and of itself. We must look closely at how it is structured, who is conducting it, and what questions it is aiming to answer. From this perspective, OSU's Triad model is seen as a strongly biased approach. It fails to ask relevant questions and relegates the Elliott to an antiquated model of extractive forestry.

Besides failing to incorporate public comments, I could cite many other instances of systemic barriers to public participation throughout the Elliott process. The meetings of the Elliott Advisory Committee (EAC) were only begrudgingly recorded and made available to the public by DSL after I waged a lengthy email battle urging DSL to follow the Oregon Public Meeting Law (OPML). DSL staff adamantly insisted they were not required to follow the OPML because the EAC was merely "advising director Walker", not making broad recommendations. DSL staff eventually agreed to operate "in sync with the OPML", though they insisted they were not required to do so by law! Predictably, the DSL lawyers (including Geoff Huntington, who now serves as the governor's senior natural resources advisor) were unwilling to provide any specific evidence or logic backing up their resistance to the OPML. None of the DSL lawyers or the deputy director were willing to even acknowledge my emails.

OSU's Science Advisory Panel Not Accessible or Credible: OSU's Science Advisory Panel (SAP) for the Elliott is another example of structural barriers to public participation. The SAP was hand-picked by the former dean to advise him and his Elliott team on issues related to the science of their Elliott proposal. When I tried to contact the SAP members to express concerns about OSU's research proposal articulated by Dr. Jerry Franklin, I was told that all communications had to go through the College's former communications director (Michael Collins). That constraint seemed designed to insulate SAP members and limit public engagement. The biased nature of the selection process also gave a strong impression that the SAP was meant to serve as a badge of legitimacy for OSU's research plan - not as an objective, scientific body.

Oregon Consensus – Part of the "OSU-DSL Team": I'd be remiss if I failed to also mention the role of Oregon Consensus (OC) in the Elliott process. Time and again, the OC facilitator behaved in a way that strongly suggested he was part of the "OSU-DSL team", rather than the unbiased arbiter of the public process. The sanitized meeting summaries, collegial assurances, and exceptional deference that the Oregon Consensus lead showed to the process "insiders" stood in obvious contrast to his treatment of the public at large. I never once heard him explain the role of Oregon Consensus or mention their responsibility to ensure the integrity of the process. Many observers have mistakenly concluded the OC facilitators are employees of OSU.

Inadequate Public Review Periods Diminish Participation and Trust: The short review period for the Elliott FMP is but the latest in a long history of inadequate deadlines that have greatly diminished public trust and participation. Why can't public institutions like OSU and DSL provide adequate public review periods, when our state and federal agencies have done so for decades? These agencies typically allow 45-60 days for public review and comments, and up to 180 days for complex rules. At over 800 pages, OSU's Elliott FMP is far too complex to be reviewed in a scant 30-day period. The public review period must also allow for outreach and communication within the conservation community and wider citizenry. OSU and DSL staff understand this, but adamantly insist they have no choice. Predictably, these unrealistic deadlines work to their advantage. The completely inadequate review period means their critics have less time to organize and respond. I did not attempt to even engage supporters of my organization because the review period was entirely too short. I have only had time to review a small portion of the FMP (despite investing many days in this review effort). How you folks can honestly claim you are acting in ways that honor and encourage public participation is beyond me.

These are but a few of the many deliberate, systemic barriers that have resulted in broad public mistrust of OSU, DSL, and the Land Board when it comes to the Elliott. The OSU and DSL Elliott teams need to understand that these organizational issues are the heart of the public process. To a great extent, these issues determine whether the public lends its support or reacts with cynicism and disapproval toward our public institutions and their endeavors. Systemic oversights have characterized the Elliott process to such a degree that one can only conclude many are deliberate shortcomings.

I have presented this detailed, historical context because I want everyone involved in this process to understand that TRUST is the key to public collaboration and support. Few people will devote their time and energy to participate in the planning process when they suspect ulterior motives and agendas from those in power. From my perspective, the loss of trust is the major factor undermining not just public acceptance of the Elliott process, but also the College of Forestry. As Dr. Johnson said after OSU cut the old growth in 2019:

"***It's not hard to do something that loses trust. It's a long road to earn it back.***"

Appendix A: Dr. Jerry F. Franklin's Critique of OSU's Research Proposal for an Elliott State Research Forest

November 28, 2020

Creating a Scientifically Credible and Socially Relevant Research Agenda for the Elliott State Research Forest

By Jerry F. Franklin with assistance of K. Norman Johnson

SUMMARY: The Oregon State University College of Forestry (OSU COF) has an extraordinary opportunity to serve the citizens and forest resources of Oregon at the Elliott State Research Forest (ESRF). It can do that by creating new knowledge about forest ecosystems and demonstrating the application of that science in managing forests for the multiple environmental, economic, and cultural benefits desired by Oregon's citizens. However, the current OSU COF proposal for management and research on the Elliott Forest needs significant revision if it is to succeed in achieving those benefits.

Activities on the ESRF should begin with development of a problem analysis to identify what research and experiments are needed to address problems of importance to Oregonians. The current document "puts the cart before the horse" by proposing a major experiment before conducting such an analysis and without developing on-the-ground familiarity with the property. In addition, the experiment OSU has proposed is badly flawed, compromises development of the long-term research potential of the forest, and lacks significant relevance to management of Oregon's forests. The proposed experiment violates basic principles essential to production of statistically valid and socially convincing outcomes. Furthermore, the focus on Triad, an academic concept related to land allocations at regional scales, has no relevance to pressing forestry issues facing Oregonians.

The citizens of Oregon are effectively giving OSU COF a $121 million gift in creating the ESRF – arguably the largest single investment that the State of Oregon has ever made in forest research. The state deserves a research program that will contribute to creation of forest ecosystems that can better meet current challenges, such as wildfire, climate change, and recovery of threatened salmon populations. The program also needs to have great flexibility to meet the ever-changing needs and preferences of society.

The State Land Board should direct OSU COF to make a fresh start at designing a research program that includes scientifically rigorous experiments directed at sustaining the productivity and other functions of managed forest landscapes. This process of selecting the research foci and initial experiments for OSU's program should be undertaken systematically and transparently. It is important that stakeholders understand how the topics for research were selected and how they relate to proposed experiments. Independent outside peer review would be appropriate for both the problem analysis and for all major research projects and experiments.

The State Land Board should also insure that there is a process by which OSU COF's program of research and management at the ESRF will undergo periodic outside review by

an independent panel of scientists and citizens, who will report to the State Land Board on its findings.

I appreciate this opportunity to comment on Oregon State University College of Forestry's (OSU COF) proposal to undertake management of the Elliott State Forest for research and education. My credentials for commenting on this proposal include my involvement in forest research in the Pacific Northwest for over 60 years, much at Oregon State University and most recently as a professor in the University of Washington's School of Environmental and Forest Science. My entire career has been involved with development and management of experimental forests and long-term research projects. I helped lead the development of the globally recognized H. J. Andrews Experimental Forest and managed Andrews, Cascade Head Experimental Forest, and the Wind River Canopy Crane facility for significant periods. I also participated in conceptualization and implementation of the National Science Foundation's Long Term Ecological Research Program (LTER), successfully competed for one of the initial grants (at Andrews), and coordinated activities of the LTER network for the National Science Foundation. I was involved in obtaining congressional funding for and the design of the only statistically designed regeneration harvest experiment in the Douglas-fir region (DEMO). I am

coauthor with Norm and Debora Johnson, of the foundational textbook for ecological forestry, “Ecological Forest Management”.

OSU COF has made significant progress in developing a vision statement, but some further changes are required, most profoundly a problem analysis to identify priorities for research and experiments on the Elliott State Research Forest (ESRF). A critical missing element in the existing document is provision for independent oversight of OSU COF’s research and management of the property. It is fair to say that OSU COF’s record in management of its own lands and in support of long-term research is checkered. Providing independent oversight is necessary to establish and sustain the trust necessary if OSU COF is to manage this important property. This group should include both scientists and distinguished citizens that represent the spectrum of stakeholder interests. They would be charged with reporting regularly and publicly to the State Land Board. Funding to sustain and make credible their oversight activities would be needed. Conservation easements could also provide some additional legal teeth in the oversight function.

The problem analysis is critical to identify the important issues relevant to managing Oregon’s forest that OSU COF can address on the Elliott Forest. Such a document would provide a systematic approach to identification, review, and prioritization of potential research topics for the OSU program. It would be the basis for identifying the research, including experiments, necessary to address those issues. Examples of the scientific issues that need consideration are development and demonstration of approaches to creating managed forests that are more resilient in the face of disturbances, such as wildfire, and climate change, and techniques to better integrate forest management with restoration of salmon populations.

Development of a problem analysis will have several important benefits. First, it can make the process of identifying OSU COF’s research priorities a much more transparent process. It would put on record the various topics/issues that were considered and the processes used by OSU COF in making its selection. While some stakeholders have relatively little interest in what research is done on the Elliott, many stakeholders do want to know more about OSU COF’s research plans as well as to have input into these plans. It could allow for much broader participation by individuals both within and outside of the institution. The problem analysis should also undergo a scientific peer review process before it is finalized.

The State Land Board needs to provide OSU COF with time to develop such a problem analysis and to familiarize themselves with the property, so that the proposed activities are based on on-the-ground familiarity and not simply on maps and remote imaging. Detailed information on stand ages and structural and compositional characteristics is necessary to identify comparable areas for research. Attention to the geomorphic and hydrologic features of drainages is also needed, so that credible experiments examining the interactions of forest management on aquatic systems and fish, can be developed. ***The development of specific studies and experiments needs to follow, not precede, development of such familiarity. Initiating activities on a property that is intended to be managed in perpetuity for research, demonstration, and education should never began with by committing essentially all of it to a single experiment.*** OSU COF’s current proposal for a major experiment is very much “putting the cart before the horse”!

The deficiencies in the massive experiment currently proposed by OSU COF further emphasizes the need for a systematic assessment of research priorities and the potential of the ESRF before activities are undertaken. The experiment lacks a relevant focus (a supposed test of TRIAD) and has multiple significant flaws in its design and proposed implementation. The potentials for statistically credible scientific or socially convincing outcomes from the current design are near zero. Some of my concerns with this specific proposal are as follows.

The purported purpose of the experiment is to test the TRIAD concept. TRIAD is a concept that envisions forests in a region being managed using three general approaches (Hunter and Calhoun 1996): (1) Areas for intensive commodity production, (2) Areas with little or no resource use by people; and (3) Areas in which resource use is integrated with protection of ecological values. Here in Oregon, such a partitioning of forest lands has already occurred – an approximation of the Triad approach. The industrial forest lands are currently managed intensively for commodity production (Triad category 1); and the national parks, wilderness areas, and Late Successional Reserves represent Triad category 2. The remaining managed forestlands (e.g., federal, state, tribal, most non-industrial private lands,

conservation trust lands, etc.) represent Triad category 3. All owners and managers of lands in this latter category (Triad category 3) seek to integrate economic and environmental goals in the management of their properties by choice and/or law. A further important aspect of Triad is the geographic scale to which the Triad model applies and at which it needs to be tested. This scale is where the "Issues of economic distribution and balance can usually be evaluated [and is] at the scale of an individual state or county" (Hunter and Calhoun 1996). ***Triad is not intended to be applied to nor can it be tested at the scale of a single property.***

Hence, Triad is inappropriate as either an intellectual or experimental focus for OSU COF's research program on the ESRF. A Triad-like division has already occurred in Oregon by policy decisions made regarding management of the various forest ownerships. Practically speaking, the proposed experiment can provide no meaningful insights into the merit of the concept. Indeed, what Oregonians need most is research that will assist managers of the Triad category 3 lands in achieving their goals of managing forests simultaneously for economic, environmental and cultural values.

In addition to its focus, the failures of the proposed experiment that are numerous. The whole idea of committing most of what is intended to become a long-term research property to one massive experiment at the outset, is an outstandingly bad idea, since it greatly limits the potential for future research projects, notwithstanding arguments by proponents that you could nest other experiments within its design. We know from experience that our current ideas about the most pressing research questions, scientifically and socially, are going to undergo dramatic change with time. If most of the unreserved portions of a property have already been compromised by an experiment, the opportunities will be limited for other major research programs to be undertaken as new knowledge emerges and societal goals change.

The proposed experiment would be immensely expensive and take many years to implement; hence, it would take decades before any useful knowledge could emerge. It bases its treatments on watersheds and yet has no credible plan or intellectual engagement in measuring impacts of management on hydrology and aquatic ecosystems. Such research must be an important part of the Elliott Forest research program. However, the cost and institutional commitment for such research generally allows for relatively few gaged watersheds and the calibration of such watersheds requires 10 to 20 years before any treatments can begin. So, why are whole watersheds being proposed as the treatment units in the proposed experiment?

The experiment lacks a rigorous statistical design. The first and most basic principle in designing field experiments is random assignment of treatments to the experimental units – the specific land areas that are going to be part of the experiment. Treatments are not randomly assigned to the experimental units in OSU COF's proposed experiment – rather the characteristics of the experimental units (such as how much older forest is present) are the basis for assigning the treatment that they will receive! A second principle is that the treatments must include controls, which would be experimental areas that do not receive any treatment. The experiment does not include control treatments. The presence of a large semi-reserved area elsewhere on the Elliott does not fulfill the requirement for experimental controls. A third principle is that, if you want clear tests of variables – for example, how ecological responses are affected by the number of trees retained or the spatial pattern of the retention or the effects of different retention patch sizes – you must avoid confounding your treatments. Treatments are confounded when you change more than one variable at a time. Confounding of treatment variables is implicit in the current design.

There are many potential research topics highly relevant to the management of Oregon's forestlands, which could be addressed in OSU COF's research program. This summer has made obvious the importance of developing management regimes that would reduce the vulnerability

of managed forests in western Oregon to wildfire and other large-scale disturbances. A related and critical research need is to conceive and test multiple approaches to adapting managed westside forests to climate change. Experiments of this type are underway in many forest regions of North America – but notably not in the Douglas-fir region! Silvicultural approaches to integrating ecological and economic goals is a major challenge in management of a broad array of forest ownerships in Oregon, from small, non-industrial private forest lands to tribal and federal forests. Extensive experimentation is needed to better quantify the tradeoffs between various forest values, such as the

economic costs and ecological benefits associated with various levels of live tree and dead wood retention during harvests. Similarly, research, including experimentation, is needed to compare economic returns and ecological benefits of mixed-age forests compared with even-aged forests. Any and all of these could be the foci of rigorous, statistically credible experiments that would directly benefit the citizens and forest ecosystems of Oregon.

OSU COF's research at the Elliott Research Forest needs to include significant, credible attention to the relationships between forests and streams. The streams and rivers are the very best and most sensitive indicators of the health (or, I would substitute the word, functionality) of our forest landscapes. We need much better knowledge of the impacts of management on water quality and quantity and on health of the biota. The salmon are arguably the most significant of the endangered biota of the Elliott. There has been no meaningful consideration of streams and stream biota in the current research plan – for example, no consideration of how geophysical processes line up with the expected treatment units. There are multiple ways to configure riparian networks to achieve desired outcomes but this is not a part of the current experimental design. Credible experiments are needed but these will be expensive and significant time will elapse before treatments can begin. The potential for stream-based experiments should not be compromised as they will be by the current research design. These concerns with the research related to aquatic systems and salmon need to be dealt with "up front", not some time after other experimental manipulations have already been planned, let alone implemented.

In conclusion, the OSU COF should drop the current proposed experiment and undertake a comprehensive and transparent problem analysis to identify the research priorities and experiments that will provide the greatest benefit for Oregon citizens and forest ecosystems. Any research projects, including experiments, should be developed after the COF has an opportunity to become more familiar with the property and reassess how research can benefit the citizens and forests of Oregon in the short- and long-term.

Hunter, Malcolm L., Jr. and Aram Calhoun. 1996. A triad approach to land-use allocation. Pages 477-491 in "Biodiversity in Managed Landscapes", edited by R. C. Szaro and D. W. Johnston. Oxford University Press: New York.

Appendix B: Specific Comments Re: OSU's Forest Management Plan for the ESRF

<u>Slash Burning – Unnecessary, Ecologically Destructive and Polluting:</u> I strongly question the apparent assumption in the FMP that slash burning will be a routine and necessary practice to be used in the ESRF. The relatively moist environment in our Coast Range forests means that slash left on the ground will decay in a relatively short period, providing important nutrients to the soil. Burning slash emits enormous amounts of CO2 and fine particulate (which is a human carcinogen). It is NOT leadership in forestry to routinely burn substantial volumes of logging slash (as OSU does in the McDonald-Dunn Forests).

)

Slash fires (like these in OSU's Dunn Forest in 2021) often smolder for weeks or months, emitting substantial amounts of carcinogenic particulate and C02 into the atmosphere. This is unnecessary, at odds with "leadership in forestry education" and a disgrace for our public university.

Figure 3.1 (page 91) appears as follows:

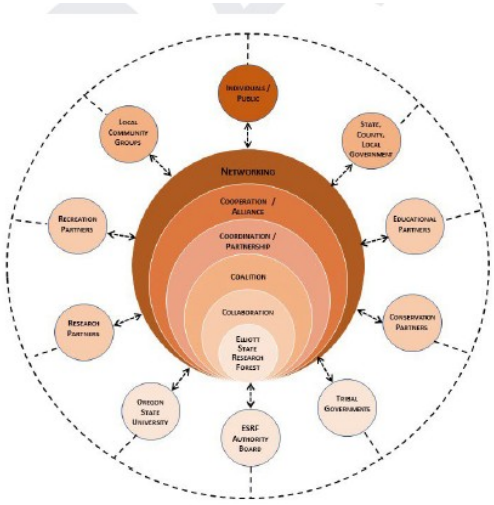


Figure 3.1. Collaborative framework envisioned for ESRF. Note that the research forest is at the center as the shared vision, mission, and goals. Relationships that are closer to the research

The text is largely illegible, even after zooming in significantly. It is unclear what the various shades of brown signify and why the nested circles were structured in the designated order. Why, for example, is "collaboration" inside "Coalition" which, in turn, is inside "Coordination/Partnership"? The structure of this diagram seems to represent some clear assumptions and biases (whether intentional or not). I find it to be an artificial and annoying construct that diminishes my interest (whatever the graph is supposed to convey).

Page 118 has the following description for "Fig. 4.4 Triad *landscape-level* (subwatershed) treatments.":

> "Each of the forty subwatersheds that are wholly contained within the MRW (400 to 2,000 acres each) will receive one of these four treatments (ten replications per treatment), all of which are designed to produce approximately equivalent mean annual increment per-unit-area wood yields at the subwatershed level (Figure 4.4)."

This text is confusing and a poses a barrier to understanding for the average person. What is a "subwatershed"? How do you define "replications"? What does it mean to "produce approximately equivalent mean annual increment per-unit-area wood yields"? Surely these concepts could have been explained using clearer language, with a level of detail sufficient for a person without a degree in forestry to understand!

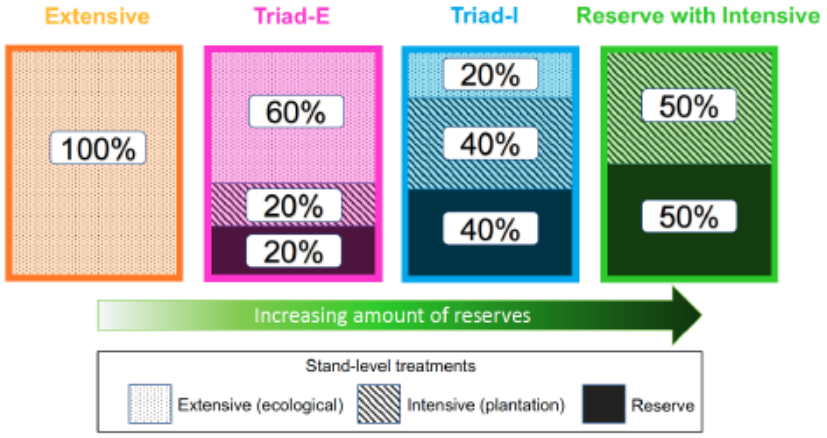


Figure 4.4. Triad *landscape-level* (subwatershed) treatments. Treatments are designed to produce approximately equivalent wood yields using different combinations of stand-level treatments: reserves, extensive (ecological forestry), and intensive (even age) management. The 'Extensive' Triad treatment (orange) is 100% ecological forestry, the 'Reserve with Intensive' Triad treatment (light green) consists of 50% intensive forestry and 50% reserve. 'Triad-E' and 'Triad-I' contain differing proportions of reserve, ecological and intensive forestry.

Triad Landscape-Level (Subwatershed) Treatments

1. **Extensive** subwatersheds are 100% extensive stand management across the entire 60%subwatershed, outside of the RCA.
2. **Triad-E** subwatersheds are 60% of the acreage in extensive, 20% intensive, and 20% reserve stand management, outside of the RCA.
3. **Triad-I** subwatersheds are 20% of the acreage in extensive, 40% intensive, and 40% reserve stand management, outside of the RCA.
4. **Reserves with Intensive** subwatersheds are 50% of the acreage in intensive and 50% reserve stand management, outside of the RCA.

The explanatory text for Fig. 4.4 and the figure itself is unnecessarily confusing, as well. How can a "Reserve" have "Intensive" (clearcutting), as indicated by the label in green? The protections of a "reserve" would seem to exclude "intensive" treatments. It is initially unclear what the percentages within the fields indicate (e.g. what does "100%" refer to within the "Extensive" box and why label it if it's the entire box? – that seems redundant; what does "60%", "20%", and "20%" refer to within "Triad-E"?, etc.?) Is the black square in the legend (labeled "Reserve") supposed to correspond to the variously shaded portions of the above boxes? If so, the colors are distracting and inconsistent with the legend. The same applies to the other shaded designations. Coloring the boxes on top of the shading for "Stand-

level treatments" makes it visually confusing. The arrow showing "Increasing amount of reserves" is also confusing, as the "Reserve with Intensive" box is also green. If the green color is indicative of increasing amounts of reserves (as indicated by the arrow), then why aren't the corresponding reserve percentages shown in green, as well?!

Many people will wonder what "stand-level treatments" are and struggle to understand the jargon-laden descriptions. It is also unclear what "Triad-E" and "Triad-I" mean, as these terms are NOT listed in the table of abbreviations and acronyms. Triad implies a division of three and one might assume the "E" designates "Extensive". If that's true, then one logically wonders what's the difference between "Extensive" and "Triad-Extensive" (Triad-E), when the entire research platform has been described as "Triad". You should not use the designation "Triad" for both the overall research model and two of the individual treatment categories (Triad-I and Triad-E). This is fundamentally illogical, inconsistent, and confusing.

Various sections of technical content in the FMP are difficult to understand due to jargon and a writing style that appears to be unnecessarily complicated. Many of these sections are of little interest to the average reader and pose a substantial barrier in terms of the time and attention needed to read through them. The readability of the FMP could be greatly improved by moving these sections to a technical appendix. The section on forest soils in 1.4.3 is an example of text that is difficult to process and ought to be moved to a technical appendix.

> to be much deeper in colluvial hollows, terraces and valley bottoms. Most soils of the area are classified as Inceptisols, and exhibit only moderate degrees of weathering. However, local variation in soil age and biologically mediated geochemical processes cause wide variation in carbon and nutrient accumulation, and depletion of rock-derived weathering products, which shapes patterns of soil fertility (Lindeburg et al. 2013, Hynicka et al. 2013). Similar soils derived from Tyee sandstone in the middle Coast Range support some of the highest accumulations of soil carbon and nitrogen ever reported worldwide, with locally deep accumulations (Perakis et al. 2011, Hunter et al. 2023). Moderately-deep to deep clay loams overlie three-quarters of the ESRF, and primarily support Douglas-fir site class II and III (Biosystems et al. 2003). Oregon Coast Range soils display a very wide range of soil carbon and nutrient accumulation, including some areas of deep soil with some of the highest C contents on Earth (Perakis et al. 2012, 2006)
>
> Forest soils possess highly diverse microbial communities with functional representation from bacteria, archaea, fungi, and animals with all four possessing keystone organisms in a complex and dynamic food web. Microbial-mediated reactive interfaces in forests, such as interrelations and dynamics of fungi, bacteria and roots, affect ecosystem processes ranging from short-term seasonal changes to long-term stand development and responses to global climate change. Studying these dynamics in different forest habitats and stand ages will provide a more unified framework for understanding large-scale ecological-geographical patterns and drivers involved in microbial-mediated biogeochemistry and predicting forest responses to climate change (Li et al. 2023). The ESRF offers abundant opportunities for exploring the complex forest microbiome to advance in-depth knowledge of this vital aspect of forest ecology.

Appendix C: Excerpts from Andy Kerr's November 2020 blog: "An Elliott State "Research" Forest?"

Share or Spare?

There has long been a debate in forestry and conservation circles about whether, given a need for *x* amount of fiber or food (a nonnegotiable number in the discussion), 'tis better to spread the logging or crops broadly across or within the forest landscape ("share") or to concentrate and intensify production in as little area as possible ("spare") and save the rest for nature (Figure 8). While the debate has been long, it's over. For nature, it's best not to share the damage across the landscape but to spare as much of the landscape as possible. In a 2018 paper entitled "What Have We Learned from the Land Sparing-Sharing Model?" scientist Ben Phalan wrote:

The key finding from all empirical studies to date, covering >1500 species, is that most species would have larger populations if a given amount of food is produced on as small an area as possible, while sparing as large an area of native vegetation as possible.

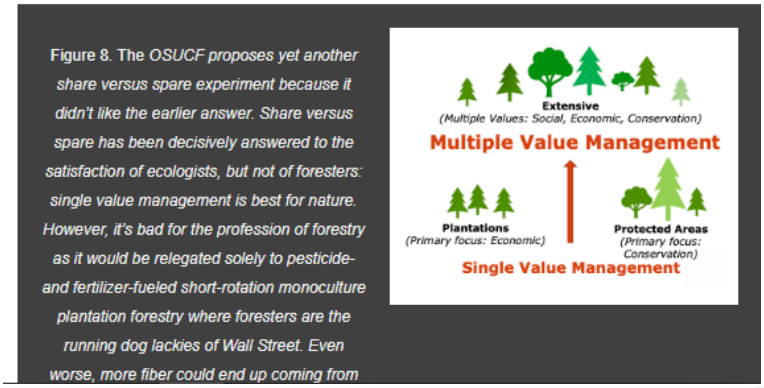


Figure 8. The *OSUCF proposes yet another share versus spare experiment because it didn't like the earlier answer. Share versus spare has been decisively answered to the satisfaction of ecologists, but not of foresters: single value management is best for nature. However, it's bad for the profession of forestry as it would be relegated solely to pesticide- and fertilizer-fueled short-rotation monoculture plantation forestry where foresters are the running dog lackies of Wall Street. Even worse, more fiber could end up coming from*

OSU College of Forestry Competence

Historically, the OSU College of Forestry has been a handmaiden to the timber industry. Much of it—but not all of it—still is. As public attitudes toward forests have changed, so too has the OSUCF. However, the college still houses the last of Oregon's academic timber beasts. Some are unreconstructed and still advocate for short-rotation industrial "forestry" monocultures of endless Douglas-fir. The more dangerous timber beasts are the reconstructed ones, who have learned the modern doublespeak of interdisciplinary, diverse, equitable, and inclusive sustainability, but in their hearts and minds are still stump-centric foresters. To them every solution to a forest problem is logging, albeit kinder and gentler clear-cuts. A telling example is that last year, the OSUCF cut down a 420-year-old tree on the MacDonald-Dunn State Research Forest.

In its defense, the college now has on its faculty some top-notch academics in matters of forest carbon, forest science, and forest fire. All of them have been pissing off Big Timber by stating inconvenient truths: that timber plantations burn more severely and are a bigger threat to communities than real forests, that the solution to taking excess carbon out of the atmosphere is not long-lived wood products but rather long-lived forests allowed to grow naturally old, that timber plantations are biological deserts, and the like.

As far as a potential ESRF is concerned, this old guard has assiduously avoided engaging the new guard in developing the OSUCF ESRF proposal. The result is that the most relevant research questions (regarding, for example, carbon storage and sequestration) are not being acknowledged, while these production foresters are seeking once again to prove that one can have their forest and log it too. To their minds, with just the correct kind and amount of logging that only the forestry priesthood can conjure, species need not go extinct, water quality can be adequate, and recreation can be tolerable.