

Rebirthing Oregon's Elliott State Forest

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Abstract

Public land policies and their real-world results give rise to much conflict. Within these land controversies lie familiar American examples: Hetch Hetchy of Yosemite Nat'l Park, California or the Bears Ears Nat'l Monument, Utah. In the state of Oregon, described as the “environmental ground zero of the timber industry,” the Elliott State Forest is the most recent of such public land controversies. I examined the Elliott’s story, from its inception to its current state, with the intention of finding specific management solutions to solve the Elliott State Forest controversy and, to a lesser extent, answering the question: *How can public lands stay in public hands?* In the process, I uncovered some of the most bitter and long-standing disputes among governing bodies, the public, industry, and other key stakeholders. Using ArcGIS and publicly available data on land ownership, endangered species, and sensitive landscapes, I pinpointed public lands in Oregon that could be legally exchanged for the Elliott, effectively releasing the obligations of the forest to maximize timber revenues. Through interviews with the Elliott’s diverse stakeholders and a comparative analysis with similar land exchanges, I confirmed the high feasibility of an Elliott State Forest land exchange between state and federal governments. At the surface, the Elliott controversy resembles a classic standoff between environmentalists and corporations, and while this simple narrative helped establish many of our most cherished national treasures in the past, the great irony here lies in the disservice of this narrative to the true work of modern environmental studies.

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Acronyms

Acronym	Meaning
AOCC	Association of O&C Counties
BLM	Bureau of Land Management
BWCA	Minnesota Boundary Waters Canoe Area
CSF	Common School Fund
EMP	Elliott State Forest Management Plan
ESF	Elliott State Forest
FAO	United Nations Food and Agriculture Organization
HAP	High Aquatic Potential
HCP	Habitat Conservation Plan
NGO	Non-Governmental Organization
NPS	National Park Service
O&C Lands	Oregon & California Lands
ODF	Oregon Department of Forestry
PNW	Pacific Northwest
SITLA	Utah School and Institutional Trust Lands Administration
SLB	State Land Board
USFS	United States Forest Service

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Background

Publicly-owned land appears in myriad shapes, sizes, landcovers, jurisdictions, and histories across the globe (Mather, 1990). Globally, publicly-owned forests – a subset of public lands – permeate the borders of nearly every country (figure 1); according to the Food and Agriculture Organization of the United Nations 2015 Global Forest Resource Assessment, publicly owned forests accounted for 76% of global forestland (FAO, 2015).

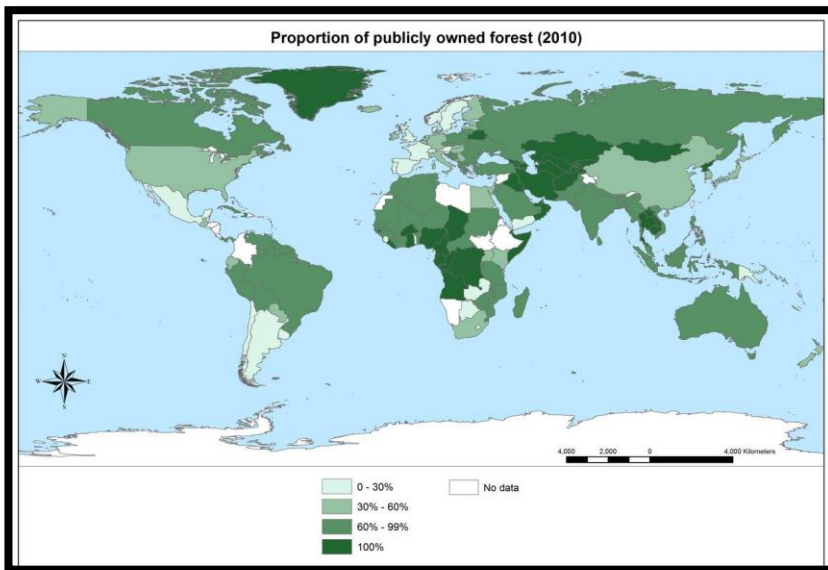


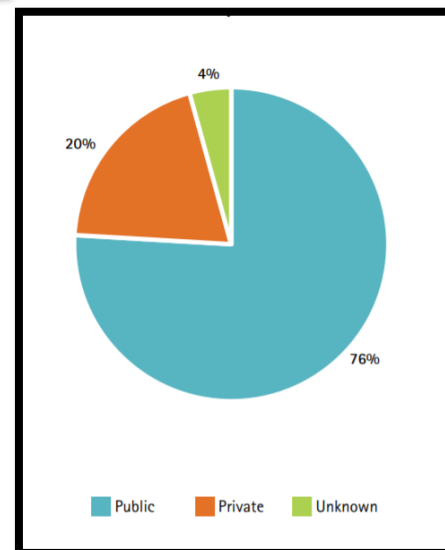
Figure 1 (above): Global extent and proportion of public forests. Source: FAO, 2015

Figure 2 (right): Global forest ownership in 2010. Source: FAO, 2015

neo-liberalism movement and is closely related to other forms of public resource privatization, such as health care and prisons (Klein, 2007). Global trends for public forests indeed foreshadow a continual reduction of public ownership and increase of private ownership (FAO, 2015).

While many instances of public land and forest privatization go largely unnoticed, some examples of attempted “land grabs” of public land have encountered substantial opposition, most often by the public themselves (the theoretical owners of “public” land). The sale of portions of the Karura National Forest in Kenya for instance, led to an unprecedented level of nationwide public outcry against government corruption (Maathai, 2012) (Klopp, 2000). In the United States, recent efforts by primarily Republican lawmakers attempt to transfer federal lands to state ownership, a move that often results in the sale of the land parcel to private entities (Jakus et al., 2017). Examples of public outcry against the privatization of public lands in the USA abound, from Alaska’s National Arctic

The diverse policies we use to manage these public lands and forests, not to mention their real-world results, are astoundingly complex and give rise to much conflict stemming from the classic and fundamental “tragedy of the commons” problem (Hardin, 1968). The privatization of public lands is one option for remedying the problem of the commons; however, many modern-day instances of privatization of public land represent the larger global



Wildlife Refuge to Hawaii's many culturally-significant sites (Naone Hall, 2017) to Minnesota's Boundary Waters Canoe Area to Utah's Bears Ears National Monument. On a broader scale, I ponder the future of global public lands in the face of land grabs by private entities and corporations. *The crux of my research remains: how can public lands remain in public hands?* Within this broader question, my research focuses on the logistics of a specific management strategy (federal land exchange) is the best viable option for keeping Oregon's Elliott State Forest under public ownership while balancing diverse stakeholder interests. Before the specifics of my research however, it is crucial to understand the history and framework of U.S. public lands.

Public Lands – A Brief History

The history of public land management in the United States dates to well before the pre-colonial era and appears most commonly as public access rights to natural resources or land alteration for subsistence hunting and gathering (Diamond, 1997). For far too long, the discourse surrounding land in the Americas has ignored the intense relationships and management strategies that First Nations had and have with the land. For First Nations communities near salmon-bearing streams for example, there were intricate rules and regulations – or more accurately, agreements – among users to ensure that the public-access good (salmon) could exist indefinitely (Lackey et al., 2006); collective management focused on dictating the use of key fishing areas, such as the now flooded Celilo Falls on the Columbia River (White, 1996). Within the specific context of public *forest-land*, the popular 20th century and earlier misconception of “pristine” and “impenetrable” American forests, so often romanticized by early Euro-American writers, fades as historical research reveals sometimes-intense management of forestland by First Nations (Diamond, 1997) (Williams, 1989) (Robbins, 1997). It is crucial to note that these traditions and activities of public land use continue to this day, with current First Nations communities across the Americas. Indeed, some First Nations communities such as those along the Columbia River currently manage public resources (in this case, salmon) with higher success than federal or state governments (Anderson, 2017). It is, however an underestimation to say that the change of public land use from pre-colonial to colonial era America was dramatic (Sherow, 1998).

The *dominant modern* public forest management story in the United States began in the two centuries spanning 1600-1800 as European settlers converted the existing landscape into agricultural land and created a commercial logging industry and economy and commodified land (Williams, 1989). In larger land purchases by the subsequent United States government, publicly-owned land was privatized and eagerly handed off to Euro-American settlers as they – and deforestation at the hands of the commercial logging industry – encroached westward to the west coast. As the conclusion of the 19th century drew nearer though, discussions surrounding the dwindling forestland left in the U.S. took a front-line stance in the debate over how to manage public lands:

The nature of the inquiry into forest depletion became more complicated... if only because it slid easily and naturally into a debate about forest preservation and conservation. In all its wonderful variety, richness, and size, the forest had many different users and admirers, each with his or her own view about its utilization and future.... and there was a federal government, which was becoming conscious that it owned and even had a responsibility for land that was timber-covered.... Both the aesthetic and the patriotic preservationists inclined toward the idea that mankind needed the forest in order to “re-create” himself, and this concept of recreation

in natural surroundings grew stronger as the century progressed and ultimately was to become perhaps the major mover in national forest policies. (Williams, 1989 p. 394)

By the early 1900's, the future of public forests in the U.S. had changed forever as controversial figures like Gifford Pinchot and President Roosevelt would set aside nearly 90 millions of acres of land as forest reserves, eventually managed as national forests by the Forest Service. The sometimes-instantaneous creation of vast forest reserves in the Northwestern states during Roosevelt's presidency generated public outcry, for the timber activities that would occur under the new land-use policies catered to large corporations than the small-town logger. To this day, these and other public lands (and their purpose for existing) are hotly contested debates in local, national, and even global politics.

In Oregon, the story of public land and extractive industries, namely timber, comes time and time again to the forefront of current state politics. However, it is crucial to bring historical context to these recent developments. William Robbins, an expert in Oregon environmental history, notes that white settlement of the Willamette, Umpqua, and Rogue River valleys in the mid-1800's was transformative to the landscape and notoriously detrimental to the livelihoods of the region's First Nations. Laws like the Oregon Donation Land Law (1850), overcame preceding land laws designed to protect First Nations; these laws could be seen as the catalyst for dramatic land cover and ownership shifts in Oregon:

Valid legal title to land was the centerpiece to settler ambitions, occasionally as a matter of conscience but more often to legitimize those claims in the eyes of larger constituencies - to enhance its market value and to keep other grasping interlopers from interfering with established legal rights. *The newly constructed legal arrangements redefined landscapes that native people had formerly treated as a commons.... Land increasingly became a commodity, a thing of value in the marketplace.* (Robbins, 1997 pg. 83, emphasis added)

Once commodified, land was subject to the forces of the market, specifically the mining and timber markets. In time, this market would extend beyond the nation and enter the global natural resources markets; the demands of this larger audience would entice logging companies to continue ecologically-unsound cutting methods and continually vie for unlogged lands (often public lands). The early days of this chapter also involved public land privatization via government land grants to settlers and railroad companies, most often in the form of one square-mile plots. The events of this era still leave their marks on Oregon's landscape, as could be seen in the checkerboard-patterned BLM O&C land (see fig. 7 on pg. 15).

In the latter decades of the 1800's though, a national conversation on disappearing American forests and natural resource management shifted the priorities of the federal governments. As a result, there was an intense focus on managing public land (forests especially) for current and future lasting benefit. By the mid-20th century though, Oregon's economy was *intricately assimilated* into the global capitalist framework, and severing these economic ties - at this point totally necessary to Oregon's growing population - was unlikely. In 1997, William Robbins writes:

It is important to remember that the conditions and circumstances transforming the Oregon landscape today - as they did a century ago - reflect national and global developments, especially those associated with market and industrial forces. To grasp the transformation that has taken place across the Pacific Northwest during the last two centuries is to know something of relations between the countryside, its urban centers, and distant

constellations of capital and markets. Capitalism has been, in brief, the most powerful determinant of environmental change during the last two centuries. Great expanses of the American West, it should be remembered, including much of the Oregon country, originally developed as urban/industrial, dependent economies centered in mining, agriculture, fishing, and timber. (Robbins, 1997, pg. 302)

Robbins writes of how globalization was physically changing the Oregon landscape. Indeed, while the physical landscape of this state may differ greatly from that of the 1800's or even the 1990's, perhaps today's Oregon is not so different after all; what happens on public land here is both a result and a harbinger of events across the nation and the world. The slew of 1970's environmental legislation, and the widely controversial Northwest Forest Plan of the 1990's, are just a few examples. Indeed, residents here and across the nation *still* struggle with the use (and abuse) of public lands.

Public Lands in the 21st Century

Public land privatization continues today. However, public outcry is a common occurrence in high-media coverage cases of privatization, alluding to the high perceived *existence value* of public land, even if the land does not directly affect the daily livelihoods of protestors. In economic terms, an existence value represents an individual's willingness to pay for the non-use of a resource that may or may not be immediately extractable; for public lands, the existence value represents how much taxpayers are willing to pay for a tract of land to be set aside for preservation/conservation (non-use) vs. be sold off to private entities or subject to extractive industries like timber or mining. Preserving a resource's integrity through non-use defies the very necessities of the modern capitalist system, most relevant of which is the exploitation of natural resources: lumber, minerals, metals, oil, all in potentially massive quantities that quite literally fuel substantial economies and provide many hundreds of thousands of jobs. Why then are public lands revered so highly among residents across the world, especially when the very act of non-use seemingly opposes development?

To answer this question, we must look to the benefits and services that public lands provide. The earliest rationales to assigning some form of public ownership to land may have been to protect hunting, burial, or spiritual practices. While these areas and rationales most definitely still exist, the past three centuries of land management have shifted attention from these "traditional" benefits to the more monetarily-quantifiable world of natural resource economics and eco-system services. Extensive research in this branch of economics studies has revealed the following economic benefits of public lands: water purification and retention, carbon storage, erosion control, species conservation (and its ensuing benefits ex: pollination), revenue generated from eco-tourism (all outdoor recreation from hiking to hunting/fishing), and employment in/directly tied to the recreation and conservation industries (Gantioler et al., 2000) (Rasker, 2017). Of course, these are just a handful of the benefits that stem from public lands. It is important to note though that most of these benefits occur over extended time periods - more simply stated, the benefits of leaving a forest unlogged most often outweighs the benefits of logging it *in the long-term or in catastrophic cases such as when logging an area leads to immediate costly consequences such as landslides.*

A curious phenomenon surrounding public land is its existence value for an individual - or whole communities for that matter - who will never visit the land in question. Examples of this occur nation-wide, most recently in the public outcry against oil drilling in Alaska's Arctic National

Wildlife Refuge. These concerns are in-discriminant of national boundaries, as in the case of a global community bringing light to Amazonian rainforest destruction. For the concerned audience, they likely will never hear the howls of Alaska's wolves or experience the Amazon's astoundingly diverse rainforests, yet somehow these concerns reach and originate from every corner of the globe.

Controversies incited by public land grabs by private entities (and in the international realm, by countries) *call into question the opportunity costs of keeping public land in public hands*. Most often, public land regimes provide direct economic (selective cutting forestry, mining, tourism, etc.), social (outdoor recreational activities, nature therapy, etc.), and eco-system services (carbon sequestration, water purification, etc.) in the long-term as opposed to private land, which typically harbor immense short-term benefits more skewed towards one or two of these factors (Krutilla et al., 1983). The action of the state to designate public ownership to a parcel of land then is to sacrifice the more immediate financial returns on investment: a deliberate move to prioritize the long-term over short-term. It is understandable then that extractive industries like timber may be opposed to the more restrictive land management regimes such as the U.S. National Park Service, an agency that generally prohibits logging on its lands.

In some cases, a tract of public land containing natural resources like timber or oil becomes privatized. Many of these cases complete the privatization process without substantial media attention, but in some instances, a particularly outstanding case dominates national attention and sometimes enters the international realm as in the case of Kenya's Karura National Forest. The controversies that often ensue investigate the precarious balance of government management of the needs of industries, economies, and the larger public.

The modern rhetoric surrounding public lands management is itself a topic that would benefit immensely from deeper research. In today's complicated world of land management controversies, it will no longer suffice to simplify the narrative into the "good" environmentalists vs. the "bad" corporations *when* the situation behooves a more careful explanation. The environmental studies, and its profusion of non-profits, academic institutions, and NGO's, must realize a transition from this over-simplified narrative into an approach that accurately and fairly depicts the circumstances; otherwise, no one - not the environmentalists nor the companies, governments, or public - will truly reap the benefits of public land. The Elliott State Forest controversy is just one in an inadmissibly long list of land management controversies that have suffered from over-simplified narratives.

Within the context of the recent Elliott State Forest controversy in central Oregon, an array of options for the management of this public land have been extensively investigated from privatization to business-as-usual strategies; out of these options though, the transfer of the Elliott State Forest from state to federal ownership presents a balanced array of short and long-term benefits to outdoor recreationalists, eco-system integrity, and industry economies and sets a precedent for the state in the face of shifting public policies and concerning public lands. For a state considered as the "ground zero for the modern environmental movement in the timber industry," the future of the Elliott has the potential of solving decades-old public land controversies and breathing new life into Oregon's environmental struggles and successes.

Situated Context

The Pacific Northwest (PNW) is a colloquial term for the region of the United States that encompasses all of Oregon, Washington, and portions of Idaho and Montana. This region enjoys a relatively intact and contiguous natural landscape. While this landscape has been under various human influences dating to First Nation fire-burning (Williams, 1989), this region still contains habitat for many species of political and economic interest: Northern Spotted Owls (*Strix occidentalis*), Marbled Murrelets (*Brachyramphus marmoratus*), and Pacific salmon (*Oncorhynchus sp.*), to name a few. Much of this region is publicly owned, either by the state or federal governments, under varying management regimes from the preservation-minded National Park Service, to the multiple-use rhetoric of the Forest Service and state agency equivalents.

The rural communities and counties, many previously dependent on resource extraction industries like timber, surround pockets of major metropolitan areas. State legislation activity concerning both rural and urban areas occurs in the metropolitan areas of Salem, OR and Olympia, WA. The unfortunate consequence is that rural communities often suffer from under or mis-representation in state legislative decisions. It is wholly understandable then that when federal and state legislative bodies make crucial decisions about public land use and designation, rural communities are dissatisfied with the decisions, especially when the land in question directly influences the livelihoods of rural communities. Oregon and Washington federally-owned public lands comprise 53.1% and 30.3%, respectively, of total land area, and these figures exclude state-owned public lands. Controversies surrounding public lands are not exclusive to federal public lands but also include these equally important state public lands.

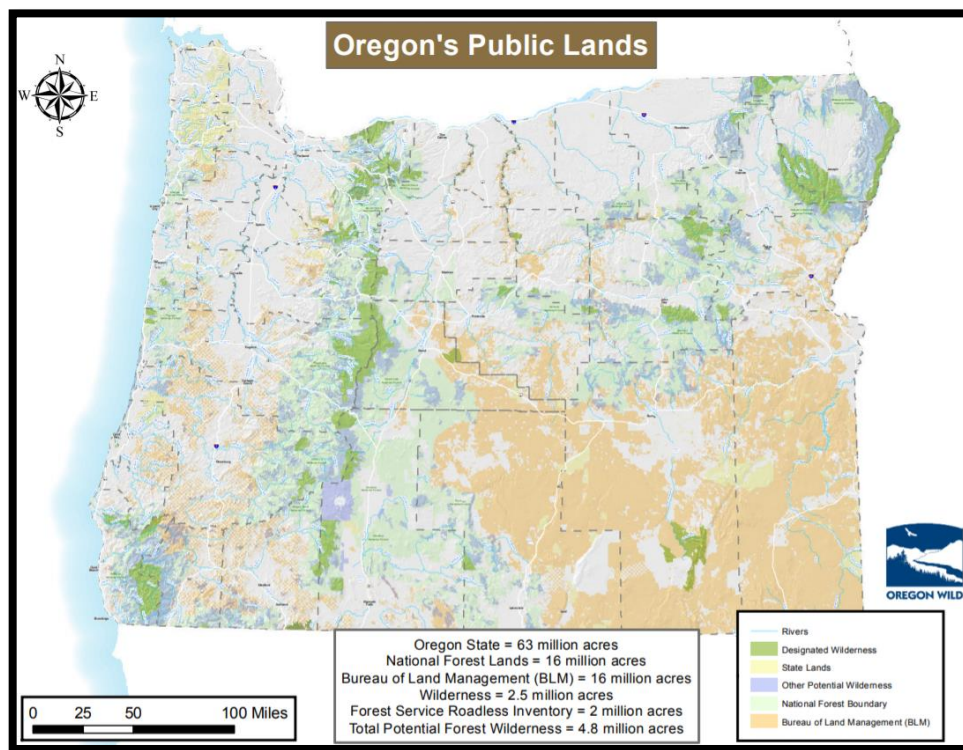


Figure 3: Land ownership of Oregon's public lands. Note both the extent of public lands and the varying jurisdictions that exist in this state. For my analysis, I looked primarily at BLM (orange) and USFS (dark and light green) lands. Map produced by Oregon Wild, a non-profit educational, scientific and charitable organization for state and national conservation.

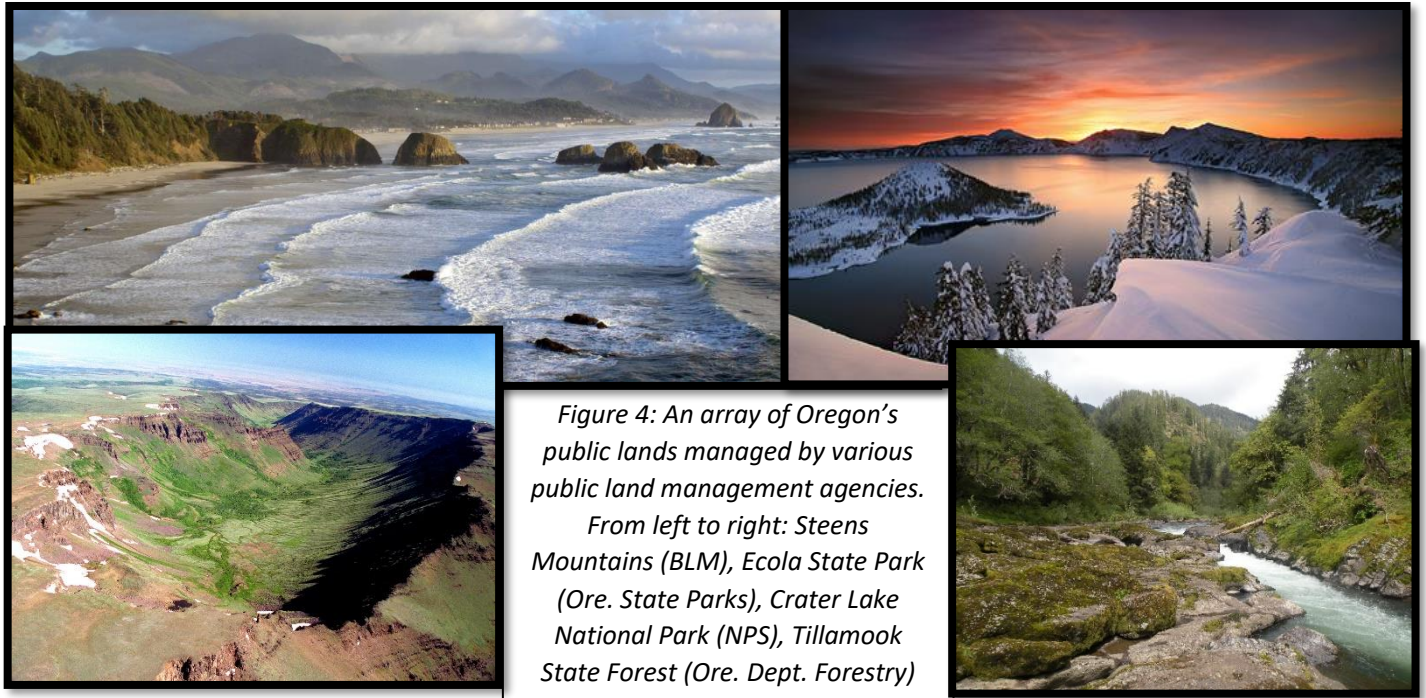


Figure 5: The Elliott State Forest (in red) in context within the Pacific Northwest region of the U.S.

The Elliott

One of these state-owned tracts of public land is the Elliott State Forest (shown in fig. 5), established in 1930 from land previously managed by the adjacent Siuslaw National Forest and currently covering 93,003 acres (376 km²) of mixed-age forest. The area contains patches of forest at different levels of succession, from old-growth to mature second-growth and recently logged. While other nearby forests place large emphasis on recreational use, the Elliott State Forest's (ESF) primary function is to generate revenue for Oregon's public schools through harvesting and selling timber. According to the 2011 Elliott State Forest Management Plan (EMP), the Elliott has contributed an overall \$900 million to the Common School Fund (CSF), which funds Oregon's public-school system.

Starting in the 2000's however, the forest's profits plummeted to the point that Oregon no longer made any profit from timber harvests on the Elliott. Media outlets reported that a slew of litigation from environmental groups restricted or altered logging practices in the

forest. In the face of continuing financial losses, the state created the Elliott State Forest Management Plan of 2011 to balance “...sustainable timber harvests and revenue, diverse habitat for native species, properly functioning stream systems, and recreational opportunities” (Ore. Dept. of Forestry, 2011). Despite this plan, a trio of non-profit organizations sued the state government for violating the Endangered Species Act by logging marbled murrelet habitat. The state cancelled timber sales as a result, and overall timber harvest dropped from 40 million board ft/yr to 15 million board ft/yr.

In June 2016, the state announced its plans to sell the Elliott, with the sole bidder being the combination of the Lone Rock Timber Company and the Cow Creek Band of Umpqua Tribe of Native Americans. However in May 2017, a last-minute decision by the State Land Board (SLB), the trustees of the ESF, kept the forest under public ownership; currently, the state is temporarily relaying \$100 million to Oregon taxpayers to cover for the lost money and the Elliott’s economic obligations (Ore. Dept. of State Lands). A summary of the Elliott State Forest Controversy is shown in the actor-network infographic below, with additional background relationships.

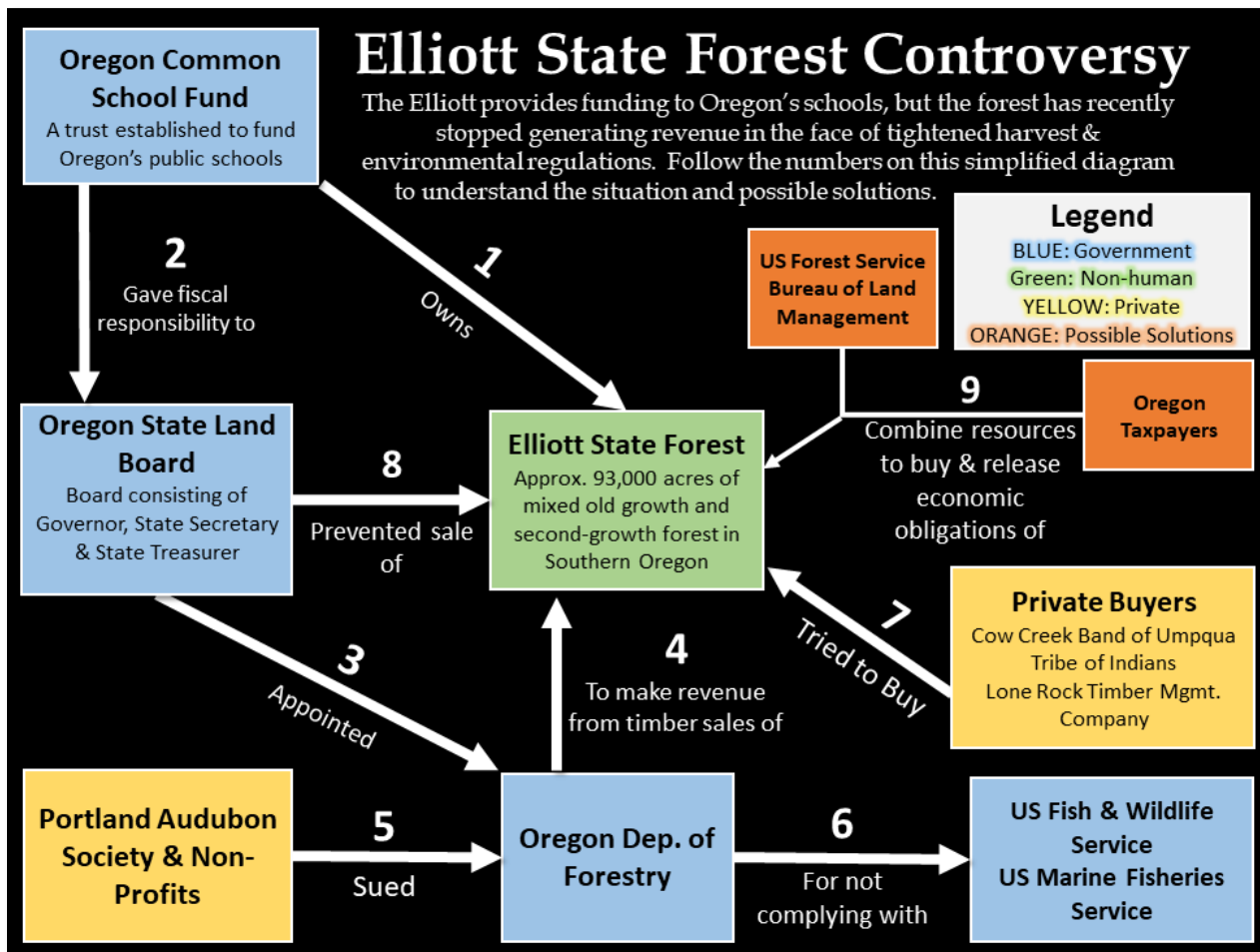


Figure 6: An easy-to-follow infographic and actor-network map of the Elliott State Forest Controversy. Please note that this diagram does not aim to assign value to any one stakeholder but solely aims to tersely summarize crucial events up to 2017 regarding the Elliott.

The future of the Elliott is still unclear, as those for and against selling the land vie in the age-old battle of private and public lands management. Significant work by state agencies and environmental consulting firms have examined the various potential management options for the Elliott. The two most popular include state retention of the forest for logging (business as usual) or its sale to private entities. The latter however, has already met significant (and costly) resistance by the public, and the former necessitates the costly creation of Habitat Conservation Plans (HCP's) to account for logging in land that hosts various endangered and sensitive species. Other management strategies like making the ESF a state park are not viable because they do not generate enough economic revenue, which is what the state is obligated to do with the forest under its current ownership.

Another option that has been mentioned in the crucial 2014 alternative management report is the transfer of the Elliott to federal ownership either through a direct sale or exchange for equivalent federal lands (Ore. Dept. of State Lands, 2014). This option, which holds substantial potential, already has many successful examples, such as the Minnesota's Boundary Waters Canoe Area Wilderness land exchange and numerous others. Federal land trading and acquisition follows an established protocol that allows the federal land management agencies like the Forest Service (**USFS**), the National Park Service (**NPS**), or the Bureau of Land Management (**BLM**) to legally acquire ownership of lands. Transferring ownership of the Elliott to these federal agencies is an option, but the state must consider its first priority: to maximize revenue from the Elliott. The biggest challenge thus, is how to maximize revenue (and cut losses) *and* balance the interests of public and private entities.

The O&C Lands

The **BLM** owns several million acres of checkerboard-patterned, fragmented land across vast swaths of western Oregon (see fig. 7 pg. 15); collectively known as the **O&C Lands** (Oregon and California Lands), this patchwork of federal forestland is a remnant of an archaic attempt by congress to promote development in western states during the late 19th century. My research of tradeable lands in Oregon involuntarily steered me towards the "O&C lands" to a frequency that necessitated a deeper understanding of this crucial side story. Therefore, a brief background on these lands follows:

In the late 1800's, the U.S. Congress passed the Oregon and California Railroad Act of 1866 and opened up federal land to railroad companies. While originally meant to help fuel a railroad link between San Francisco and Portland, the O&C lands were sold off in large tracts to many private buyers, most of whom promptly resold the land to timber companies instead of settling it (as intentioned by Congress); in reaction to this land fraud and rapidly declining American forests, Congress passed the 1916 Chamberlain-Ferris Act, which reinstated federal ownership of the lands to prevent any further land grabs, followed by the 1937 O&C Revested Lands Sustained Yield Management Act. From then on, the O&C lands had provided substantial economic benefits to the surrounding Oregon counties via timber harvests.

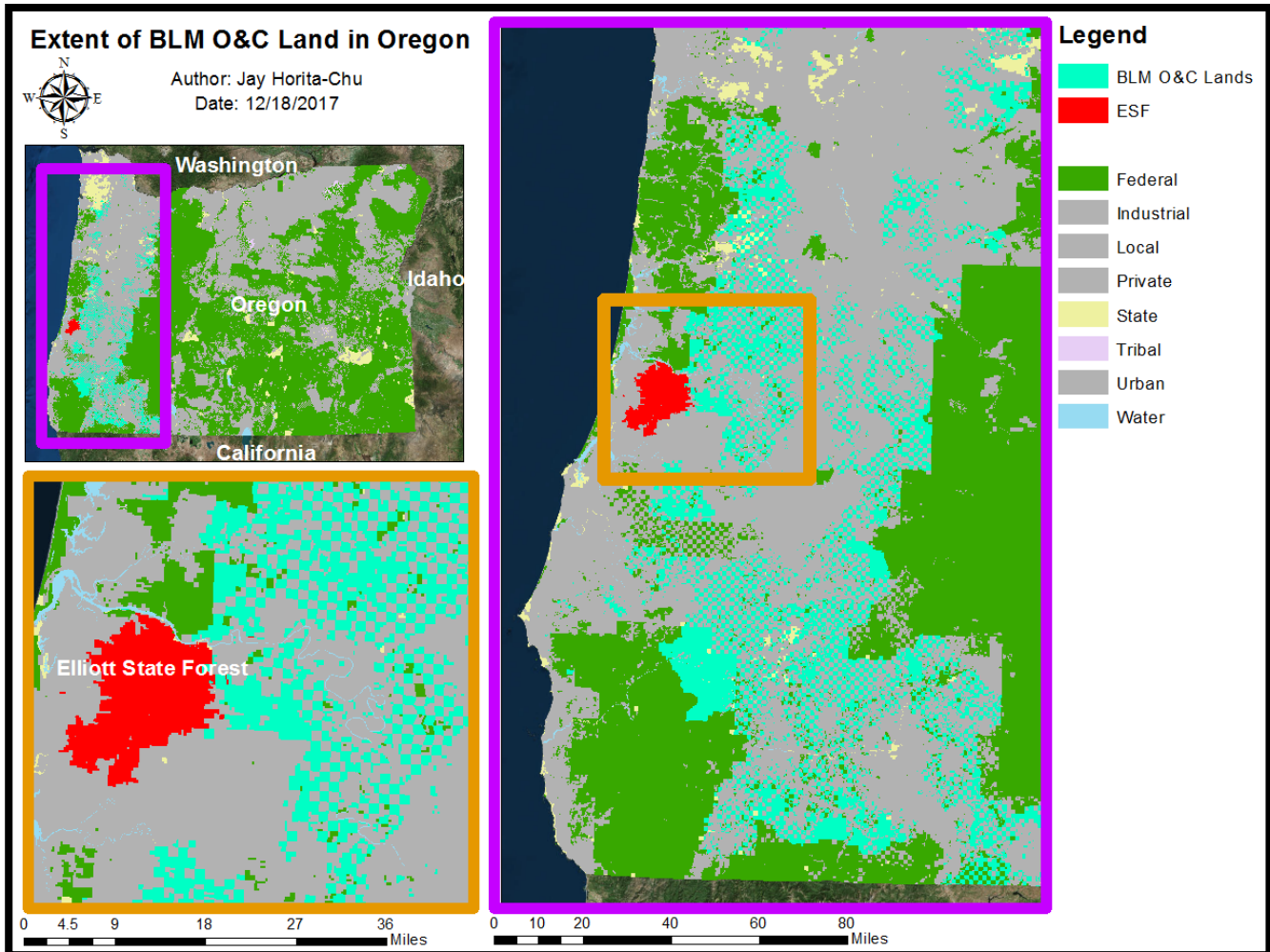


Figure 7: A three-part map showing various land ownership in Oregon. The Elliott State Forest is highlighted in red. Of note is the contiguous nature of certain federal lands vs. the fragmented BLM O&C lands.

Unfortunately, the O&C lands have become a modern land management controversy themselves. Since the inception of white settlement in Oregon, the timber industry has been crucial to the economies of most rural communities, and this historic precedent has held true to the current day with many rural counties. Various federal laws and policies before and since the 1990's Northwest Forest Plan have continually reduced the overall timber harvests occurring on O&C lands. Because many counties have, over the decades since the 1940's, grown financially dependent on timber harvests and federal grants, these falling timber harvests have heavily impacted the capacities of AOCC counties to fund basic amenities like law enforcement, medical facilities, and schools. The current controversy surrounds the BLM's management of these lands; as a gross simplification, the BLM prefers to keep lands under certain thresholds of timber harvest while the AOCC wishes to raise that threshold while keeping the lands under a "Sustained Use" system. Both sides claim that their respective estimates on timber harvest are more "sustainable." Adding to this tension is the expansion of the Cascade-Siskiyou National Monument onto O&C lands, a designation made by

former president Obama. Even further complicating the situation is the presence of “Controverted Lands,” which are tracts of USFS land that were erroneously designated as part of the O&C lands. While I have left much out of the long controversial history of the O&C and Controverted lands, further complications will no doubt arise with the current administration, which announces revisions to shrink the Cascade-Siskiyou and other national monuments.

Analysis

Sime et al.’s crucial 2014 report outlined three viable options for managing the Elliott: 1) an outright sale to private buyers 2) federal land exchange and 3) creation of an HCP and continued logging activity. Option one was attempted and resulted in major (and costly) public retaliation, and while option three is still possible, the new public spotlight cast on the forest will likely prevent any major timber activities. Therefore, I investigated option two via the essential guiding question: *What are the logistics, costs, and benefits of transferring the Elliott State Forest to federal ownership?* This relatively unexplored management option holds great potential for balancing the interests of a diverse group of stakeholders (Sim et al., 2014). To answer this question, I analyzed the available research to date regarding various facets of the ESF; these include land history, valuation, timber cruises, carbon sequestration, recreational potential, sensitive species presence, and historical timber harvest data (Ecotrust, 2011) (Sim et al., 2014).

Previous research into this option failed to outline any specific exchangeable federal land in Oregon. Using publicly available spatial data on the geography of federally-owned lands, I highlighted potential federal land parcels that could be exchanged for the ESF. Potential candidates for land exchange included lands located in the Siuslaw, Umpqua, and Rogue River-Siskiyou National Forests as well as all Oregon Bureau of Land Management lands. This analysis involved identifying areas of federal forestland that would benefit most from state acquisition, and as such, I cross-referenced federal forestland with endangered/sensitive species presence and fish habitat to avoid areas that would encounter legal complications with environmental laws.

In addition to this spatial analysis, I researched the logistics and feasibility of a federal land exchange by examining standard government documents like the 2016 Interagency Land Acquisition Conference Uniform Appraisal Standards for Federal Land Acquisitions and several case studies including Minnesota’s Boundary Waters Canoe Area and three cases regarding Utah School and Institutional Trust Lands Administration (SITLA) including the creation of the Bears Ears National Monument. These comparisons are discussed in detail in “Discussion” under the sub-section “Comparisons” (pg. 24)

Finally, I conducted informal interviews with relevant stakeholders, such as the Bureau of Land Management, U.S. Forest Service, several Oregon county commissioners, the State Land Board, the Oregon Department of Forestry (ODF) and the Association of O&C Counties (AOCC). In these interviews, I attempted to understand: 1) the main requests and complaints of all the stakeholders 2) how effectively these requests and complaints were addressed by other stakeholders and 3) their opinion on the feasibility of an Elliott land exchange between Oregon

and the federal government.

Results

Spatial

An analysis of USFS lands in Oregon did not reveal any obvious parcels of land that could be readily traded to the state for the Elliott; this is in large part due to the contiguous nature of the USFS land. Controversial lands were also analyzed, but most of these lands also occur within larger contiguous tracts or in major metropolitan areas where local left-leaning politics (see *Interviews* sub-section) would likely prevent logging. The following map shows this spatial and political analysis on Controversial lands:

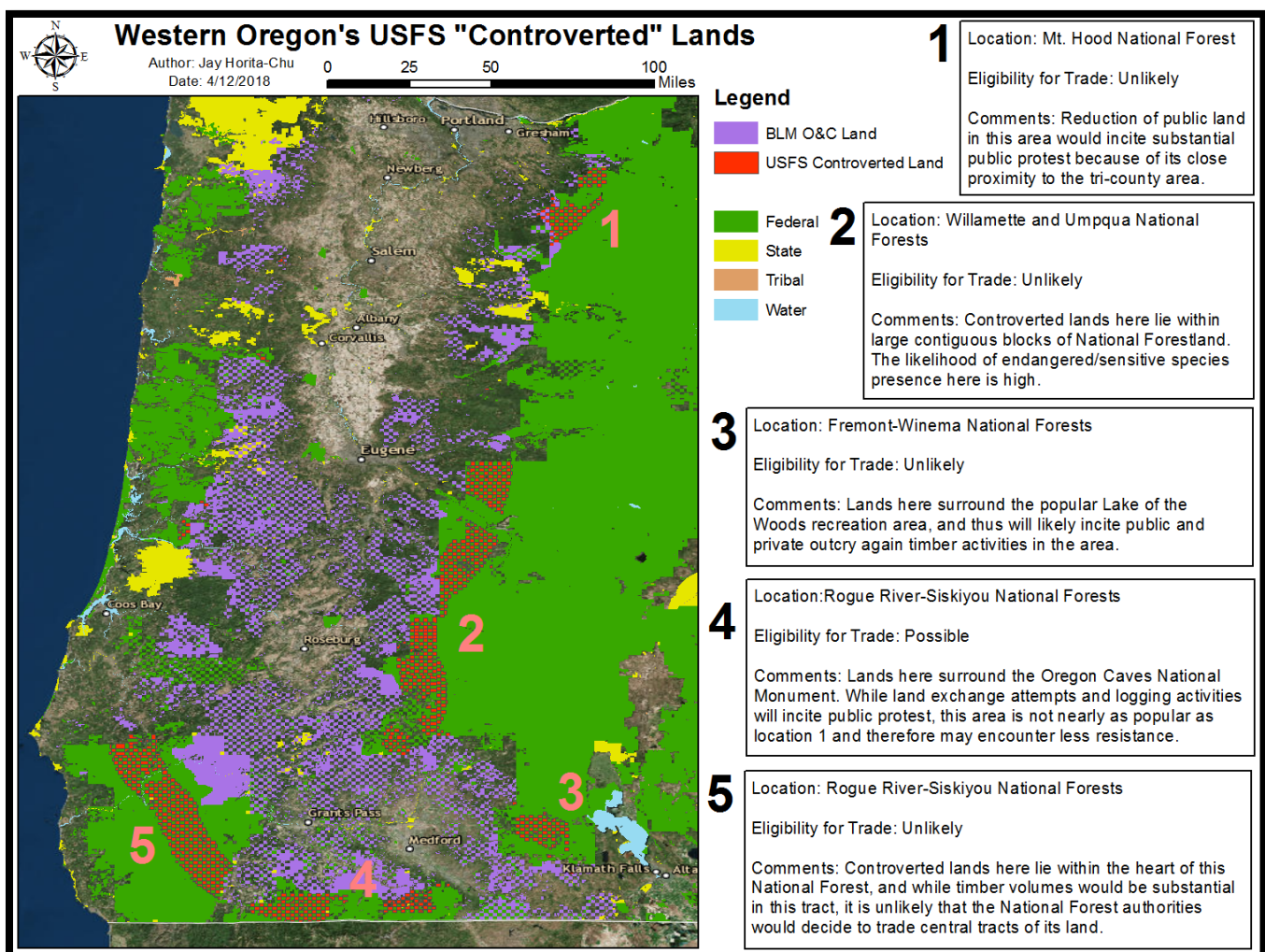


Figure 8: A map examining the feasibility of a federal land exchange involving USFS's Controversial Land (in red). Unfortunately, most parcels would not be likely candidates for an exchange, as explained in the accompanying text according to the assigned number.

Looking to BLM lands, I isolated numerous O&C Land tracts that could be consolidated and traded to the state in exchange for the ESF. To prevent litigation from environmental groups, I specifically chose parcels of land that lay outside of key Northern Spotted Owl territories (Murphy and Noon, 1992); furthermore, I imported data on existing Spotted Owl nest sites and placed 2 mi. buffers (total of $\sim 8 \text{ km}^2$) around each site. According to Murphy and Noon 1992 and other 1990's era studies, Spotted Owls consider more than just forest size in determining habitat suitability. However for the simplicity of spatial analysis, I assumed that owls require a minimum of 4 km^2 of contiguous habitat; to err on the side of caution, the buffers I used were approximately two times these minimum required territories of these owls. Secondly, I placed 200 ft. buffers around each stream that harbored sensitive fish species OR streams that were labeled as High Aquatic Potential (**HAP**) by the BLM; a current state regulation requires placing an area of undisturbed land around each fish-bearing stream, the size of the land buffer being twice the length of the stream's surrounding trees surrounding (Ore. Dept. Forestry, 2012). For most of the parcels I chose, 200 ft. is more than twice the length of the trees found on the land. With both owl and fish habitat buffers accounted for, I summed the areas of the chosen O&C lands to be 167.8 mi^2 (432.5 km^2). In comparison, the total area of the Elliott State Forest is 376 km^2 . Although it is important to note here that a federal exchange of land is *not* based on the areas of land parcels in question, it is regardless important to note that there is more than enough O&C land that could be traded for the ESF. The following map shows the results from this portion of my analysis.

Data sources are as follows: land ownership and known Northern Spotted Owl locations were downloaded from BLM's online GIS Database (<https://www.blm.gov/or/gis/data.php>). HAP data was downloaded from ODF's "Extract GIS Data" tool (<http://www.oregon.gov/ODF/AboutODF/Pages/ExtractData.aspx>). ESF and O&C lands were isolated via land ownership details in the attribute table of the BLM's land ownership shapefile.

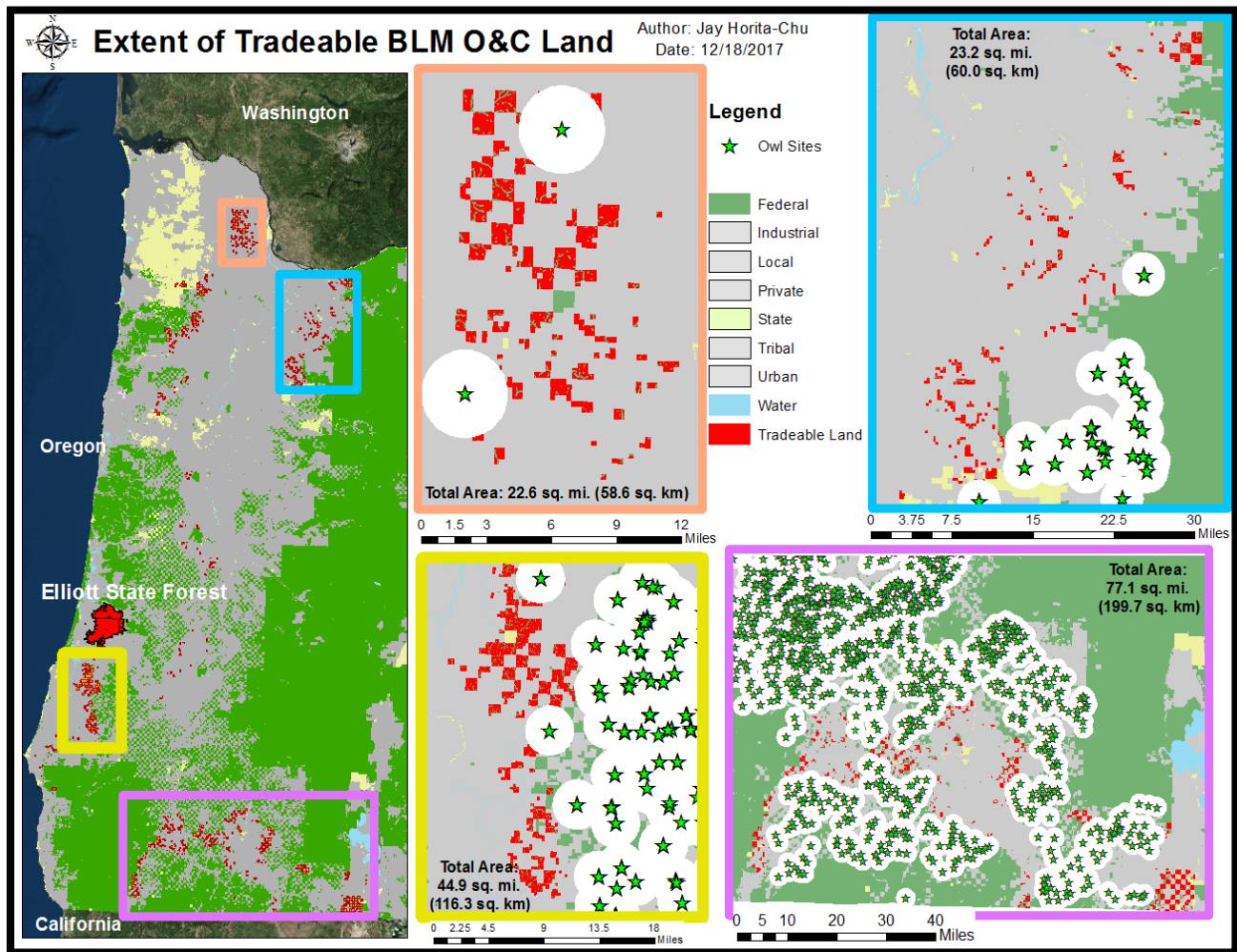


Figure 9: A 5-part map showing the four main parcels of tradeable land (outlined in various colors on the left-most map). Total areas and details of owl nests and fish habitat can be obtained from the four maps on the right.

Interviews

For far too long and far too many times, environmental studies and the work of environmental groups have told an over-simplified story: one of the good vs. the bad, one of the harmonious hippies against the greedy industry, and one that has in certain situations been a *disservice* to balancing interests and livelihoods and, indeed, true environmental work. It is not the topic of my research to critique or define environmental studies and its methodology, but it is my responsibility to hear the complaints and wishes of those involved. Apropos to this, I conducted phone or in-person interviews with several key stakeholders (or representatives of said stakeholders) including: Doug Robertson (Historian at AOCC, previously: president AOCC and Douglas County Commissioner), John Wasiutynski (Director of Office of Sustainability, Multnomah County), Julie Curtis (Public Information Manager, Oregon Dept. of State Lands), and Jules Bailey (previous

Multnomah County Commissioner, Oregon House of Representatives). Primarily, my objective was to obtain feedback on the feasibility of an ESF land. A more comprehensive study would also include interviews with tribal members and other key stakeholders, but the temporal limitations of my research could not provide for these crucial perspectives.

Nevertheless, these interviews proved extremely useful in understanding the nuance, complexity, and inter-connectedness of the Elliott, O&C, and public land controversies in general. Overall, all parties agreed that a lack of compromise in decision-making led to at best an unsustainable or illegal outcome, at worst a long and bitter dispute. What follows is a distillation of the interviews, which ranged from 40 minutes to 1.5 hours.

AOCC w/ Doug Robertson

Out of those interviewed, Mr. Robertson was by far the most knowledgeable in O&C land matters: an expected result thanks to his decades of experience. According to him, the big question then and now remains: “How can we get everyone in the room to agree?” Time and time again, Mr. Robertson has encountered problems with (the absence of) compromise, politics, and over-regulation, and these obstacles have proved successful in thwarting his and his colleagues’ well-intentioned plans for O&C land management. Regarding the Elliott, Mr. Robertson is strict in his stance that the priority of O&C lands is to generate revenue for the counties and that any management strategy that does not achieve this priority will be opposed by the AOCC. A land exchange then must maintain the economic revenue to both the CSF and AOCC, which will be a tricky affair no doubt. However, Mr. Robertson entertained the idea of using Oregon’s “Controverted lands,” 400,000 acres of highly productive lands on USFS land. This land was designated as O&C lands under BLM management by Congress, although the land was already on USFS land; the ensuing land ownership controversy prevented any effective land management, and according to Mr. Robertson, these lands today are “not as heavily managed” as the O&C lands and hold great potential for generating revenue if the CSF decides to acquire them. This land exchange (ESF for the Controverted lands) also manages to solve several problems at once, and further study and research should consider these lands instead of the O&C lands. Mr. Robertson agrees that there is a growing divide between urban and rural views on land management and that this split is partially due to the over-simplification of environmental issues, namely the narrative devolves into an “us vs. them” “good vs. bad” story (with the counties always assuming the “bad” role). Mr. Robertson is adamant about more efficient land management. He points to the failure of federal management agencies through examples such as the prevention of timber activities on “doomed” post-wildfire timber. He believes that local people (a.k.a. the counties) have the expertise, dedication, and desperate economic need to interact with forestlands in a more intimate manner. He believes that Oregon’s complex environmental history, along with its myriad residents representing everything from the staunchest timber-folks to the die-hard environmentalists and everyone in between, meets an even more complex natural landscape. The end result is simultaneously the most exciting, profound, and contested state for environmental work. It may be best to summarize these sentiments with Robertson’s own words: “*The environmental movement on timber, we are ground zero here in Oregon.*”

Multnomah County w/ John Wasiutynski

John provided some much-needed input on the urban perspective of my research. Multnomah

County is one of the most populous counties in Oregon and attracts industries and companies like outdoor apparel company Patagonia with mission-driven goals in sustainability. Wasiutynski believes that Multnomah County leadership's strong stance in favor of preserving public lands helps attract these companies, which substantially benefit the county's economy. Unfortunately, less populated counties of Coos Bay or Curry counties are in dire economic situations as a result of this mindset; preservation for those in Portland may mean the loss of essential public services like law enforcement for those in more rural, public land-dependent counties. Citing Ontario county's implementation of a county sales tax, Wasiutynski claims that rural counties need to invest in other forms of revenue and not rely on public lands for economic support.

Wasiutynski self-identifies as a "die-hard environmentalist" and notes that the majority of Oregonians are in favor of preservation. Regarding the CSF, he believes in increasing education funding but that "no amount of logging will fix this." Logging must be de-coupled from supporting educational costs. He believes that solutions abound in land management, but by far the most challenging aspect is balancing interests. One solution he mentions to help mend the urban/rural divide is to build direct-access markets between the productive rural areas and the consumptive urban areas: examples abound in CSA's (Community Supported Agriculture) and other locally-produced locally-consumed products. Capitalizing on this co-dependency that to a large extent already exists will create opportunities for more cooperative work between urban and rural parties. With this, the hope is that the two parties could more seamlessly solve a variety of issues including land management controversies.

Oregon Dept. of State Lands w/Julie Curtis

Ms. Curtis agrees that "in a perfect world, a land exchange could occur." She emphasized on that fact that in the initial review, the Dept. of State Lands tried to entertain as many proposals for Elliott management that would preserve public and economic benefits. Unfortunately, the only "solution" that was finalized and presented was the outright sale of the forest, which heavily prioritizes private benefits. Ms. Curtis notes that the process to revisit the proposals is now underway again, and she hopes that more diverse solutions will reach the SLB this time. She stresses that if a land exchange were to occur, there must also be benefits to the federal government since they will be acquiring the Elliott and its management costs).

No Current Affiliation, Jules Bailey

While Mr. Bailey has no current affiliations with public service, he is well-versed in Oregon's socio-political realm via his previous career as Multnomah County Commissioner and District 42 seat in the Oregon House of Representatives. Mr. Bailey's commented on the feasibility of timber activities on parcels of O&C land. In response to figure 9, he predicts that socio-political barriers (i.e. public protest) may create complications with the blue outlined area because of its proximity to the Portland metropolitan area. He believes that there would be much less controversy with the orange, yellow, and pink areas primarily because they would provide revenue for counties that desperately need more funding.

Discussion

The ESF's contribution to the CSF is a fraction of the overall investments of the fund, now valued at \$1.4 billion [according to an Oregon Dept. of Lands factsheet](#). Although the Elliott's monetary contributions are nonetheless important, the recent controversies (see section: *Situated Context, The Elliott*) have all but nullified the forest's revenue potential from timber sales; therefore, another solution must be entertained that will appease environmental groups, timber companies, and the Common School Fund. A land exchange is one of the best solutions for balancing the costs and benefits accrued by each stakeholder.

Through my analysis of O&C lands, I outlined 167.8 mi² (432.5 km²) of land that could be traded for the ESF. Timber harvesting on these lands would generate comparable revenue to logging on the ESF with additional benefits (depicted in fig. 10) such as 1) logging unhindered by the presence of endangered and sensitive species 2) no obligation to create costly HCP's and 3) logging occurs on less rugged terrain, which simplifies logistics (i.e. lowers operating costs) *and* prevents potentially destructive landslides and 4) help solve long-standing controversy surrounding the O&C lands. Maintaining public ownership of the forest also manifests important long-term social and environmental benefits, namely 1) public access to the Elliott and its trivial but nonetheless important recreational offerings 2) economic benefits to nearby communities stemming from the ESF's recreational offerings 3) the maintenance of the Elliott's ecosystem services such as carbon sequestration 4) an accurate land valuation of the ESF and 5) public support for government oversight of lands and prevention of costly litigation from environmental groups. Conversely, the primary drawbacks of this option would be the absence of immediate, short-term economic benefits to the state (resulting from a sale of the ESF to private buyers) and a lengthy and expensive land exchange process involving a valuation of BLM's O&C lands. These costs and benefits, along with their relevant stakeholders, are summarized in the following diagram:

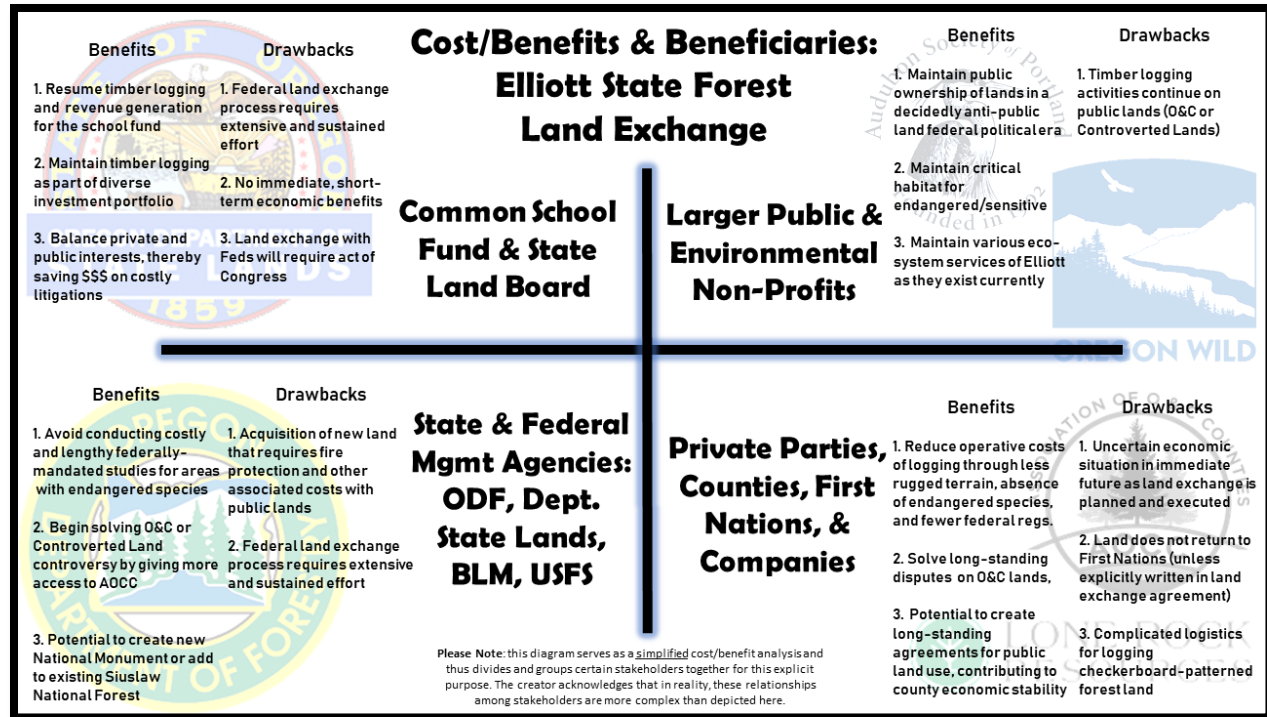


Figure 10: A simplified diagram of the primary benefits and beneficiaries to a land exchange between Oregon and the federal government for the Elliott State Forest. Please note that this is a rough guide and simplification; this diagram alone does not capture the nuance nor the complexity of the situation.

It is crucial to mention that I did not monetize the costs/benefits of a land exchange, primarily because of my lack of expertise in complex economic analysis. However, Sim et al.'s crucial 2014 study nullified the monetary feasibility of many other management solutions such as 1) developing recreation infrastructure 2) energy development 3) carbon offsets and 4) sales to conservation groups. Of their viable solutions, they found only three: 1) full privatization 2) federal land exchange and 3) creation of an Habitat Conservation Plan (HCP). The 2014 study could not consider, however, the 2017 public outcry that resulted from a full privatization option; it is obvious from this 2017 episode that privatizing the Elliott, at least in its entirety, is neither an economically *nor* politically feasible. Regarding the land exchange solution, they state:

Despite [the] potential challenges and objections, the benefits of land exchanges often outweigh those objections. In the ESF's case, the benefits of an exchange are obvious. Exchanges allow lands to be administered by agencies with experience in either conservation or development. They can facilitate wilderness and historical resource protection, enhance recreation opportunities, and improve energy development potential. They encourage consultation and communication between federal, state, local, and private entities. Exchanges also provide an avenue for local communities to determine whether the development potential of land exceeds their conservation value, or vice versa.

The ESF has resources that the public and environmental community desires to protect. This is a strong bargaining chip that the SLB could use in a potential land exchange with the federal government. As noted

above, potential federal parcels to be swapped are many. Finding the exact lands and working out a compromise between the logging industry, environmentalists, recreationalists, the public school establishment, and government officials will not be easy, but it is clearly possible as Utah, Minnesota, and over 250 other completed land exchanges have demonstrated. It is a very strong option for the SLB to consider.

Sim et al. accurately note that a land exchange must be meticulously mediated among the various stakeholders; an ESF - O&C land exchange would be no different. First and foremost, the O&C lands exist to generate revenue for the AOCC counties, and thus any attempt to exchange the Elliott for O&C lands *must* retain the timber revenue base for the AOCC counties; Doug Robertson notes in his interview that without this revenue base for the counties, an Elliott - O&C land exchange would never be supported. If the state were to gain ownership of a portion of the O&C lands then, Oregon *must* honor these financial commitments by drafting new agreements: perhaps the previous O&C land agreements that split timber receipts 50/50 between the federal government (Oregon state government, in this case) and the AOCC counties would be sufficient. These timber receipts from less-restricted state-owned lands have great potential to breathe new life into AOCC county budgets *in addition to* the state budget without the maze of federal rules and regulations. The Elliott, with its new founded public support, is unlikely to produce similar timber receipts even though the forest may have the timber production potential. Additionally, the financial burden of federally-mandated surveys, studies, and reports on the Elliott (currently required before logging continues) can be passed from the state to the more experienced federal government: a relief no doubt to a struggling state budget. Finally, some of these requirements may be deemed unnecessary if the BLM decides to manage the Elliott as a protected area like national monument.

Comparison

To investigate the feasibility of a land exchange outside of the Elliott context, I examined other similar land exchanges. cursory work by the Oregon Dept. of State Lands briefly describes the situation:

The U.S. Forest Service and Bureau of Land Management have been processing a combined average of over 60 land exchanges per year nationwide in recent years, taking from two months to twelve years to complete. Examples cited in a 2014 Strata Policy report included an exchange currently in process between the U.S. Forest Service and the State of Minnesota of 86,000 acres of school trust lands within the Superior National Forest's Boundary Waters Canoe Area Wilderness. In that case, the parties are currently conducting a feasibility analysis which if positive would lead to a National Environmental Policy Act (NEPA) review with multiple opportunities for public review.
-2011 Elliott State Forest Alternatives Project Final Report

Indeed, land exchanges between the federal government and public/private entities have an extensive history and follow established procedures outlined in the standard document Interagency Land Acquisition Conference Uniform Appraisal Standards for Federal Land Acquisitions. Therefore, an Elliott State Forest land exchange would be legally viable *if* stakeholders can justify that this land exchange would best meet the economic obligations of the ESF. Appendix B contains data on BLM land exchanges from FY2006-FY2015.

Mentioned in the excerpt above, The Minnesota Boundary Waters Canoe Area Wilderness (BWCA) is a congressionally designated Wilderness area within the Superior National Forest in northern Minnesota. Surrounded by the BWCA is 86,000 acres of state-owned land that belongs to the state's School Trust, which exists to generate revenue for Minnesota's public schools. Congressionally-designated Wilderness areas prevent mechanized machinery or roads to exist within its boundaries; one can then imagine the logistical complications that would arise from extracting timber or minerals from the 86,000 acres surrounded by the BWCA.

To balance state, federal, and public interests, the USFS is currently processing an exchange of land elsewhere in the Superior National Forest for roughly third of the 86,000 acres; the USFS will buy the remaining two-thirds of the acreage from the state. According to the Superior National Forest's website, this land exchange process benefited from support from Minnesota's government; in 2012, the governor signed a new land bill that allowed the state to sell any surplus land in the BWCA to the USFS and federal agencies. Unfortunately, a more recent controversy on mining leases on lands near the BWCA has gained much attention, and it appears the land exchange has stalled until this situation is resolved. Nevertheless, the similarities between the BWCA and ESF land exchanges are striking. Both involve state-owned lands that cannot fulfill the financial obligations to state school funds; both land exchanges involve state and federal entities; both are impetuses of balancing various interests on public land.

Sim et al. 2014 outline several other examples of land exchanges similar to an Elliott land exchange scenario. Most notable of the examples is a 2014 Utah land exchange between the Utah School and Institutional Trust Lands Administration (USITLA) and the federal government (BLM); this trade balanced previously conflicting interests like 1) Recreation by setting aside iconic areas for public enjoyment 2) Conservation by protecting sensitive areas and 3) Development by allowing developers access to high potential federal land. In another example, USITLA utilized a land exchange to trade "unproductive" land with endangered species for federal land with fewer restrictions. Both of these examples have dilemmas that strikingly resemble the Elliott State Forest Controversy.

Under the BLM, land exchange must follow rules listed in Appendix A, all of which an Elliott land exchange would theoretically meet without issue. While the idea of a land exchange may be simple in nature however, the many hundreds of thousands of work hours invested by stakeholders cannot be underestimated. Any federal land exchange requires immense and continued dedication by those involved, and this will be no less true for an Elliott State Forest land exchange.

Minnesota's BWCA and Utah's USITLA lands join the ranks of countless other land exchanges (California's BLM-Agua Caliente Tribe exchange, Arizona's BLM-ASARCO exchange, etc.), and *these nation-wide exchanges illustrate that a carefully planned land exchange can balance public and private interests and, importantly, serve as another path to keep public lands in public hands.*

Generalization

Perhaps equally as important as the outcome of this controversy is its place in current issues and political climate surrounding public lands. The Elliott example joins the ranks of countless

attempts to privatize public lands across the world, for better *or* for worse. Within a year of my research, the largest “land grab” in the history of the U.S. occurred when President Trump declared an 85% areal reduction to the Bears Ears and Grand Staircase National Monuments – a combined total of approximately 2 million acres of public BLM land. It is both apparent and alarming that the Elliott is not nearly alone in its dilemma.

Sentiments in the U.S. toward public land have fluctuated over the many decades since the realization of public lands. A decade of pro-public land and environmental policies contrast sharply against subsequent periods of hostile sentiment against new public land acquisitions and de-regulation. The 8-year period of the Obama administration was overall a pro-public land era; it saw the creation of 34 national monuments and a grand total of approx. 550 million acres of new public land, the majority of which is designated as marine national monuments. However, the Trump administration provides a sharp contrast, even without the recent de-sizing of the two national monuments mentioned previously. Only a cursory glance at the administration’s influence on public land management and environmental agencies is necessary to discern that our current political climate towards public lands has shifted. The Elliott controversy unfolds during this greater political shift. It is Oregon’s opportunity to counteract or conform with this national trend. Indeed, what is decided about the future of this forest will no doubt portend the fate of other Oregon’s state public lands that will, one day, face the same trials and tribulations.

The O&C land controversy however is one that blurs the line between the traditional environmentalist’s view of good vs. bad. Doug Robertson¹ notes that because of the relentless efforts of the AOCC counties to better manage their lands (for example, via the “Plowback Fund” which reroutes 25% of county timber receipts to fund forest resiliency projects), portions of the O&C lands are some of the “best managed” lands in the nation, if not the world (according to Robertson). These productive lands once formed the basis of county economies, and to this day, the potential for “sustained use” timber production remains high. *To be clear, the AOCC counties are not greedy corporations; they are a careful group dedicated to the health of the forest and the people. With great irony, it is the AOCC counties themselves that are the true proponents of modern environmental studies, not Cascade Wild, the Audubon Society, or others in the “environmental community.”* The blizzard of rules and regulations, in addition to the environmental community’s use of them, acts as a regulatory gillnet that halts mal-intentioned corporations *and*, unfortunately as by-catch, the responsible timber parties as well. The result? Robertson adapts a popular line to the situation: “Forest, Forest everywhere, nor a single tree to cut.” If the environmental movement is to effectively move forward, we must first rid ourselves of our simplified narratives and biases against all industry and companies and begin a new conversation on conservation.

¹ Previous Douglas County Commissioner and previous president of AOCC

Next Steps

The solution to the Elliott State Forest controversy is hindered by competing interests from the private and public sectors, mazes of federal regulations, and politically toxic simplifications of massively complex situations; however, the many thousands of human hours that have been invested in this controversy reveal a consistent theme – a sentiment shared by Oregonians west and east of the cascades. Perhaps no one has stated this sentiment better in formal terms than Roger G. Lord, the state certified property appraiser who authored the crucial land appraisal report of the Elliott:

In 2014, the Department of State Lands undertook an extensive evaluation and public process around future options for the Elliott... Two consistent themes were heard from a wide range of stakeholders: 1) the model of relying on forest land management to generate school funding is outdated, and it is time to decouple or separate decision-making about how best to manage public lands from decisions about how best to generate revenue for schools; and 2) there are many public values associated with the ESF, and ***most believe these values need to be protected regardless of what the Land Board decides about the future ownership and/or management of the Elliott.*** (MB&G, 2016) (Emphasis added)

In the divided political climate of the left and right, liberal and conservative, few examples of true bi-partisanship stand out. Unfortunately, public lands across the U.S. are victim to this liberal-conservative left-right divide and its consequences; the future options of the ESF however hold benefits that would appease parties regardless of their political beliefs. Transferring ownership of the ESF to the BLM (via O&C lands) would keep the Elliott in public hands, a move that would certainly please environmental groups and pro-public land members of the public. A trade for a portion of BLM's O&C lands would allow the CSF to retain land for timber harvesting – something that would benefit local timber companies. The de-coupling of O&C land from federal hands, as opposed as the “environmentalists” may be, would be a step in the right direction for solving the decades-long O&C lands controversy as well. Ultimately, this trade supports both private and public interests and balances the diverse scales of benefits that stem from this forest. Indeed, land exchanges may be one of the best solutions to keep public lands in public hands across the globe. Perhaps what Oregonians must do then to balance competing interests and save the Elliott, is to take this matter to Congress to rebirth these great forests and hills of the Coastal Oregon Range as the Elliott National Monument.

Acknowledgements

As I reach the terminus of my thesis, I am so completely humbled by the many voices of *truly* conservation heroes working across the spectrum of stakeholders; I end my time at Lewis & Clark College with not only cherished memories, a wonderful community of friends and colleagues, and a degree in hand – but with an effervescent force to work on environmental challenges across the globe. While the results of my research may never be fully realized in their intended forms, this experience will be invaluable to my future endeavors as a student and proponent for modern environmental work.

Among the many who have aided me in my journey at Lewis & Clark College and thesis research, I would like to extend special thanks to the following: my environmental studies professors Jim Proctor, Liz Safran, and Jessica Kleiss for instruction, guidance, counseling, and advice throughout my time at LC, my fellow 2018 graduating classmates in the environmental studies program for their support and camaraderie, professors Paulette Bierzychudek, Margaret Metz, and Atsuko Kurogi for instruction and inspiration, all the interviewees for their willingness to inform my research, my family for their support, Kelly Adams Reece and Philip McGovern for helping me start this journey, colleagues Kenny Withee, Mel Finch, Howard Richburg, Marc Blackburn & all my fellow Mt. Rainier Park Rangers, and my friends Madeleine Murray, Giorgio Russo, Claire Duncan-Bernard, Alex Hua & Alex Shinnors, Max, Tim Joo & the Joo family, Amy Trivelpiece, Kate Saylor, Max Shwarzer, Khin Wai, Jack (Long) Wang, Torin Lee, Anya Jacquez, Gabby Lopez & Noam Margalit, Sierra Nelson-Liner, Hannah Harrington, Yuka Kishiue, Shogo Shihota, Amy Natori, Nick Sievers, Kellen Ochi, George Shoemaker, Aitran Doan & the Kohler Environmental Center community, Rachel Aragaki, Izzy Fawson, Simon Anderson, Amanda Tugangui, and of course, my main man, the one-and-only, Mr. Jeremy Joo.

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Appendices

Appendix A: Requirements of Land Exchange – BLM

The following was taken directly from “Basic Rules for Exchanges” section pg. 4

<https://fas.org/sgp/crs/misc/R41509.pdf>

Same State: FLPMA requires that the federal and nonfederal lands in an exchange must be located within the same state.

Public Interest: Land exchanges must be in the public interest. Public land may be exchanged if the Secretary of the Interior determines that the public interest will be “well served.” FLPMA requires that when determining the public interest, the Secretary must consider a number of factors. These factors include better federal land management and the needs of state and local people for economic, community, and recreation purposes. BLM often trades land to achieve better federal land management, for instance, by consolidating ownership and disposing of land that is isolated or difficult to manage. Under BLM regulations, considerations include protection of fish and wildlife habitat, cultural resources, watersheds, wilderness, and aesthetic values; enhancement of recreational opportunities and public access; consolidation of lands to improve development; and expansion of communities. Also, the Secretary must find that the resource values and public benefits of the federal lands to be conveyed are not more than those of the nonfederal lands being acquired. Further, the intended use of the conveyed federal lands should not conflict significantly with management of adjacent federal and Indian trust lands. In making an exchange, BLM must reserve any rights or interests that are needed to protect the public interest and may impose restrictions on the use of lands conveyed.

Equal Value: Under FLPMA, the values of the lands exchanged are to be equal or, if they are not equal, they are to be equalized by the payment of money up to 25% of the value of the federal lands conveyed in the exchange. The parties in the exchange may agree to waive this payment, within limitations, including if it involves not more than 3% of the value of the federal lands or \$15,000. Another way of equalizing value is for either party to add or remove lands. Further, the Secretary of the Interior may exchange lands that are of “approximately” equal value under certain conditions, including if the value of the federal lands does not exceed \$150,000. The appraisal might be performed by DOI appraisers or by appraisers contracted by the department. Often the same person conducts the appraisal of both the federal and the nonfederal parcels in an exchange, although this is not required.

Costs: Typically, BLM and other parties share equally in the administrative costs of an exchange, for instance, by sharing the cost of land appraisal, mineral examinations, and cultural resource surveys and by addressing deficiencies preventing highest and best use of the land. However, the parties can agree that one party may bear costs and responsibilities typically assumed by the other, subject to certain terms.

Assembled Land Exchanges: BLM regulations define an assembled land exchange as consolidation of multiple parcels of federal or nonfederal land for the purpose of one or more exchange transactions over a period of time. An assembled land exchange may be used to facilitate

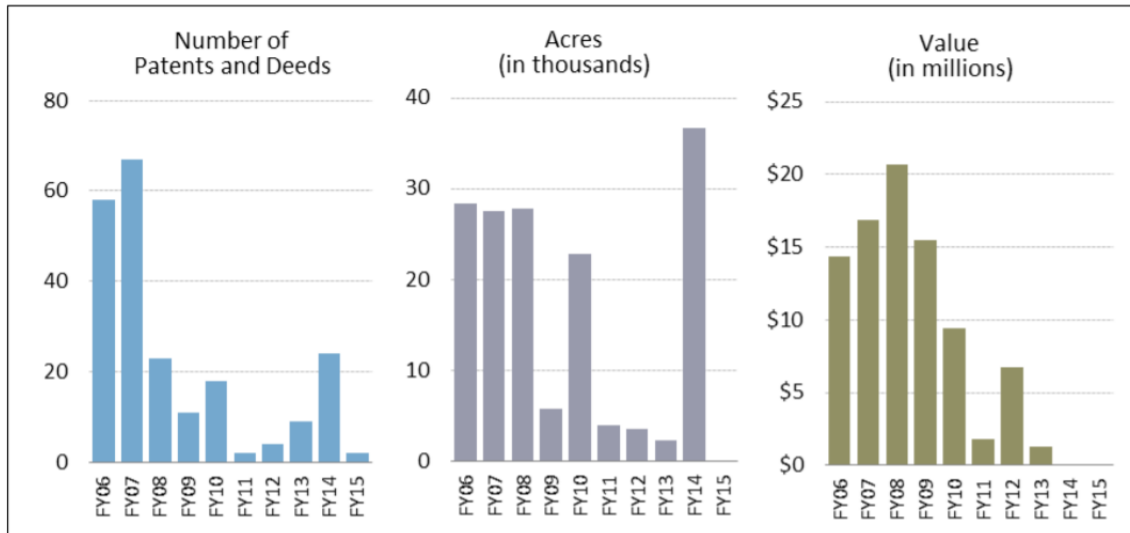
exchanges and reduce costs, for instance, by consolidating many federal parcels of limited value. In other cases, third parties secure lands that BLM wants to acquire from multiple owners to facilitate negotiations. Both for profit and nonprofit organizations have facilitated assembled land exchanges, typically functioning as brokers/agents for the exchange.

Management of Exchanged Lands: Lands acquired by BLM by exchange become public lands and are to be managed under existing law, regulations, and land-use plans. Acquired lands that are within the boundaries of an area having an administrative or congressional designation, such as a national conservation area, become part of that unit or area and are managed accordingly.

Appendix B: BLM Land Exchanges FY2006-FY2015

Both tables were taken directly from the Congressional Research Service’s “Land Exchanges: Bureau of Land Management (BLM) Process and Issues” by Carol Hardy Vincent, dates 2016.

**Table 1. BLM Land Patented or Deeded Out by Exchange
(FY2006-FY2015)**



**Table 2. Nonfederal Land Acquired by BLM by Exchange
(FY2006-FY2015)**

