

Board of Forestry
July 22, 2020



2021-2023 Agency Request Biennial Budget Approval

James Short & Bill Herber

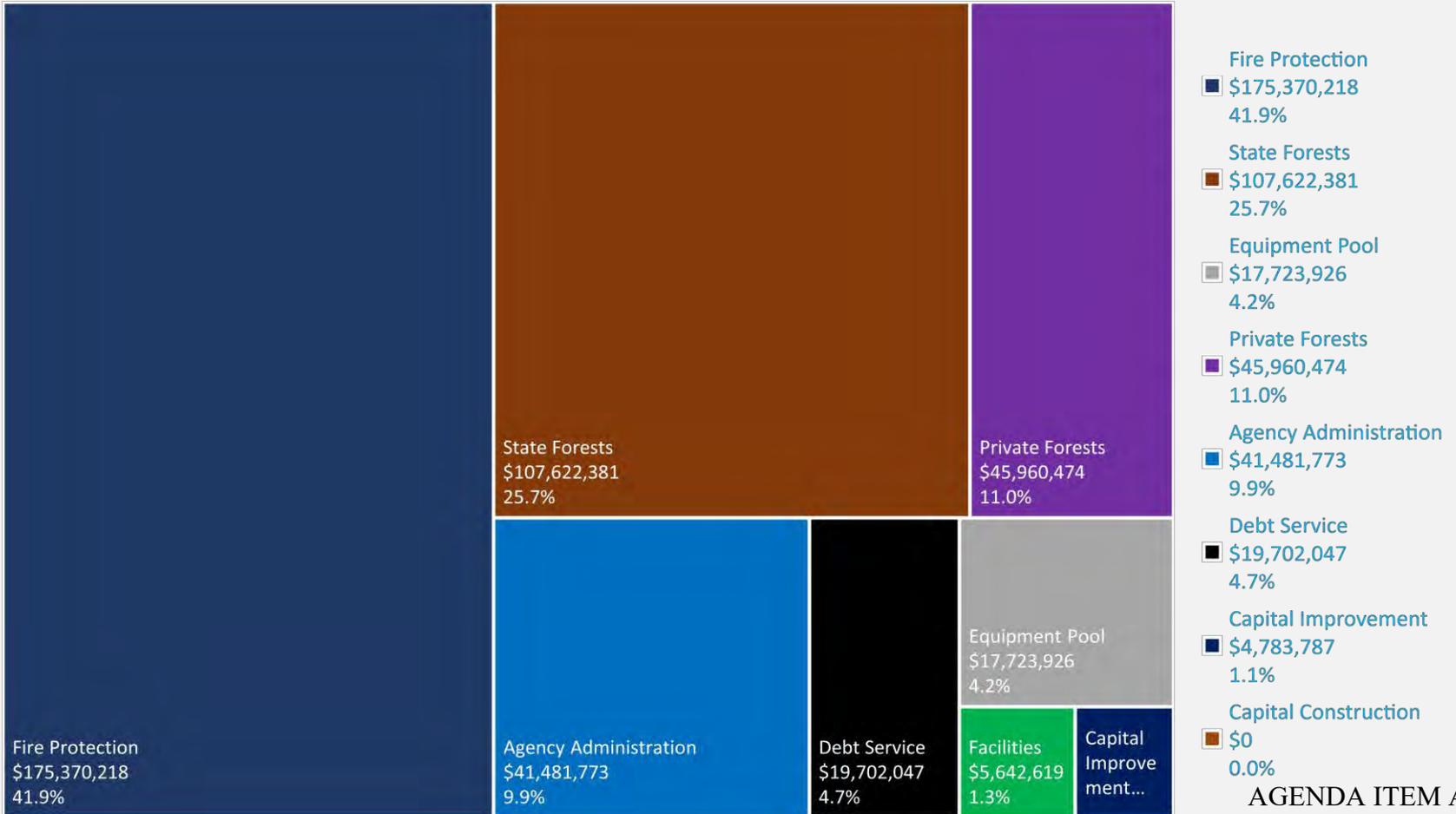
AGENDA ITEM A
Attachment 1
Page 1 of 14

The Biennial Budget Development Process

- The 2021-23 budget process has four major phases:
 - Agency Request Budget (ARB)
 - Governor's Budget (GB)
 - Legislatively Adopted Budget
 - Legislatively Approved Budget
- The Board and Department are currently in the Agency Request Budget phase.

2019-21 LEGISLATIVELY APPROVED BUDGET

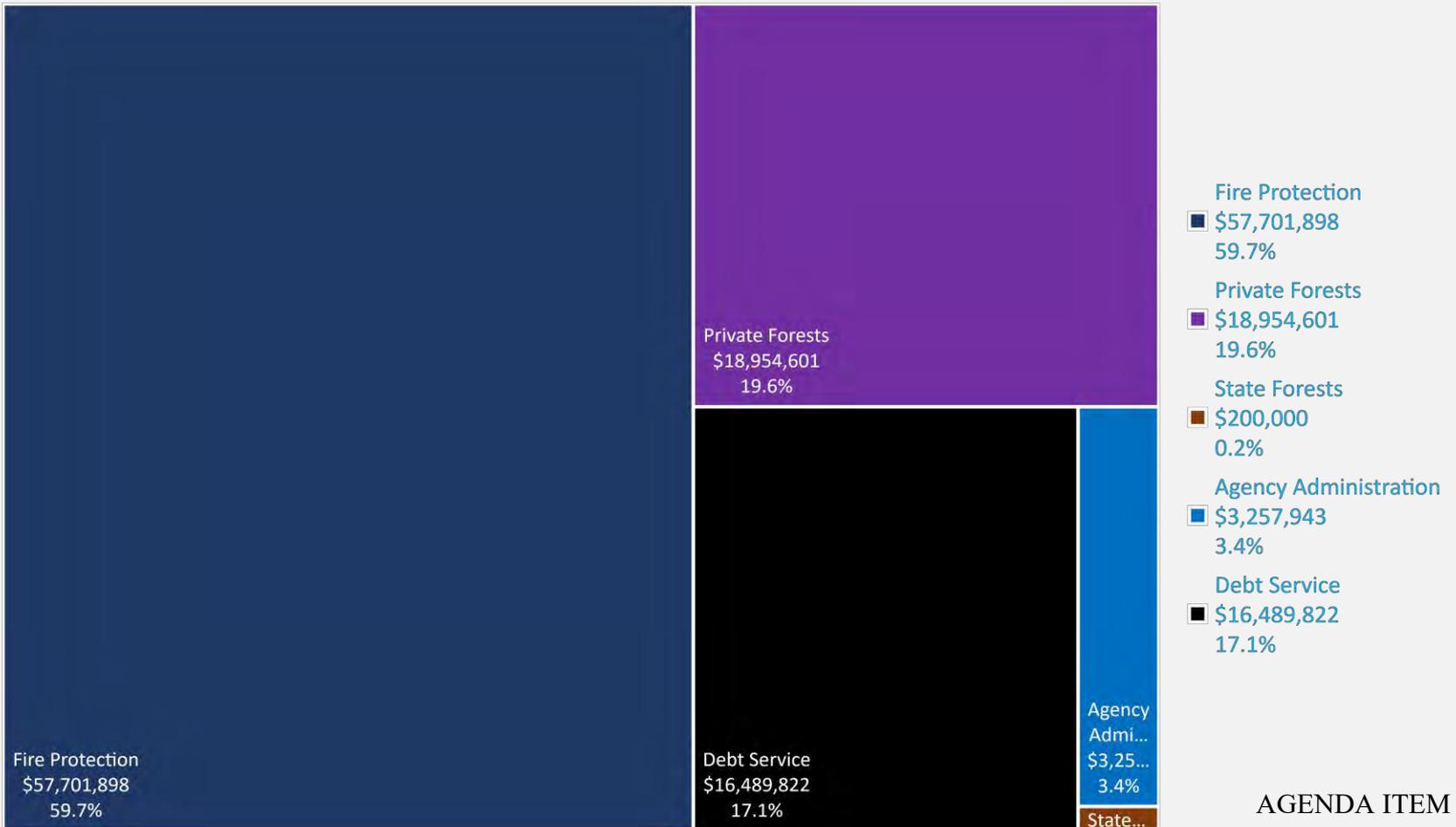
by Program Area (Total \$418,287,225)



AGENDA ITEM A
Attachment 1
Page 3 of 14

2019-21 LEGISLATIVELY APPROVED BUDGET

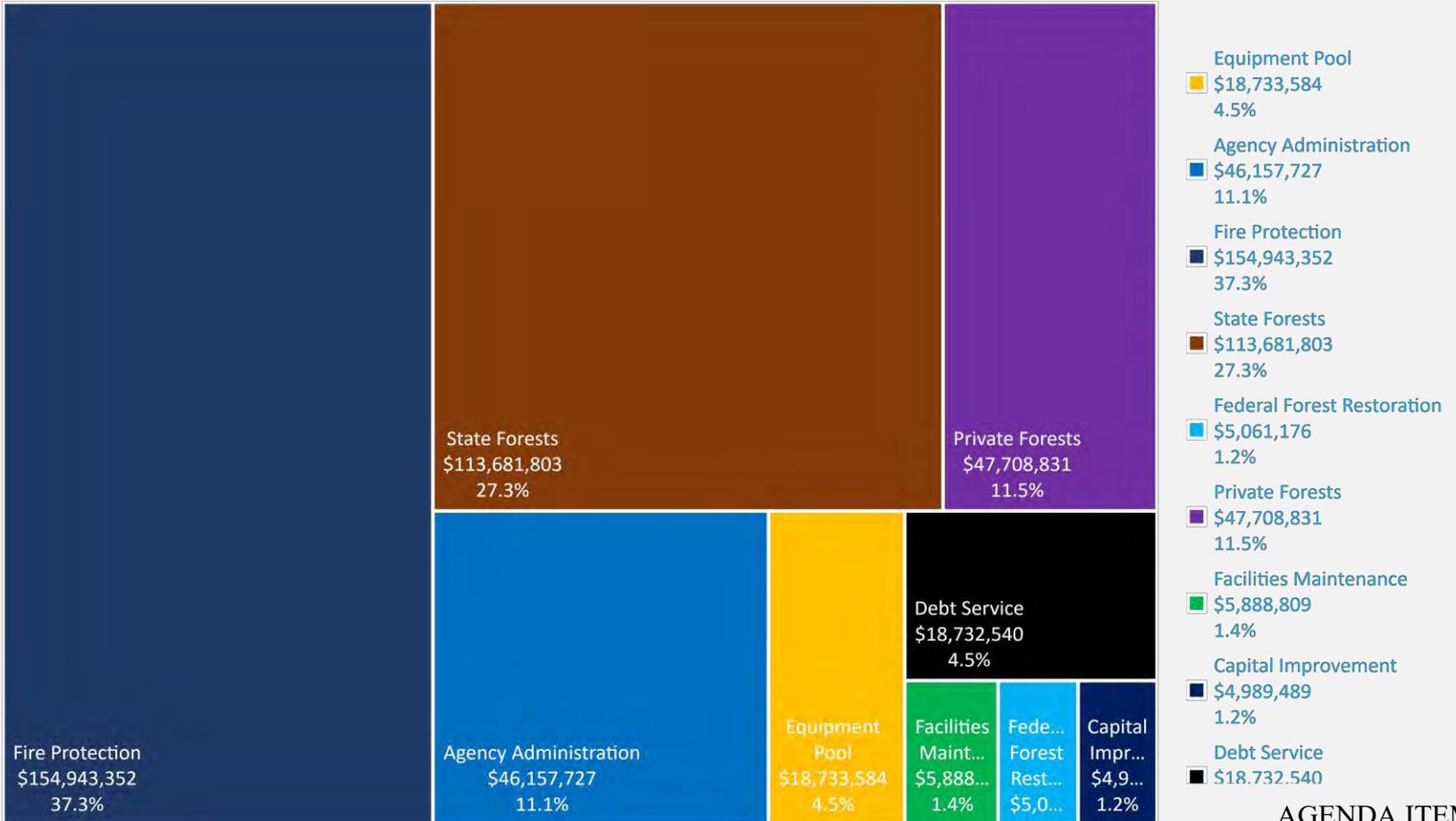
General Fund by Program Area (Total \$96,604,264)



AGENDA ITEM A
Attachment 1
Page 4 of 14

2021-23 CURRENT SERVICE LEVEL

by Program Area (Total \$415,897,311)



AGENDA ITEM A
Attachment 1
Page 5 of 14

2021-23 ARB Policy Enhancement Packages

Priority Rank	Policy Enhancement Package	Program	Description	Amount & Fund Type					FTE
				General Fund	Lottery Funds	Other Funds	Federal Funds	Total Funds	
1	100	Fire Protection	Fire Season Severity Resources	\$ 8,000,000	\$ -	\$ -	\$ -	\$ 8,000,000	0.00
2	172	Agency Admininstraion	Diversity, Equity, & Inclusion	\$ 238,738	\$ -	\$ 452,433	\$ -	\$ 691,171	2.00
3	101	Fire Protection	Organizational Sustainability & Modernization	\$ 6,466,865	\$ -	\$ 232,248	\$ -	\$ 6,699,113	28.47
4	150	Private Forests	Supporting Sustainable Family & Community Forestry	\$ 1,658,501	\$ -	\$ 1,105,647	\$ -	\$ 2,764,148	12.00
5	173	Agency Admininstraion	Administrative Modernization	\$ 774,716	\$ -	\$ 1,468,168	\$ -	\$ 2,242,884	7.00

2021-23 ARB Policy Enhancement Packages

Priority Rank	Policy Enhancement Package	Program	Description	Amount & Fund Type					FTE
				General Fund	Lottery Funds	Other Funds	Federal Funds	Total Funds	
6	171	Agency Admininstraion	Firefighter Life Safety	\$ 1,098,568	\$ -	\$ 526,501	\$ -	\$ 1,625,069	2.00
7	130	State Forests	Recreation, Education, & Interpretation	\$ 6,704,557	\$ -	\$ (6,576,318)	\$ -	\$ 128,239	0.50
8	160	Partnership & Planning	Forests Climate Change Mitigation & Adaptation	\$ 3,227,675	\$ -	\$ -	\$ (305,565)	\$ 2,922,110	9.00
9	161	Partnership & Planning	Implementing Shared Stewardship	\$ 3,127,396	\$ -	\$ -	\$ -	\$ 3,127,396	19.00
10	151	Private Forests	Forest Practices Act Effectiveness & Implementation	\$ 1,430,846	\$ -	\$ 953,894	\$ -	\$ 2,384,740	7.00

2021-23 ARB Policy Enhancement Packages

Priority Rank	Policy Enhancement Package	Program	Description	Amount & Fund Type					FTE
				General Fund	Lottery Funds	Other Funds	Federal Funds	Total Funds	
11	174	Agency Administration	Facilities Capital Management Program Capacity	\$ 558,524	\$ -	\$ 1,058,461	\$ -	\$ 1,616,985	5.00
12	102	Fire Protection	Next Generation Severity	\$ 20,000,000	\$ -	\$ -	\$ -	\$ 20,000,000	0.00
13	152	Private Forests	Expanded Capacity for Sudden Oak Death Program	\$ 6,882,603	\$ -	\$ -	\$ -	\$ 6,882,603	9.00
14	175	Agency Administration	Toledo Facility Replacement Extension	\$ 64,310	\$ -	\$ 1,764,358	\$ -	\$ 1,828,668	0.00
15	170	Agency Administration	Deferred Maintenance	\$ 516,202	\$ -	\$ 4,885,000	\$ -	\$ 5,401,202	0.00
			Legislative Policy Enhancement Packages at ARB	\$ 60,749,501	\$ -	\$ 5,870,392	\$ (305,565)	\$ 66,314,328	100.97

2021-23 AGENCY REQUEST BUDGET

Policy Enhancement Packages by Fund Type (Total \$66,314,328)



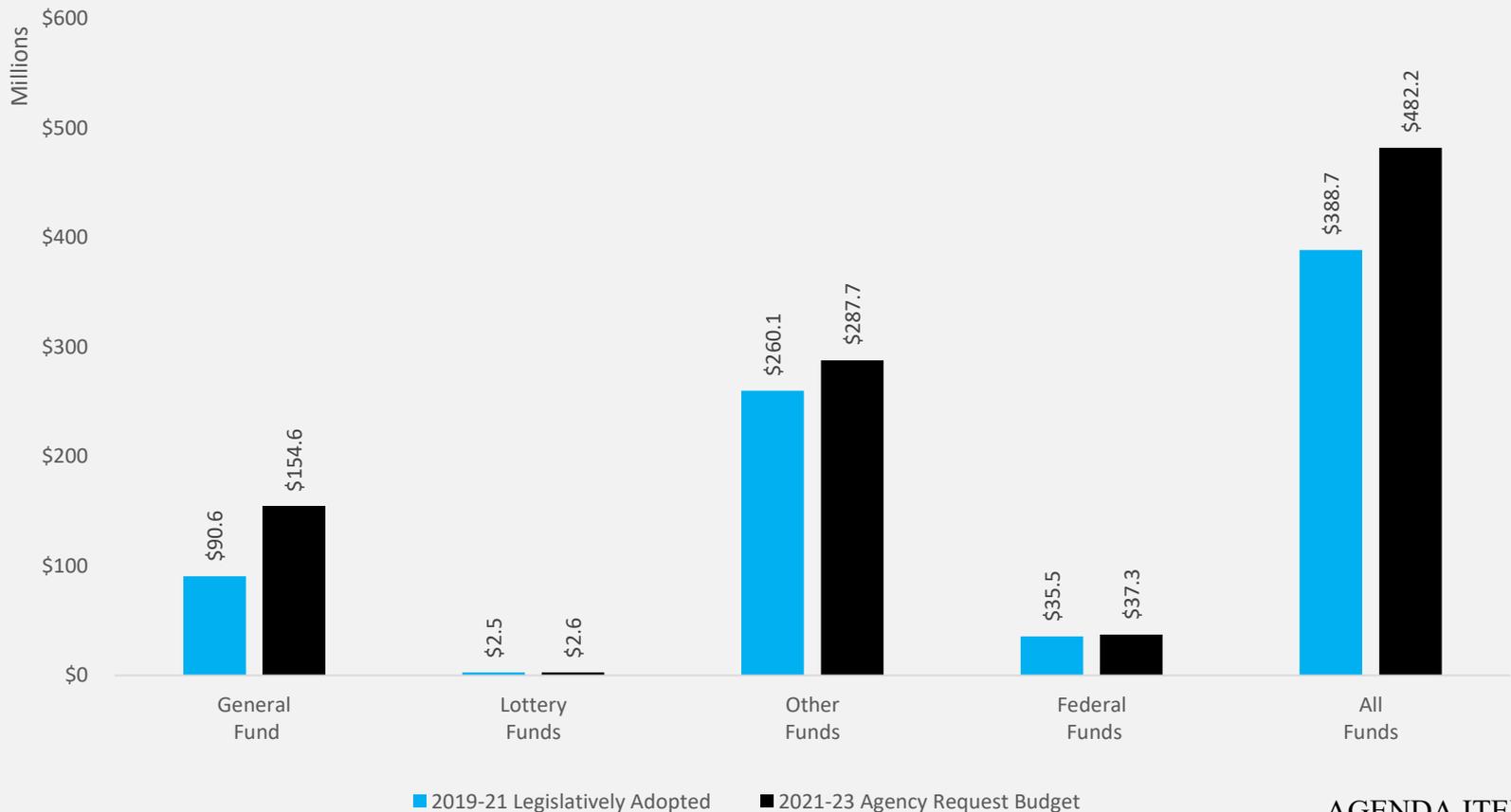
AGENDA ITEM A
Attachment 1
Page 9 of 14

2021-23 AGENCY REQUEST BUDGET

by Program Area (Total \$482,211,639)

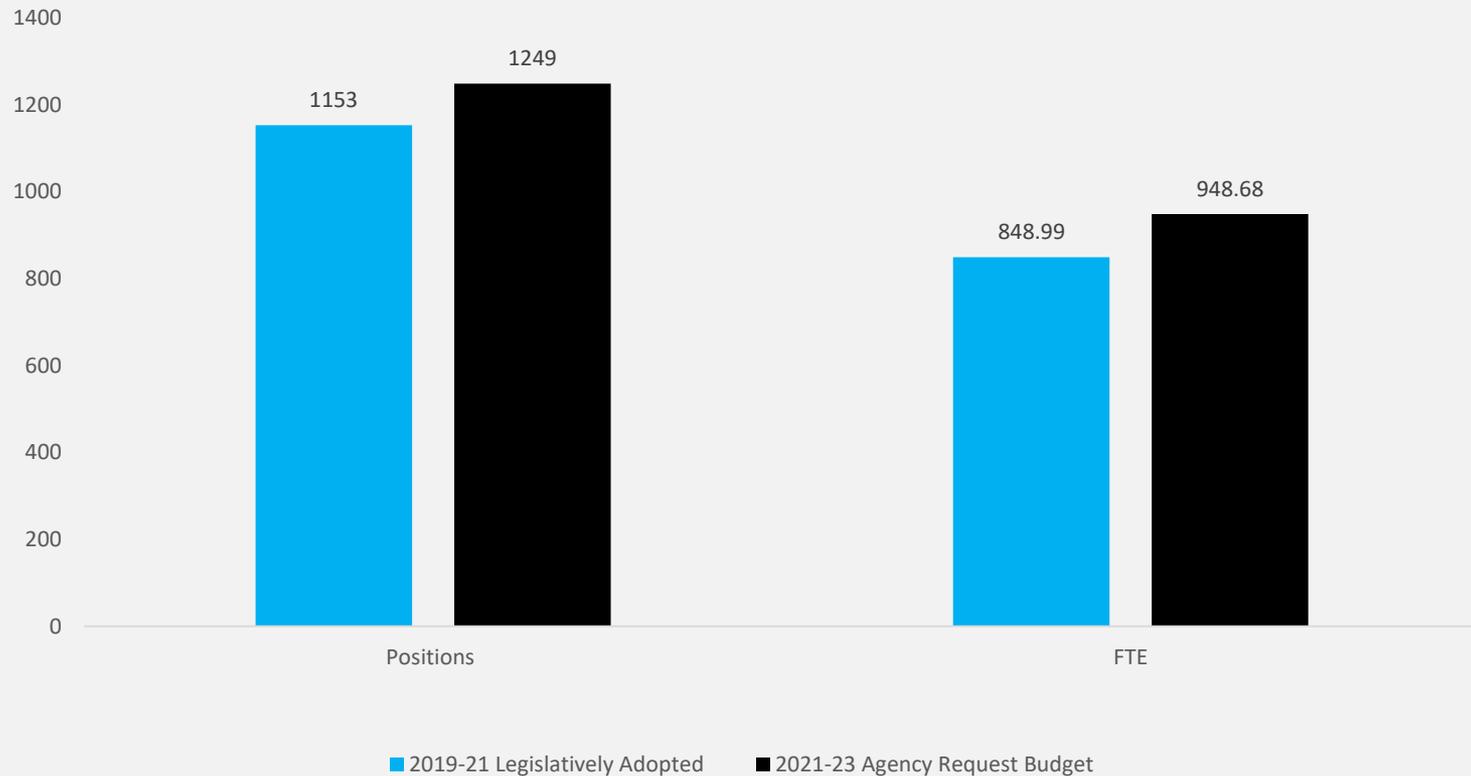


2019-21 LEGISLATIVELY ADOPTED BUDGET v. 2021-23 AGENCY REQUEST BUDGET by Fund Type



2019-21 LEGISLATIVELY ADOPTED BUDGET v. 2021-23 AGENCY REQUEST BUDGET

Position Count & FTE



2021-23 Governor's Budget – Next Steps

- The Board and Department can anticipate the following decisions to be made by the Governor:
 - In order to achieve a balanced budget the Governor may require the Board and Department to undertake a certain level of General Fund budget reductions; and
 - The Governor may choose not to fund all proposed policy enhancement packages put forth by the Board and Department in the Agency Request Budget.

The Department will continue to update the Board on any and all changes initiated by the Governor to the Department's Agency Request Budget.

The Department will also continue to work closely with stakeholders on key budget issues.

Board of Forestry
July 22, 2020

The logo of the Oregon Department of Forestry is a circular emblem. It features a stylized landscape with a yellow sun rising over a blue mountain range, with several green evergreen trees in the foreground. The word "OREGON" is arched across the top, and "DEPARTMENT OF FORESTRY" is written around the bottom edge of the circle.

2021-2023 Agency Request Biennial Budget Approval

James Short & Bill Herber

AGENDA ITEM A
Attachment 1
Page 14 of 14

Board of Forestry
July 22, 2020



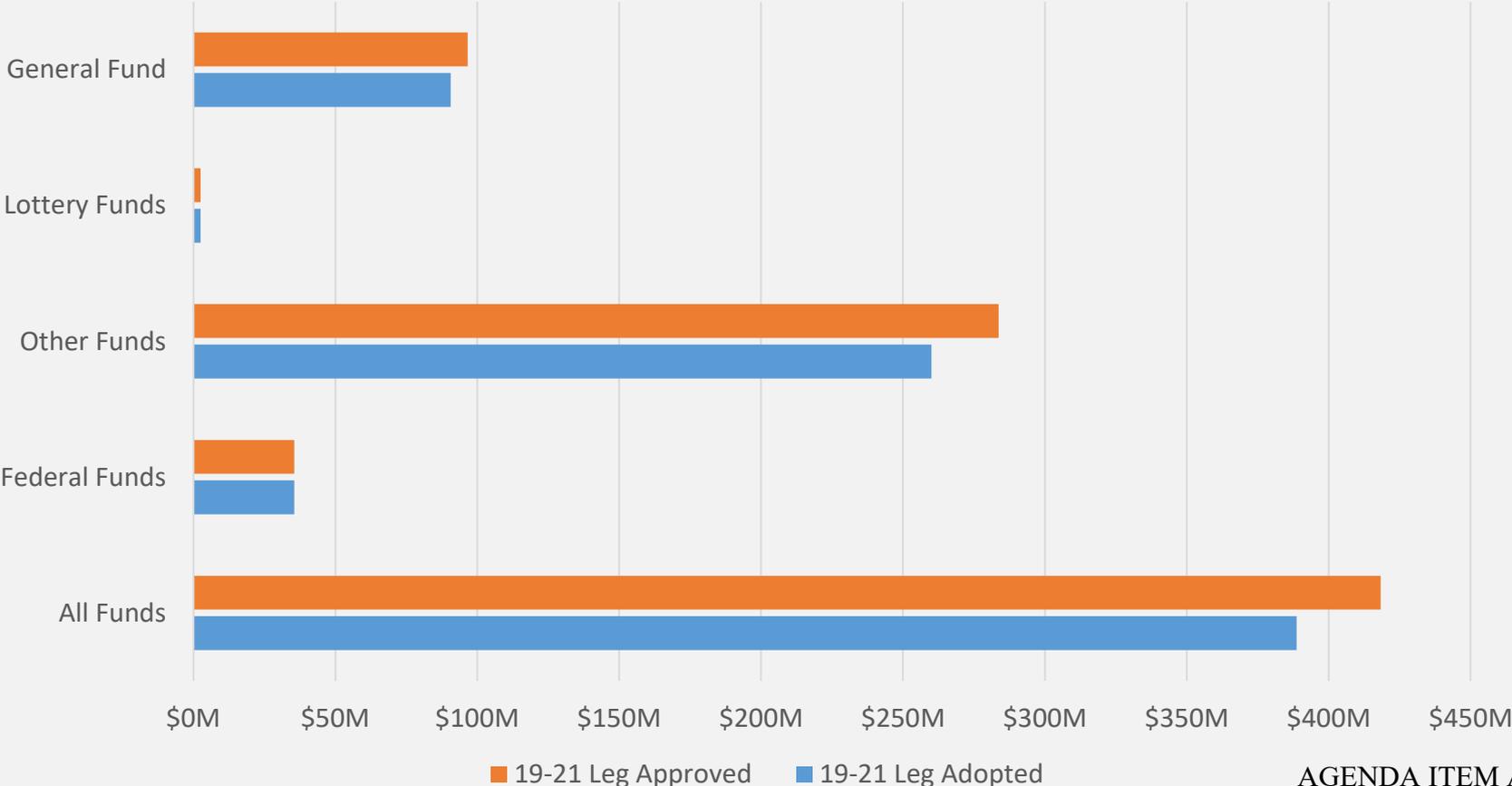
Financial Update

Bill Herber & James Short

AGENDA ITEM A
Attachment 2
Page 1 of 19

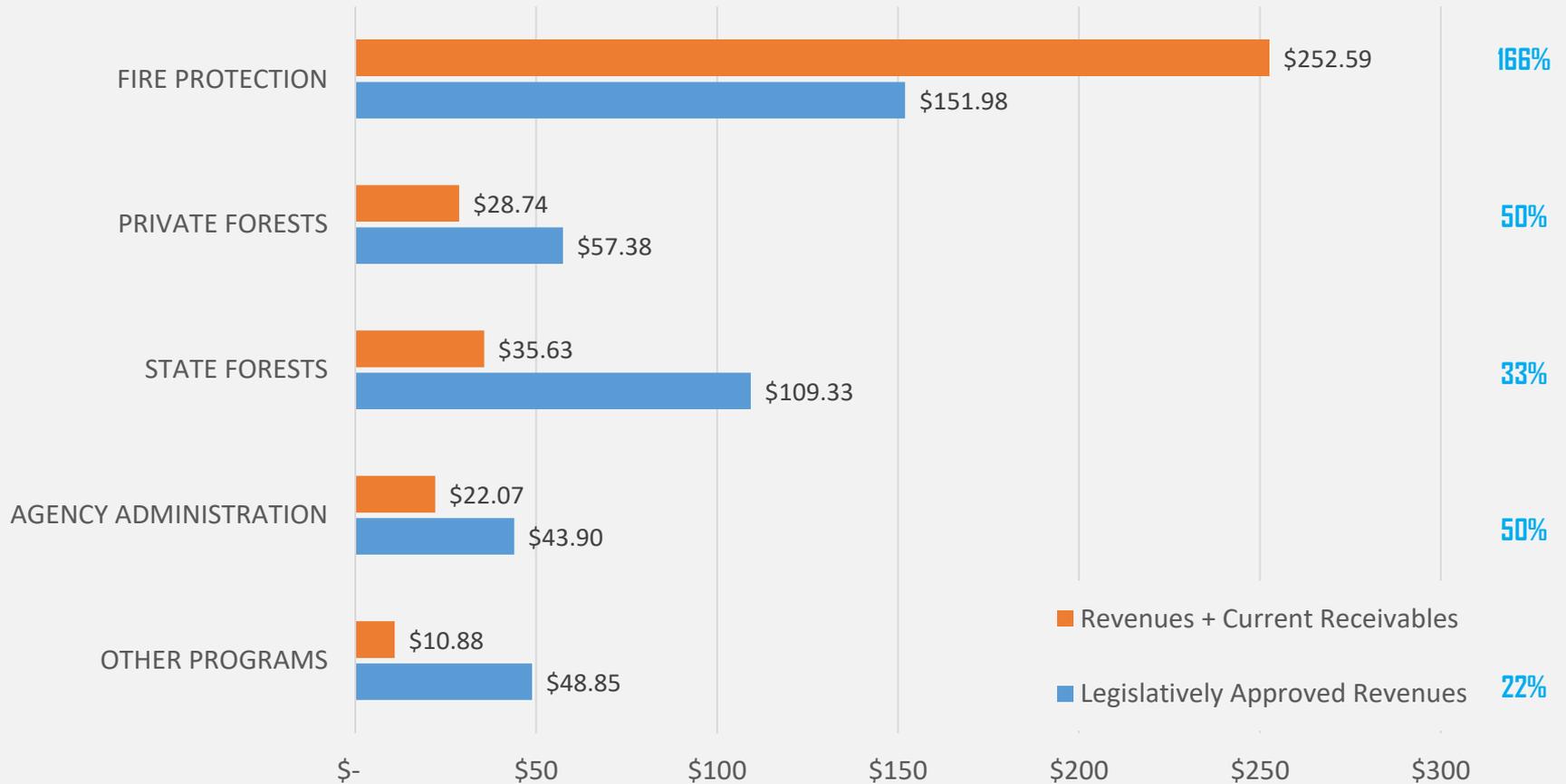
2019-21 Legislatively Adopted Budget v. Approved

by Fund Type (Total \$418,287,225 up from \$388,699,328)

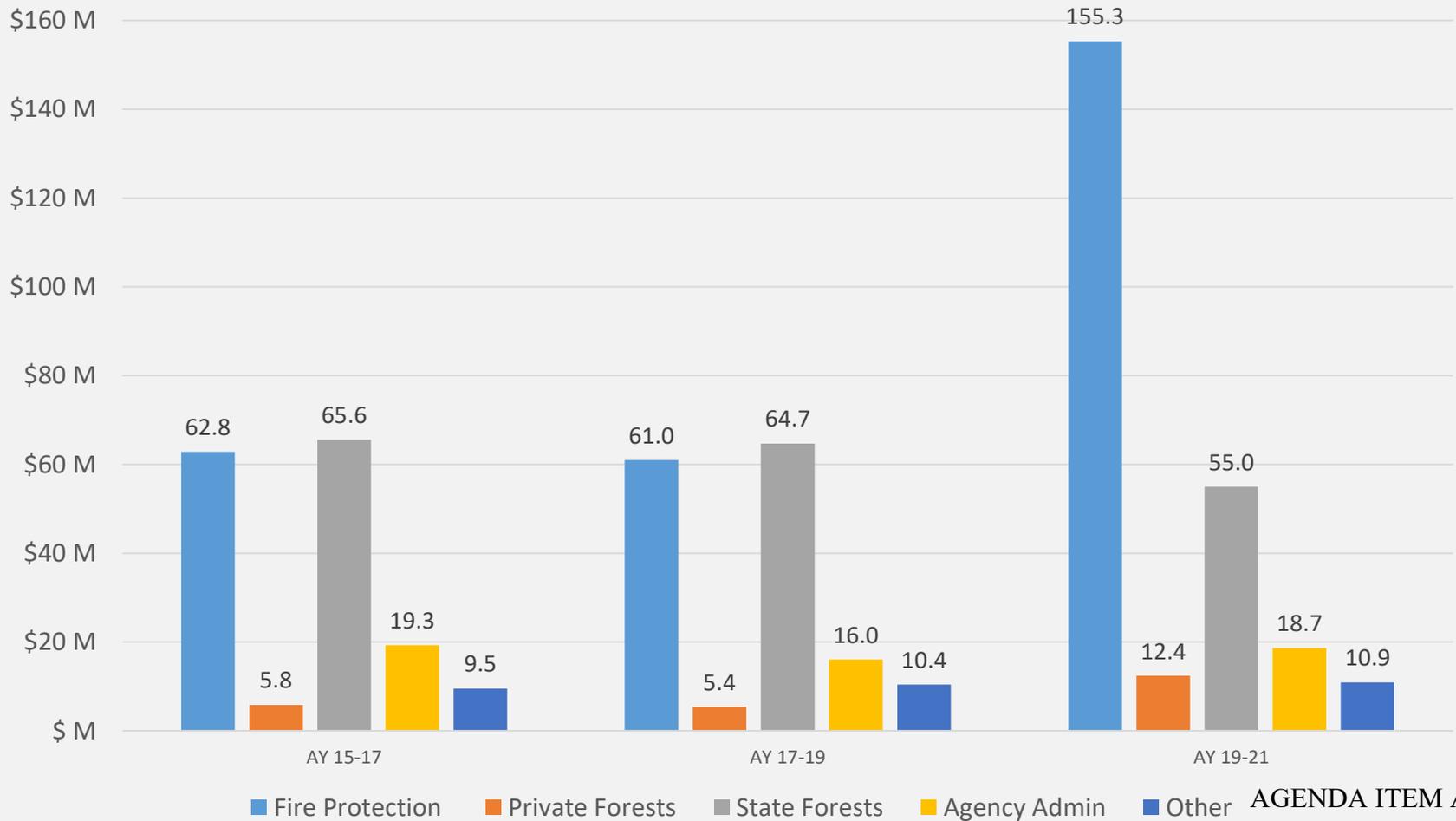


Revenues to Date v. 2019-21 Biennial Budget

50% Biennium Lapsed (in Millions)

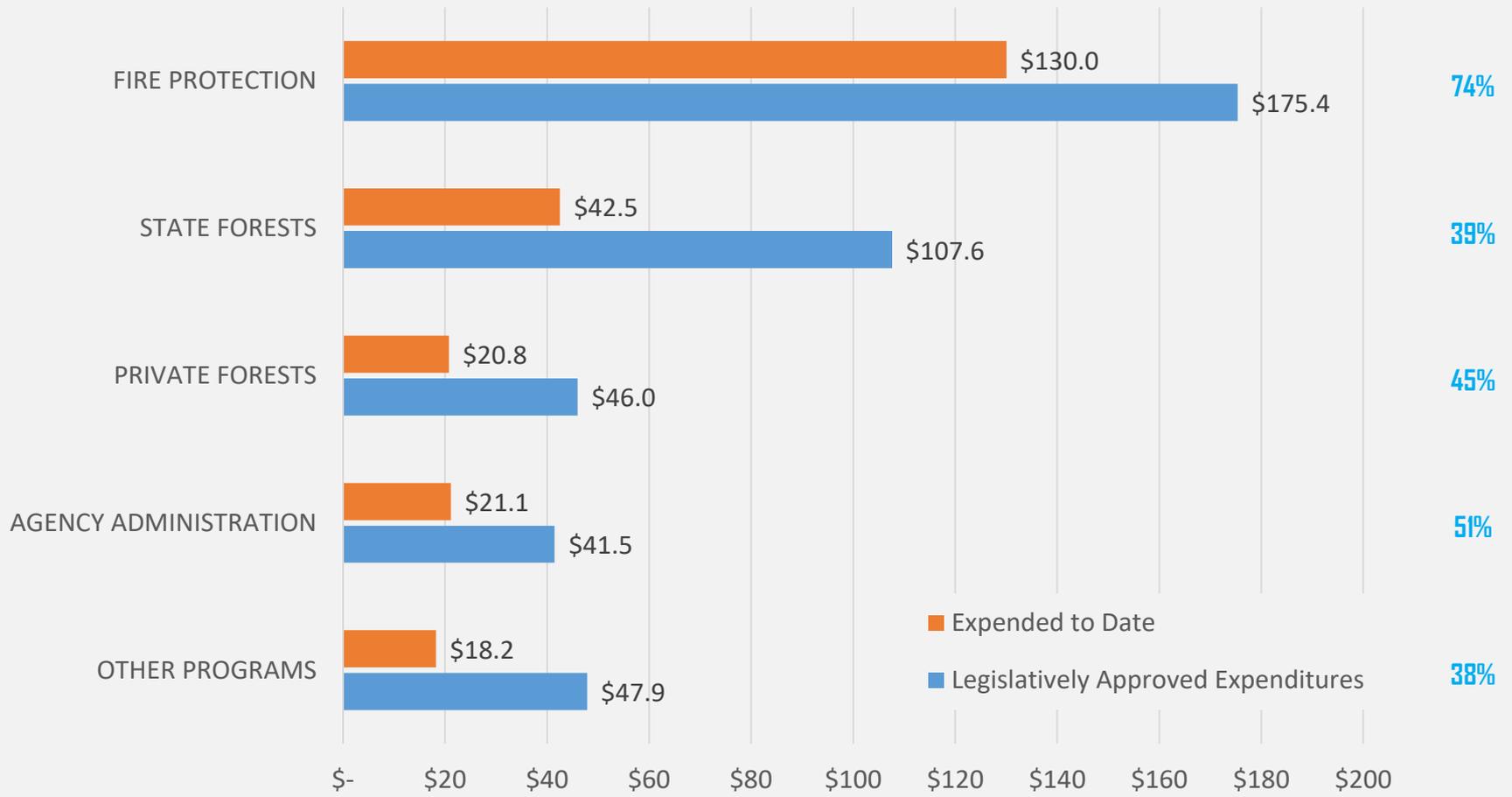


Gross Revenues Comparison Across Biennia

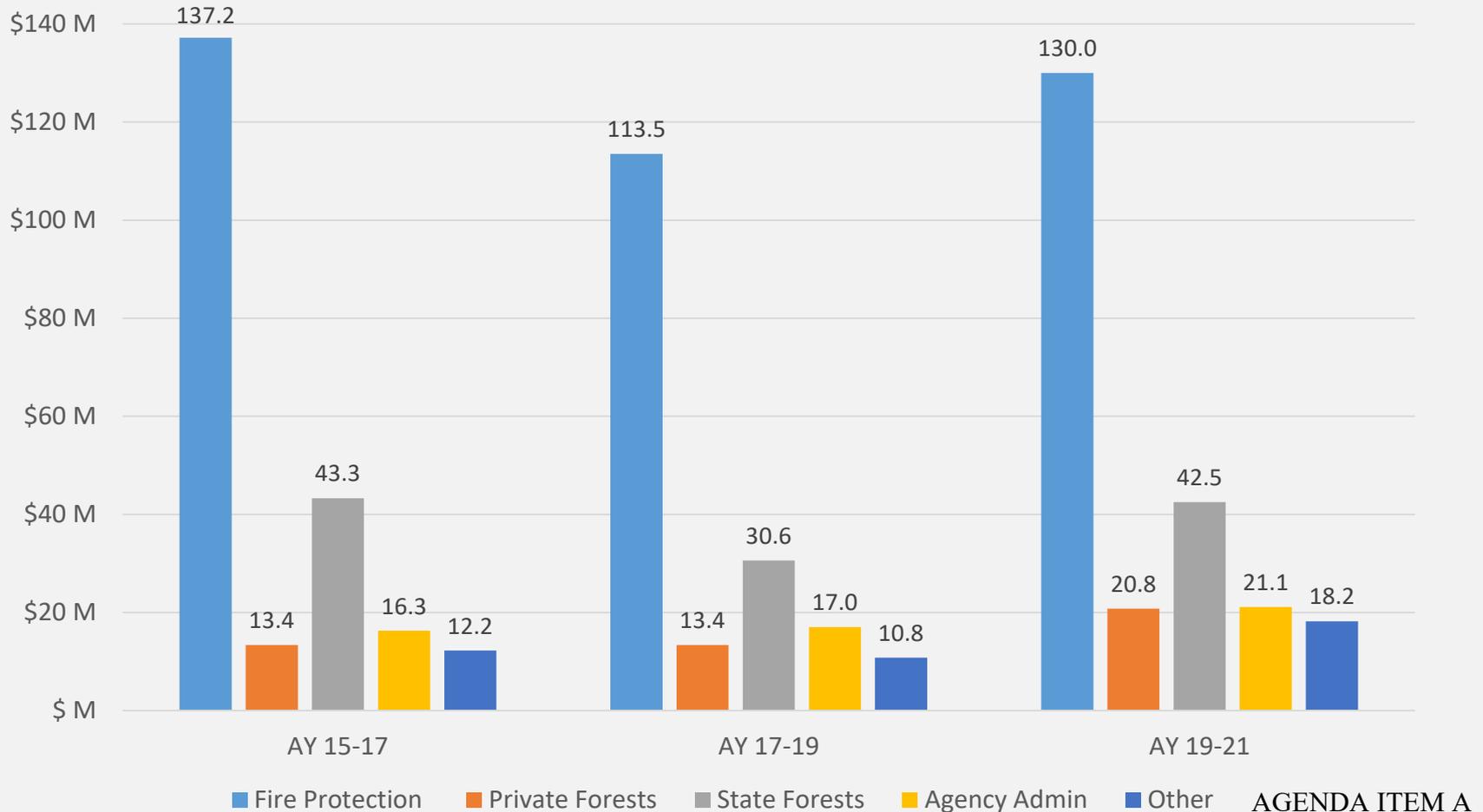


Expenditures to Date v. 2019-21 Biennial Budget

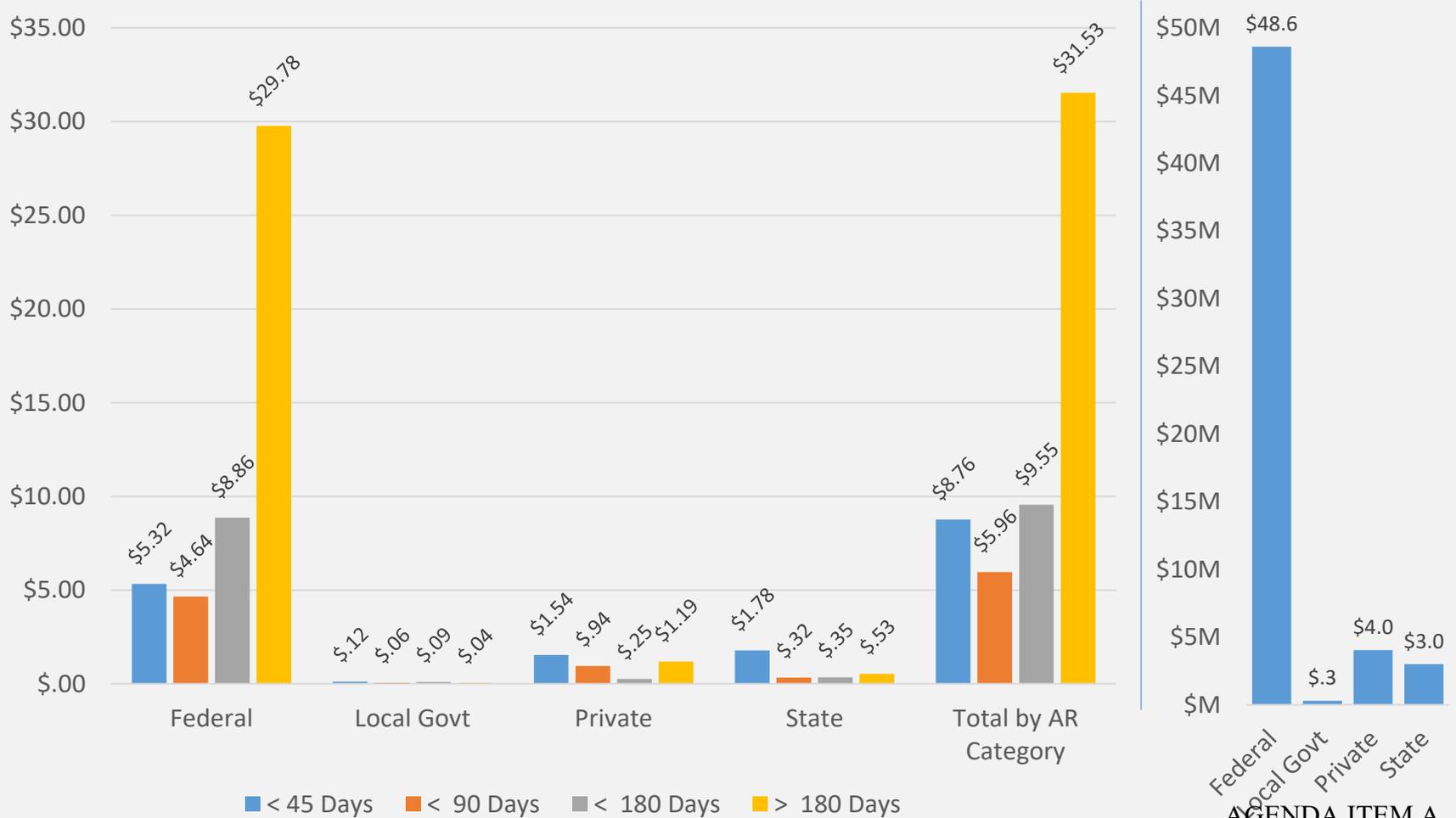
50% Biennium Lapsed (in Millions)



Expenditures Comparison Across Biennia



Accounts Receivables - \$55,936,006



AGENDA ITEM A
Attachment 2
Page 7 of 19

Fire Protection Financial Summary

(Large Fire AR)

Fire Seasons	2013	2014	2015	2016	2017	2018	2019	Total
Fire Costs	112.13	77.08	76.48	20.89	61.66	109.2	34.6	492.04
Received To-date	-112.13	-76.28	-64.53	-19.26	-52.1	-91.42	-13.25	-428.97
Amount Invoiced	-	-	-12.43	-2.33	-4.18	-11.49	-13.58	-44.01
Outstanding to Invoice/Reconcile	-	-0.8	0.48	0.7	-5.38	-6.29	-7.77	-19.06

* Red indicates estimates

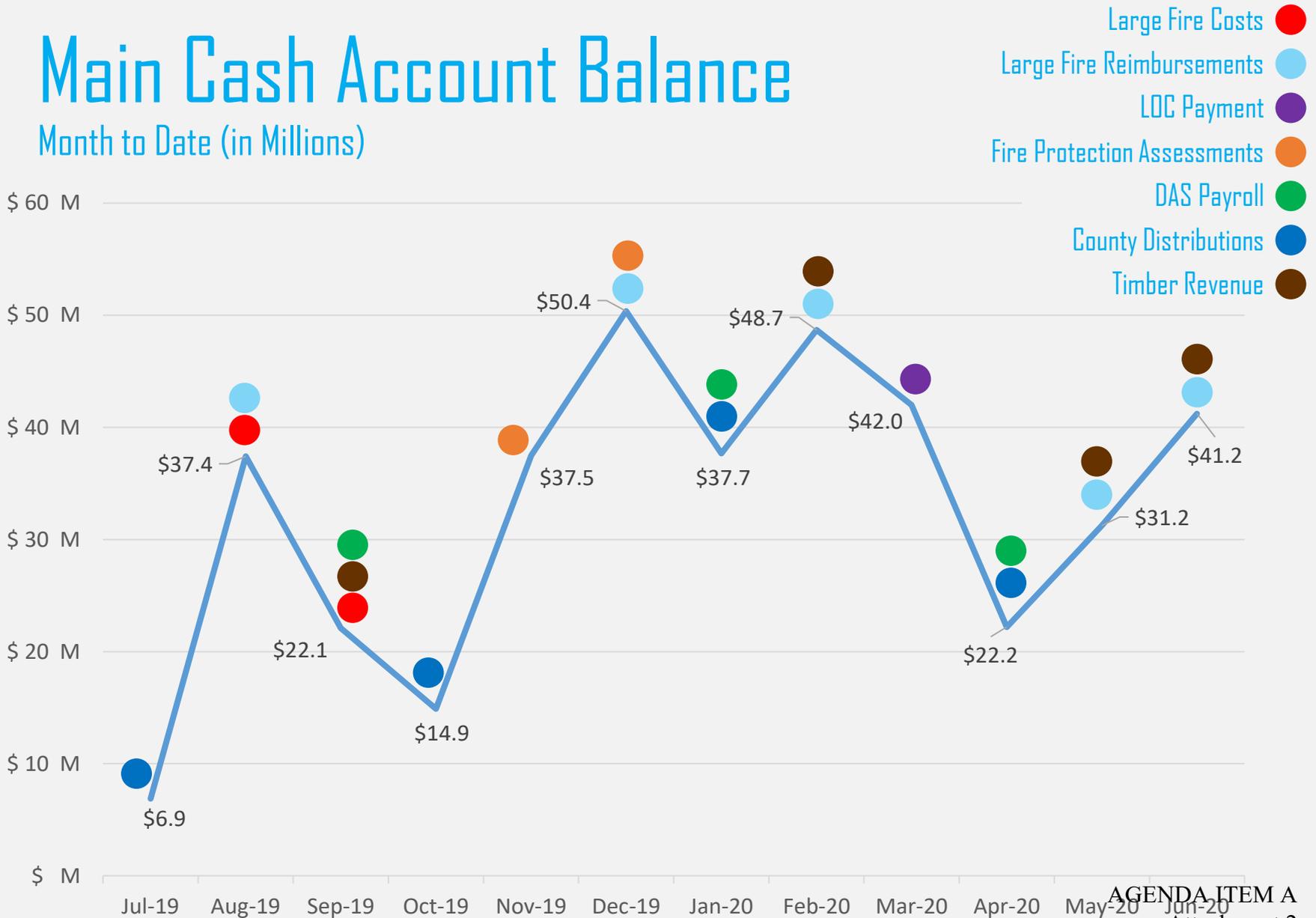
AGENDA ITEM A
Attachment 2
Page 8 of 19

Accounts Payable - \$2,676,807.94

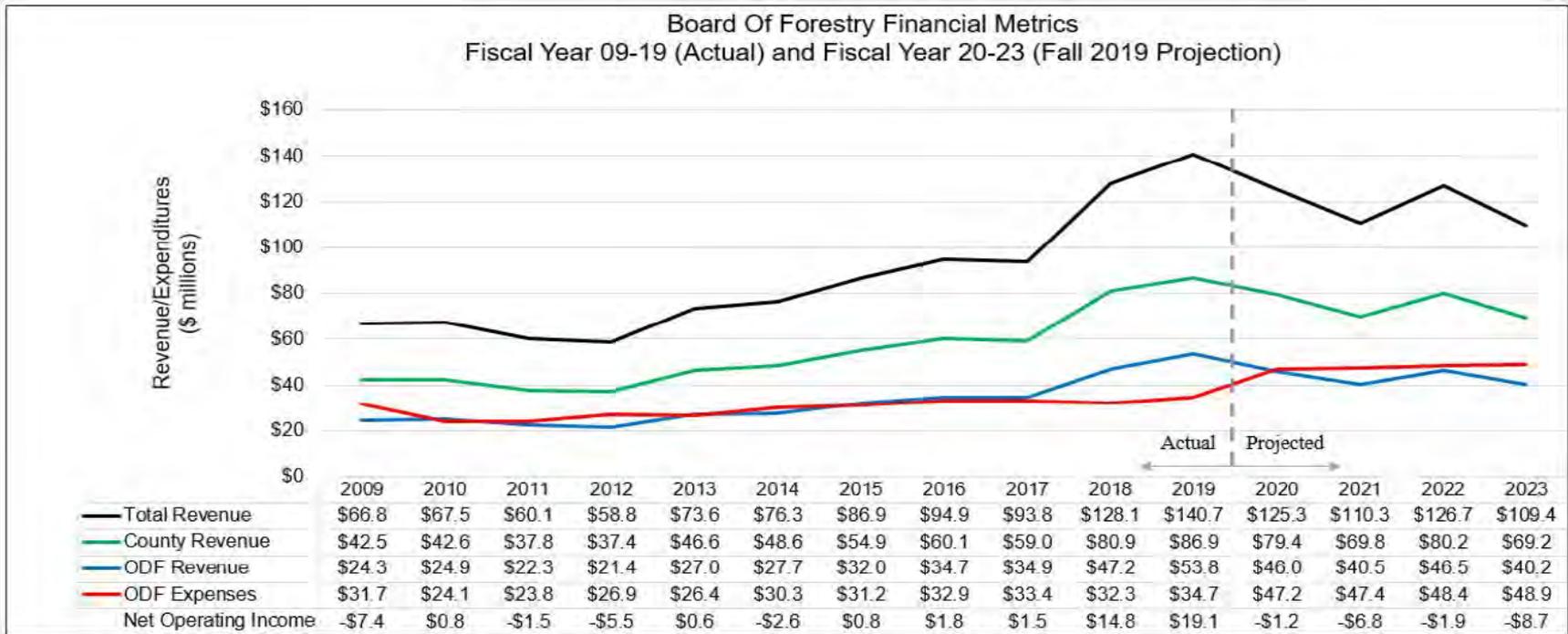
Vendor Type	< 45 days
Federal Government	\$36,445.31
State Government	\$77,811.06
Local Government	\$1,577,263.97
Private	\$985,287.60
Totals	\$2,676,807.94

Main Cash Account Balance

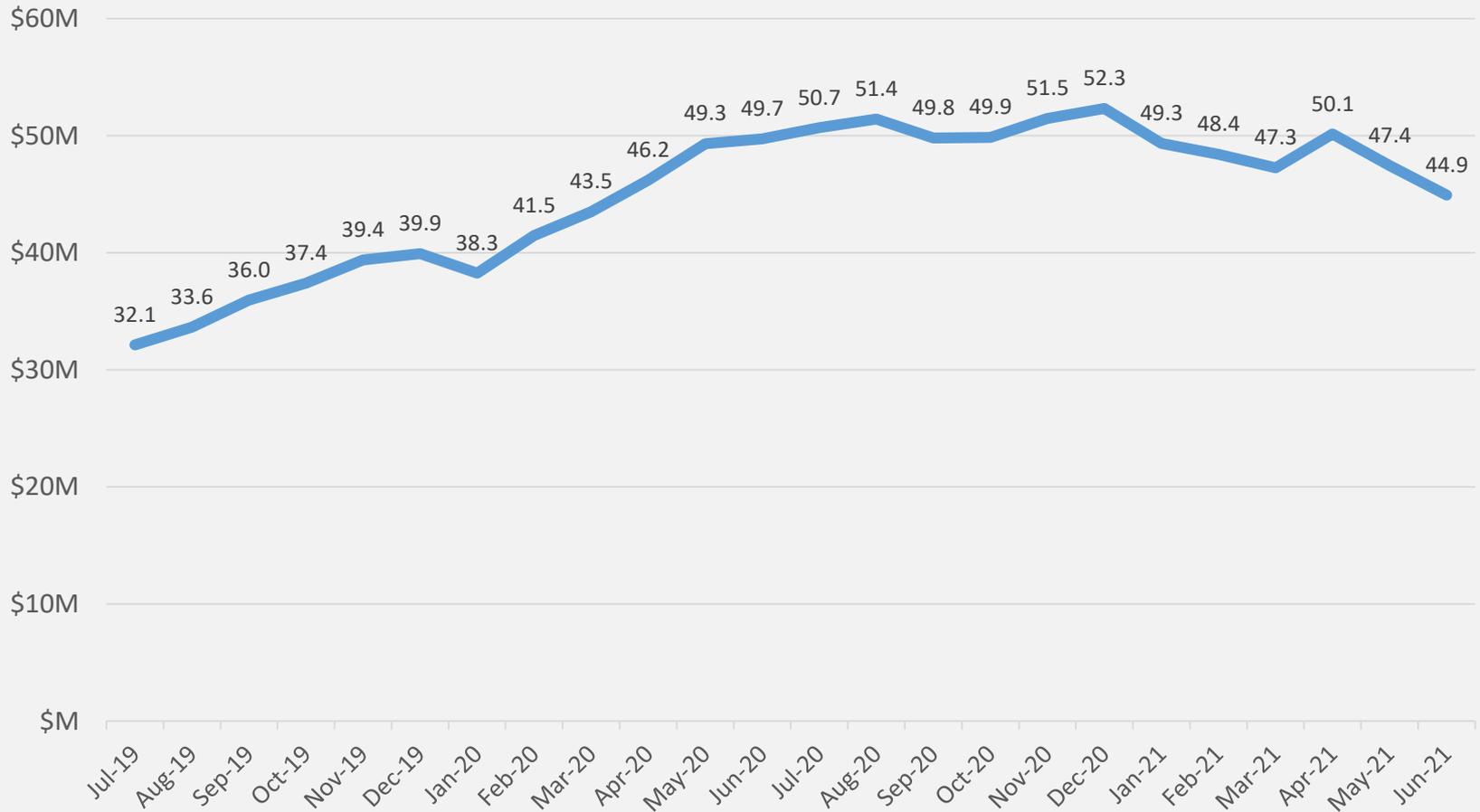
Month to Date (in Millions)



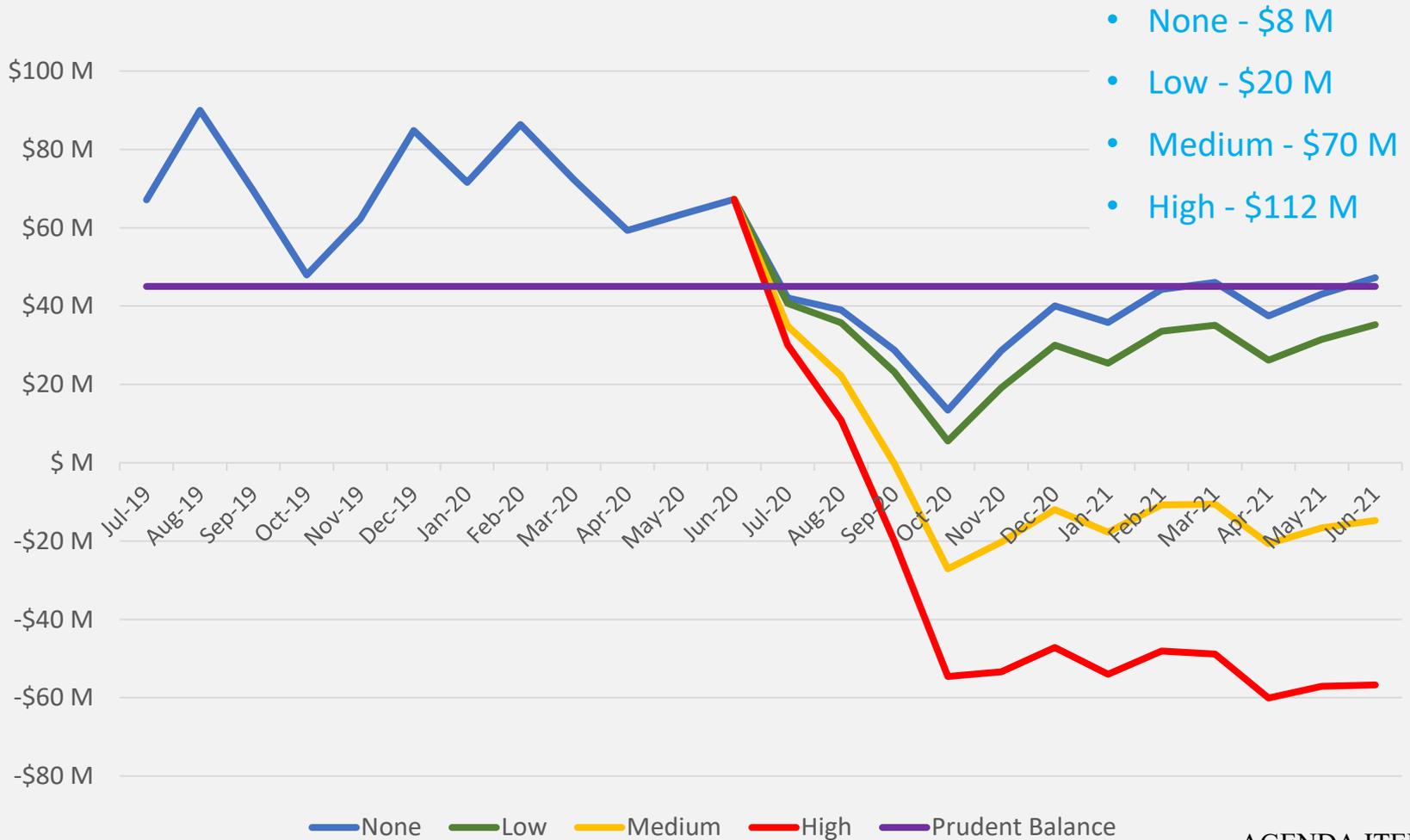
State Forests Financial Metrics



Forest Development Fund Balance



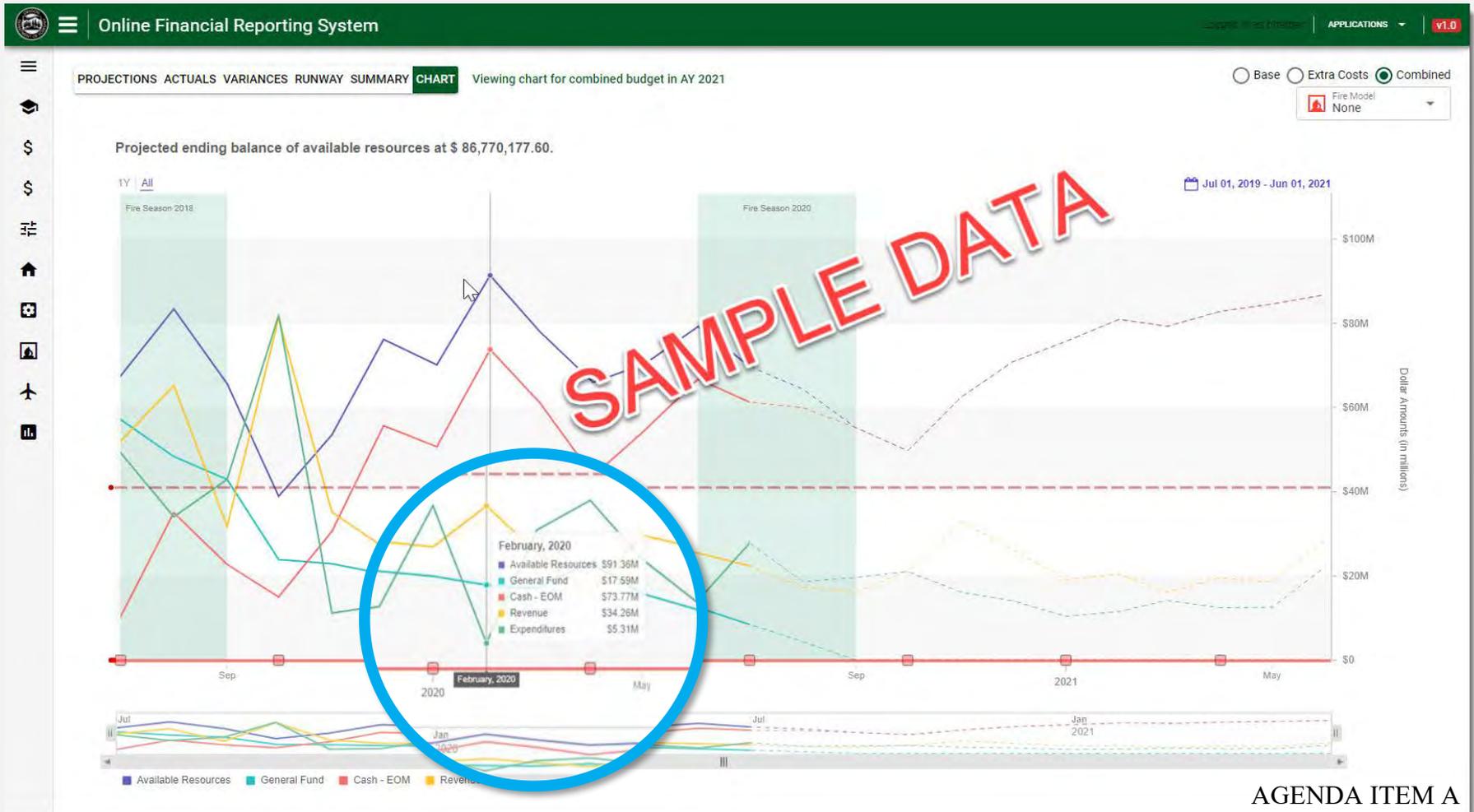
Projected Ending 19-21 Balance



Online Fiscal Reporting System (OFRS)

- Data rich, information poor
- OFRS is a context-providing data aggregator of relevant information
- Provides real-time access to disparate state and agency systems
- Highlighted as central to many of the outputs and recommendations of MGO
- Continuing on enhancing with MGO through production rollout

Cash Projection Runway



AGENDA ITEM A
Attachment 2
Page 15 of 19



Executive Financial Dashboard

Cash Balance

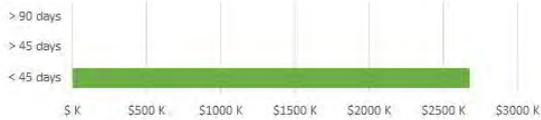


Days Receivable / Payable

Aged Receivables



Aged Payables



Liquidity



AP Exceptions

0

AR Exceptions

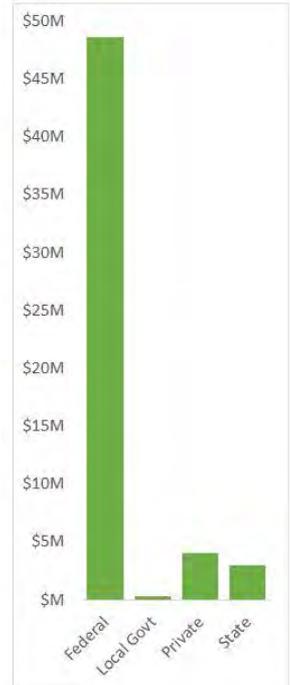
0

Receivable vs Payable



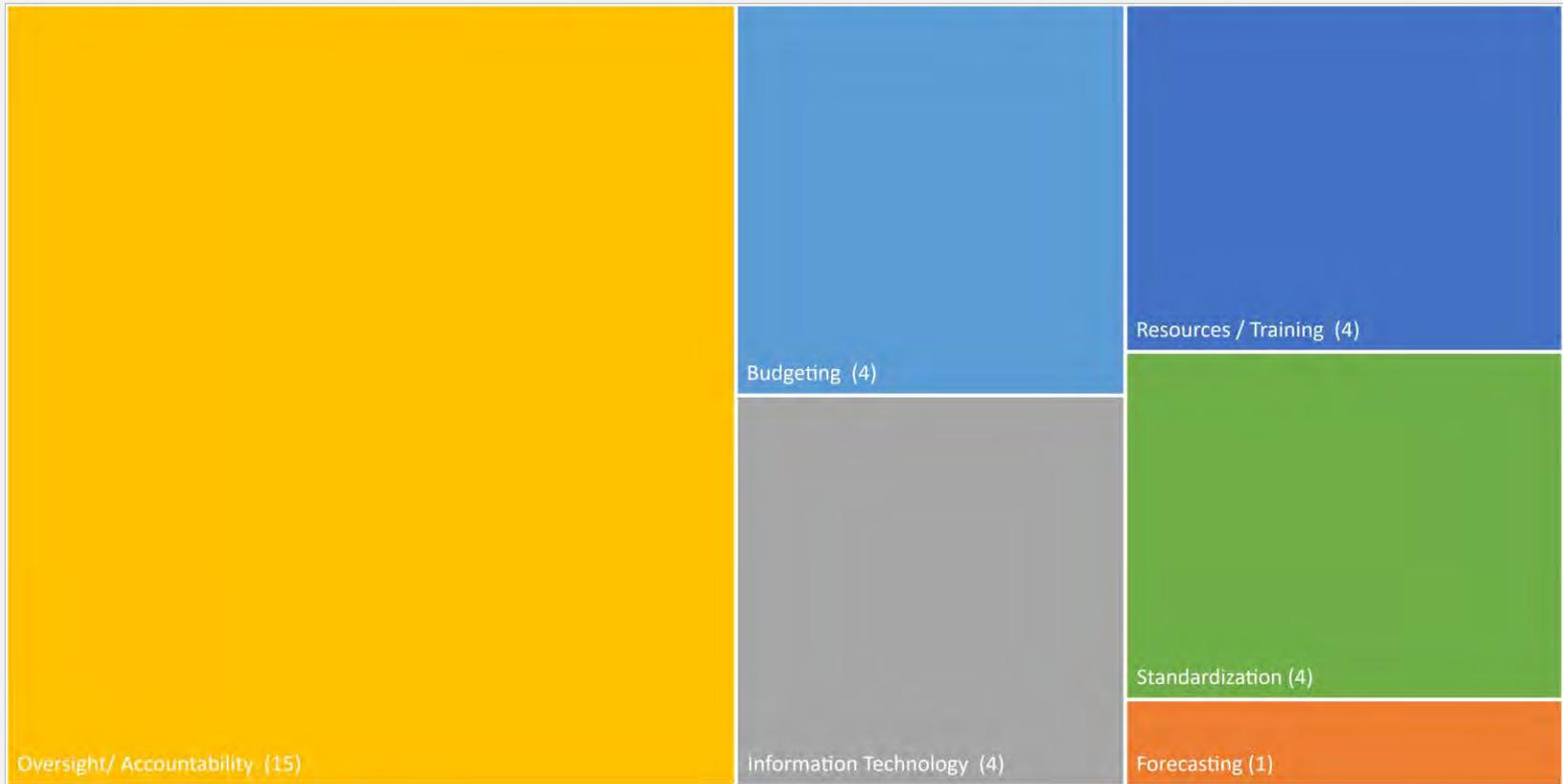
■ AR (\$55,936,006)
 ■ AP (\$2,676,807)

Total AR



MGO Recommendations

- Budgeting (4)
- Forecasting (1)
- Information Technology (4)
- Oversight/ Accountability (15)
- Resources / Training (4)
- Standardization (4)



MGO Recommendations

- Budgeting
 - Tracking budget to actuals across the department
 - Reconciliation between fiscal and biennial budgets
- Forecasting
 - Cash flow
- Information Technology
 - Disparate, outdated, manual & complex
- Oversight / Accountability
 - Structure and organization, authority, controls, processes, reporting
- Resources / Training
 - Onboarding and ongoing
- Standardization
 - Fire estimates, invoicing, receivables, systems
 - Headquarters and districts

Board of Forestry
July 22, 2020



Financial Update

Bill Herber & James Short

AGENDA ITEM A
Attachment 2
Page 19 of 19



2020 Fire Season Update

July 22, 2020

Peter Daugherty, State Forester

Doug Grafe, Chief of Fire Protection

Ron Graham, Deputy Chief of Fire Protection

AGENDA ITEM A

Attachment 3

Shangila Fire

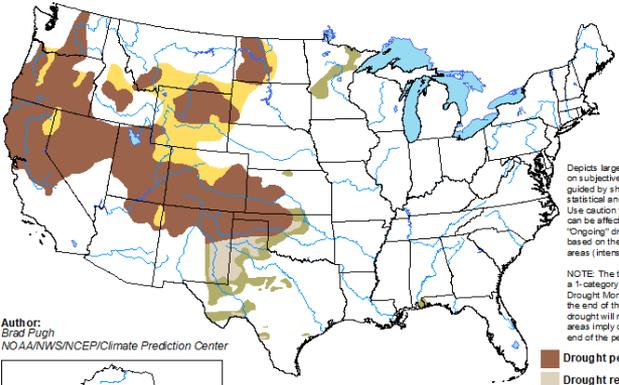
4/21/2020, ODF-SWO District



Drought Outlook and Monitor

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

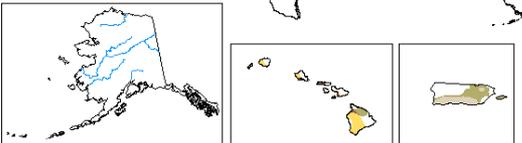
Valid for June 18 - September 30, 2020
Released June 18



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short-lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Brad Pugh
NOAA/NWS/NCEP/Climate Prediction Center

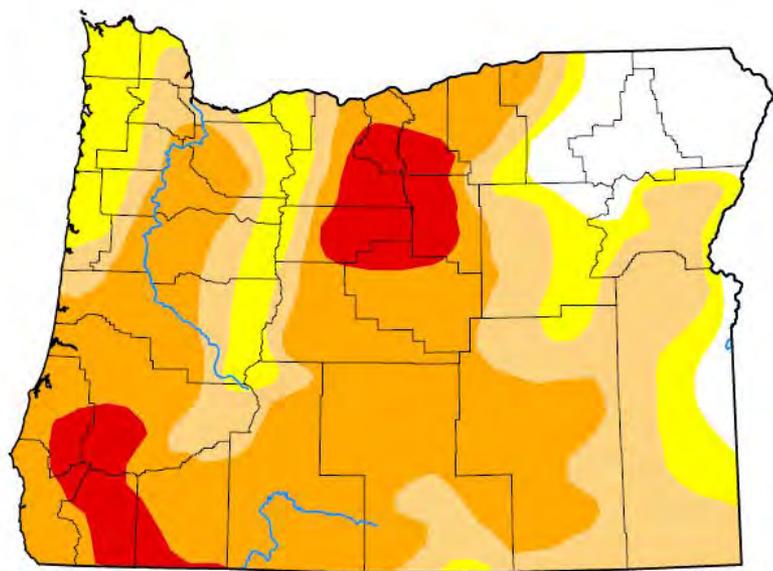


- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely

<http://go.usa.gov/3eZ73>

U.S. Drought Monitor Oregon

July 14, 2020
(Released Thursday, Jul. 16, 2020)
Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

David Miskus
NOAA/NWS/NCEP/IGPS

AGENDA ITEM A

USDA Attachment 3

Page 2 of 22

droughtmonitor.unl.edu





Oregon Counties in Drought



Oregon Water Resources Department
Drought Declaration Status Map

Drought Declaration Status Map

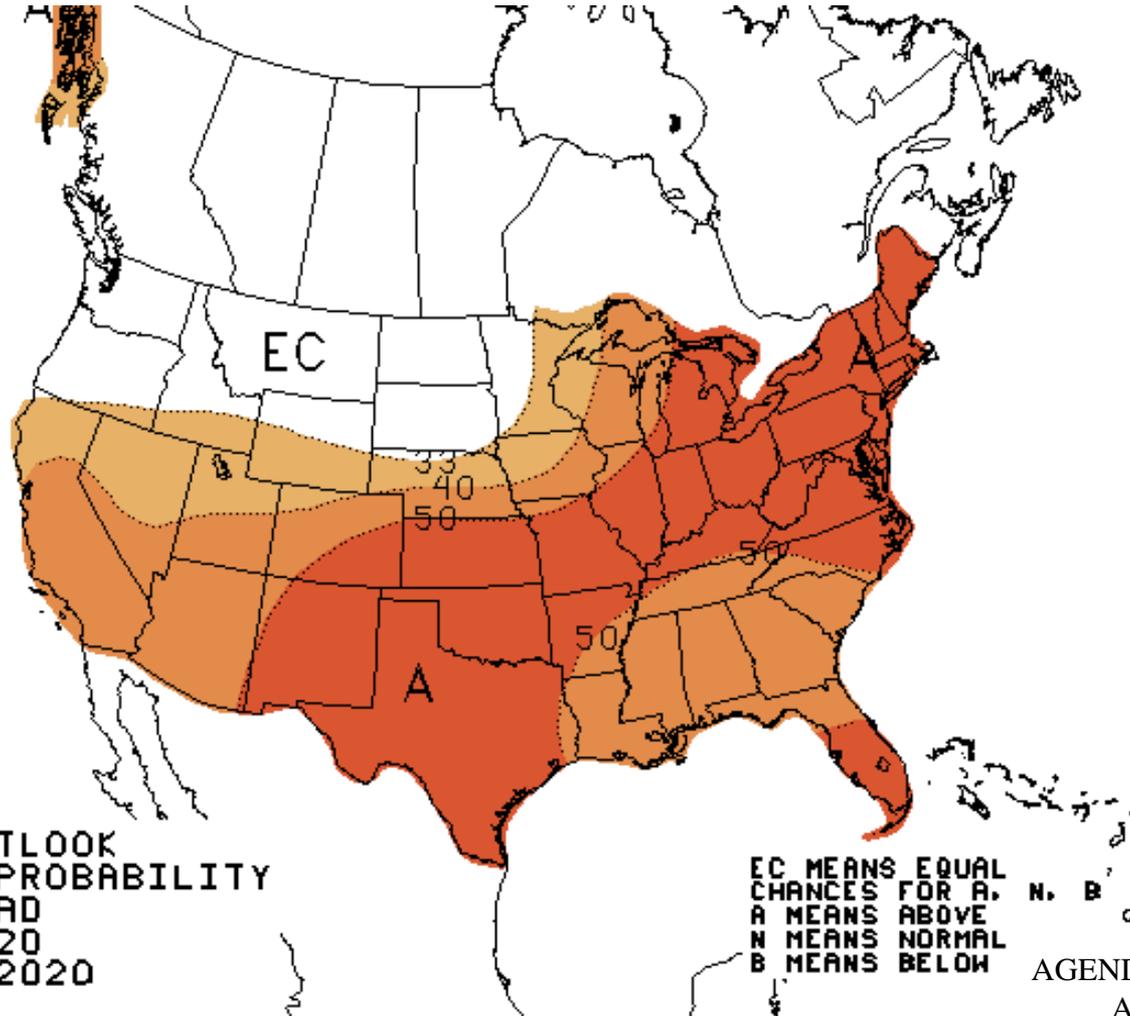
Select Year:





Temperature Outlook

Aug 2020



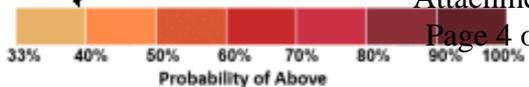
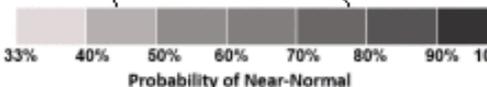
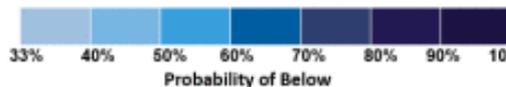
ONE-MONTH OUTLOOK
 TEMPERATURE PROBABILITY
 0.5 MONTH LEAD
 VALID AUG 2020
 MADE 16 JUL 2020

EC MEANS EQUAL CHANCES FOR A, N, B
 A MEANS ABOVE
 N MEANS NORMAL
 B MEANS BELOW

AGENDA ITEM A

Attachment 3

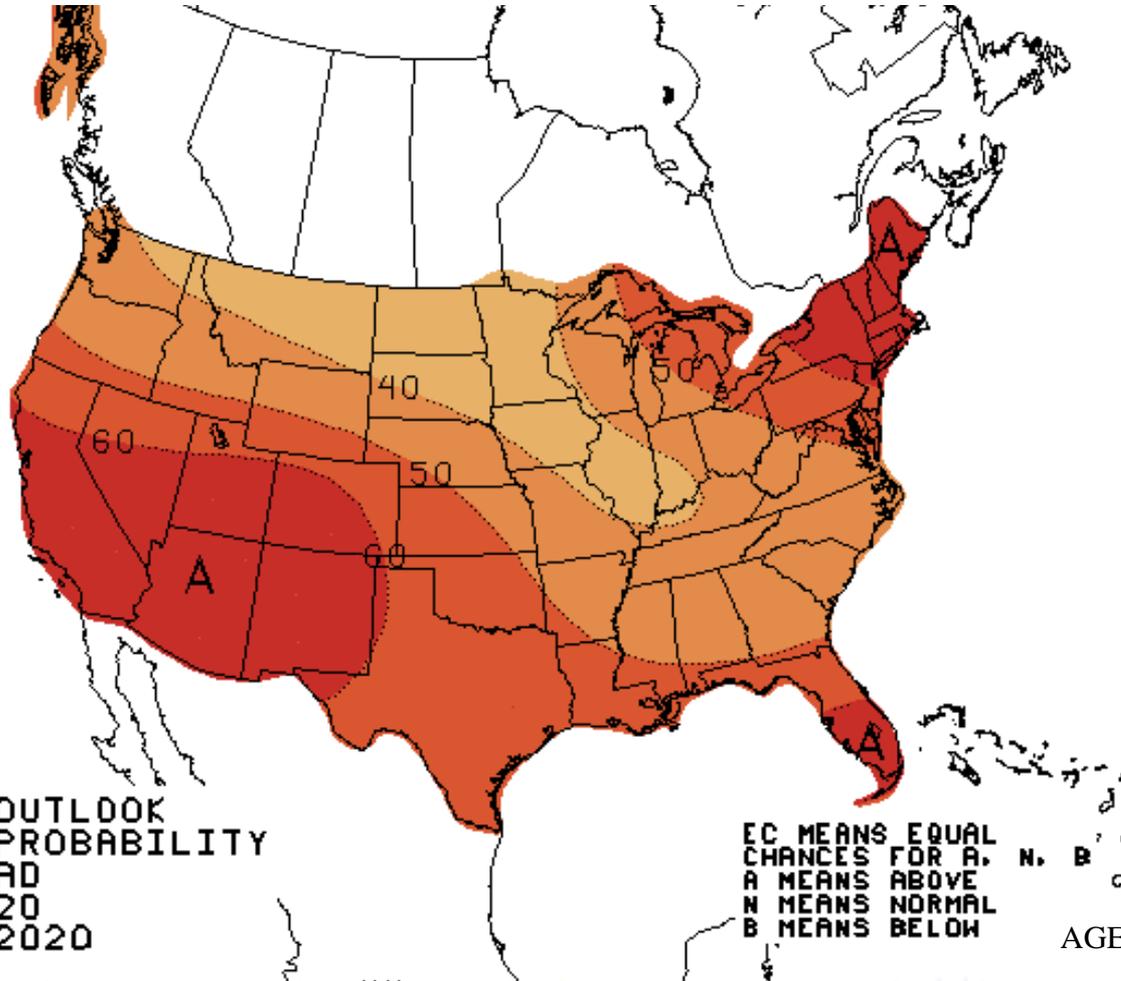
Page 4 of 22





Temperature Outlook

Aug, Sept, Oct 2020



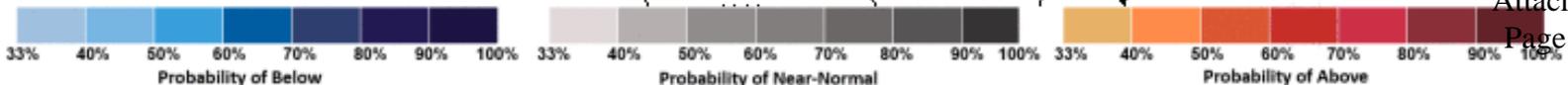
THREE-MONTH OUTLOOK
 TEMPERATURE PROBABILITY
 0.5 MONTH LEAD
 VALID ASD 2020
 MADE 16 JUL 2020

EC MEANS EQUAL
 CHANCES FOR A, N, B
 A MEANS ABOVE
 N MEANS NORMAL
 B MEANS BELOW

AGENDA ITEM A

Attachment 3

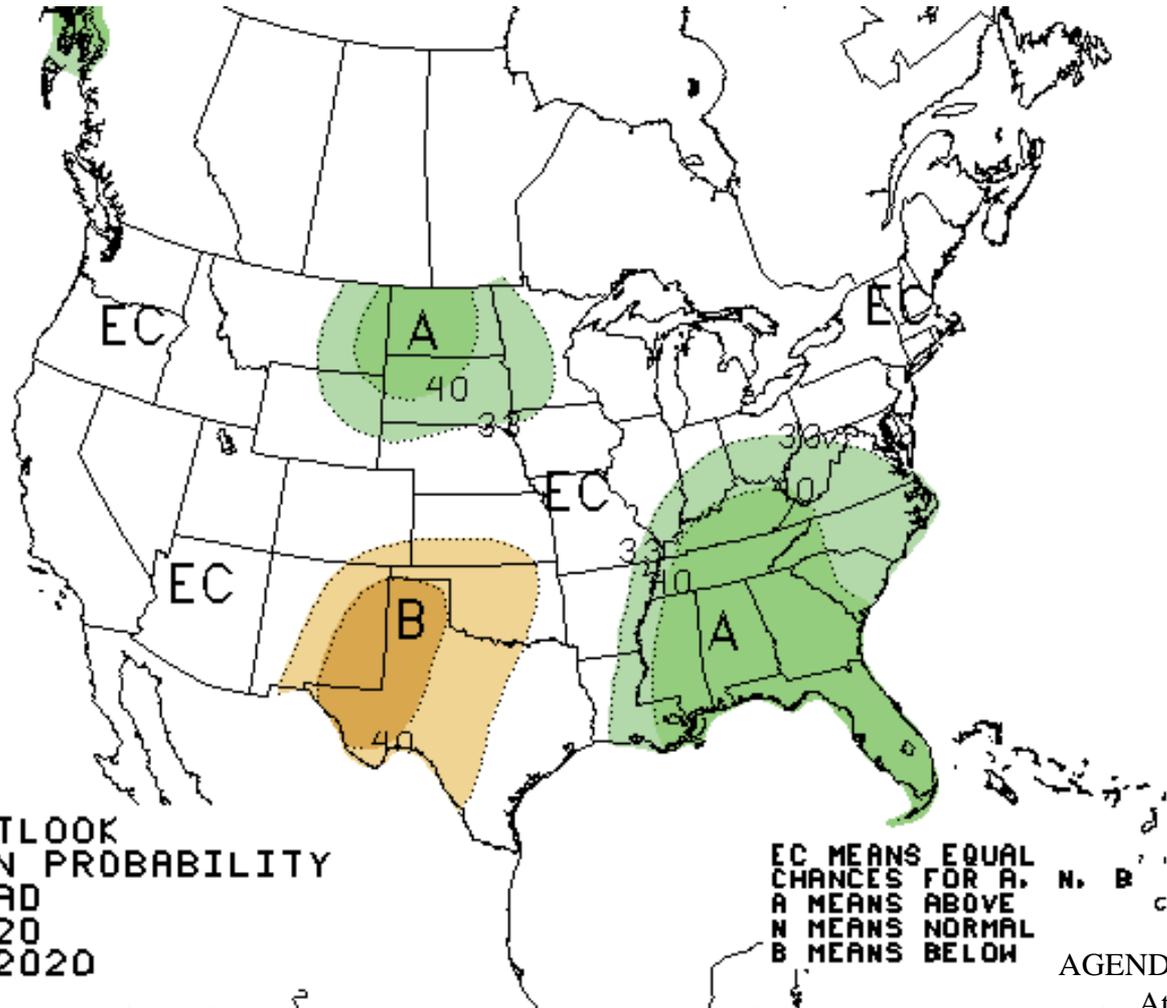
Page 5 of 22





Precipitation Outlook

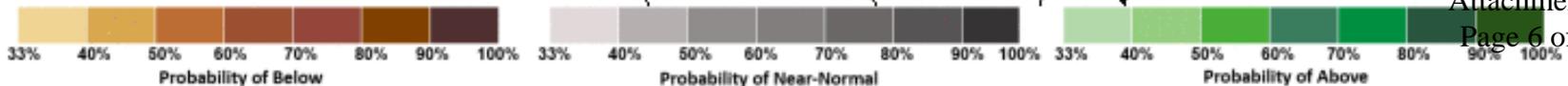
Aug 2020



ONE-MONTH OUTLOOK
 PRECIPITATION PROBABILITY
 0.5 MONTH LEAD
 VALID AUG 2020
 MADE 16 JUL 2020

EC MEANS EQUAL CHANCES FOR A, N, B
 A MEANS ABOVE
 N MEANS NORMAL
 B MEANS BELOW

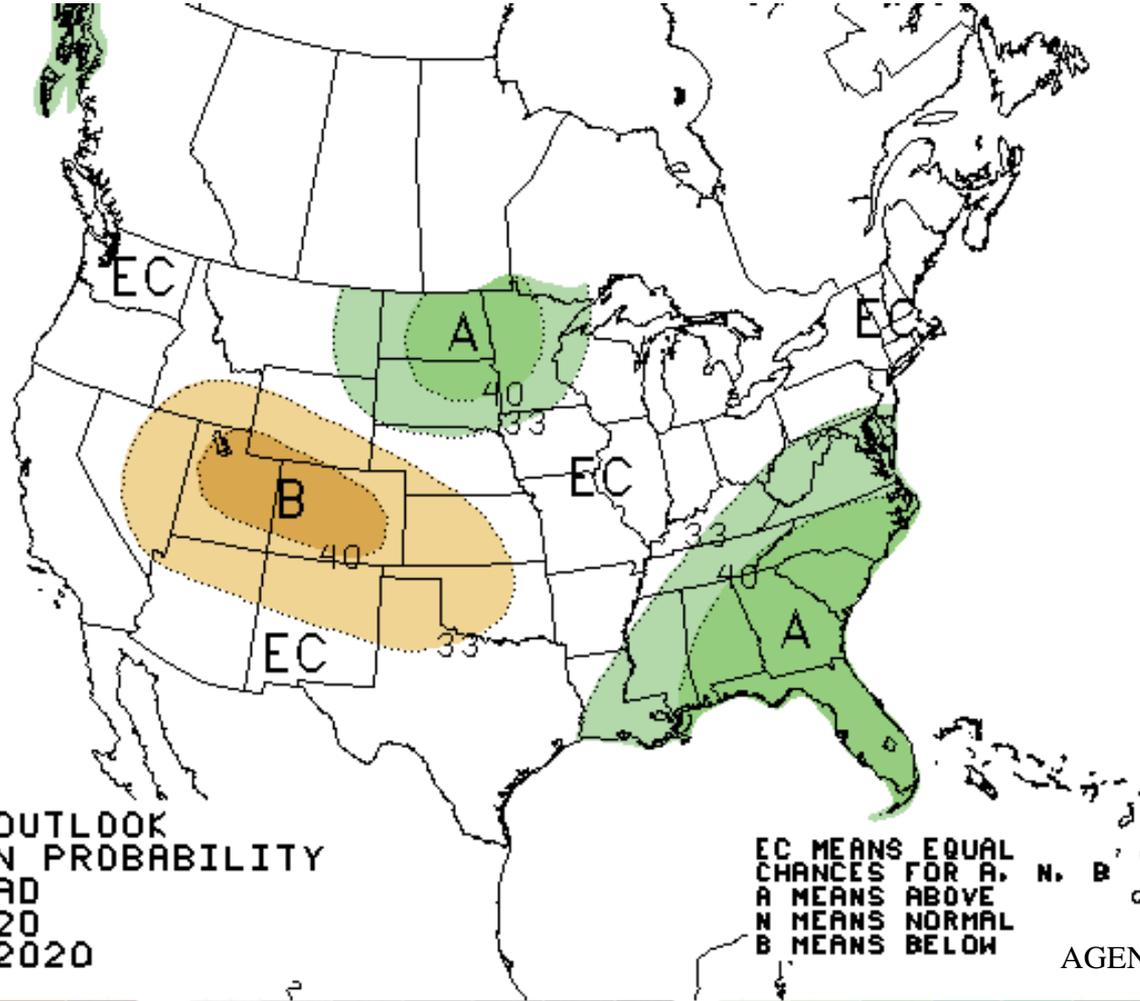
AGENDA ITEM A
 Attachment 3
 Page 6 of 22





Precipitation Outlook

Aug, Sept, Oct 2020



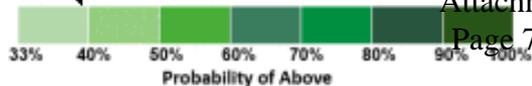
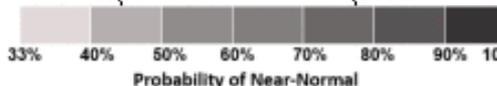
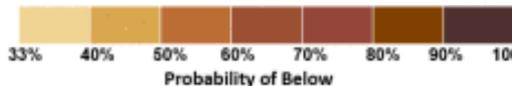
THREE-MONTH OUTLOOK
 PRECIPITATION PROBABILITY
 0.5 MONTH LEAD
 VALID ASD 2020
 MADE 16 JUL 2020

EC MEANS EQUAL
 CHANCES FOR A, N, B
 A MEANS ABOVE
 N MEANS NORMAL
 B MEANS BELOW

AGENDA ITEM A

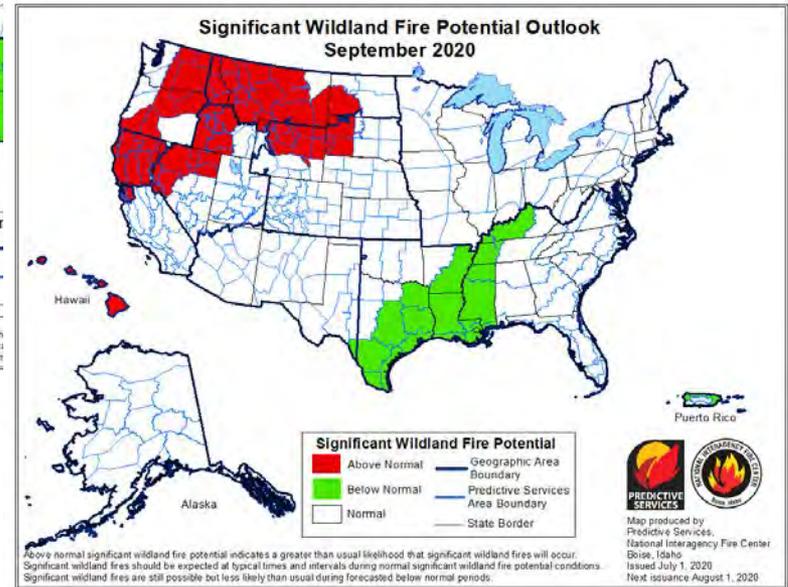
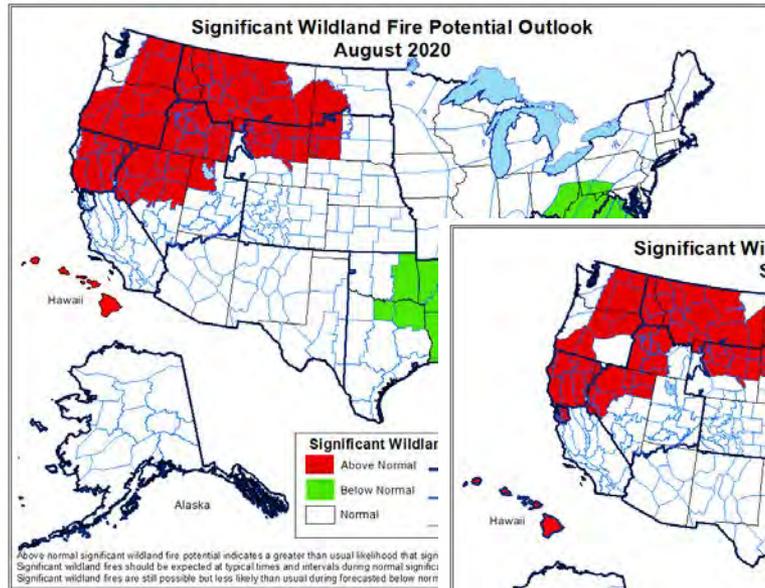
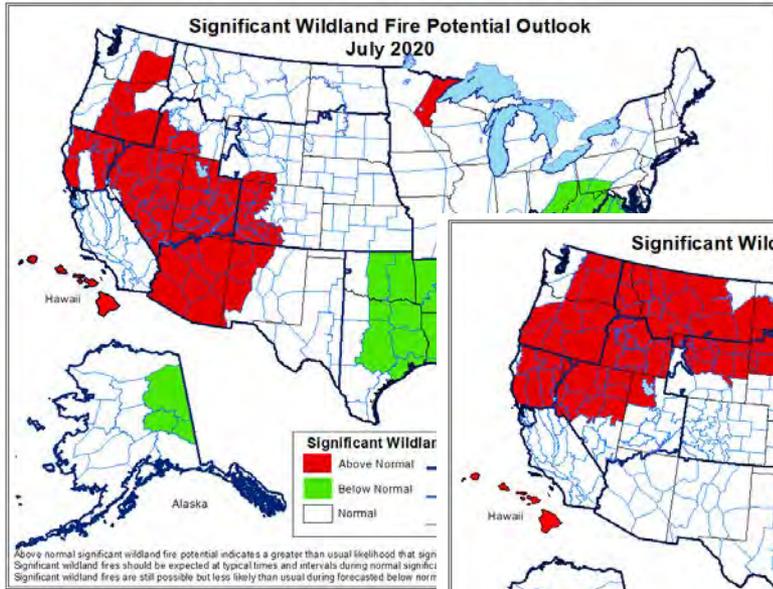
Attachment 3

Page 7 of 22





July, Aug, Sept Wildfire Potential



Significant Wildland Fire Potential

	Above Normal		Geographic Area Boundary
	Below Normal		Predictive Services Area Boundary
	Normal		State Border



Fire Statistics to Date

July 20, 2020

2020 Year To Date

	Fires	Acres
Lightning	29	5
Human	316	661
Total	345	666

10-Year Average (2010-2019 Year To Date)

Lightning	76	7,652
Human	297	2,221
Total	373	9,873

96%

fires kept at 10 acres or less to date in 2020



2020 vs 10 Year Average

- 6% more **human** fires
- 72% less **human** acres burned (~3 ½ times less)
- 8% less **total** fires
- 93% less **total** acres burned than our 10-yr average (~15 times less)

ODF Large Fire Costs 2006 - 2019

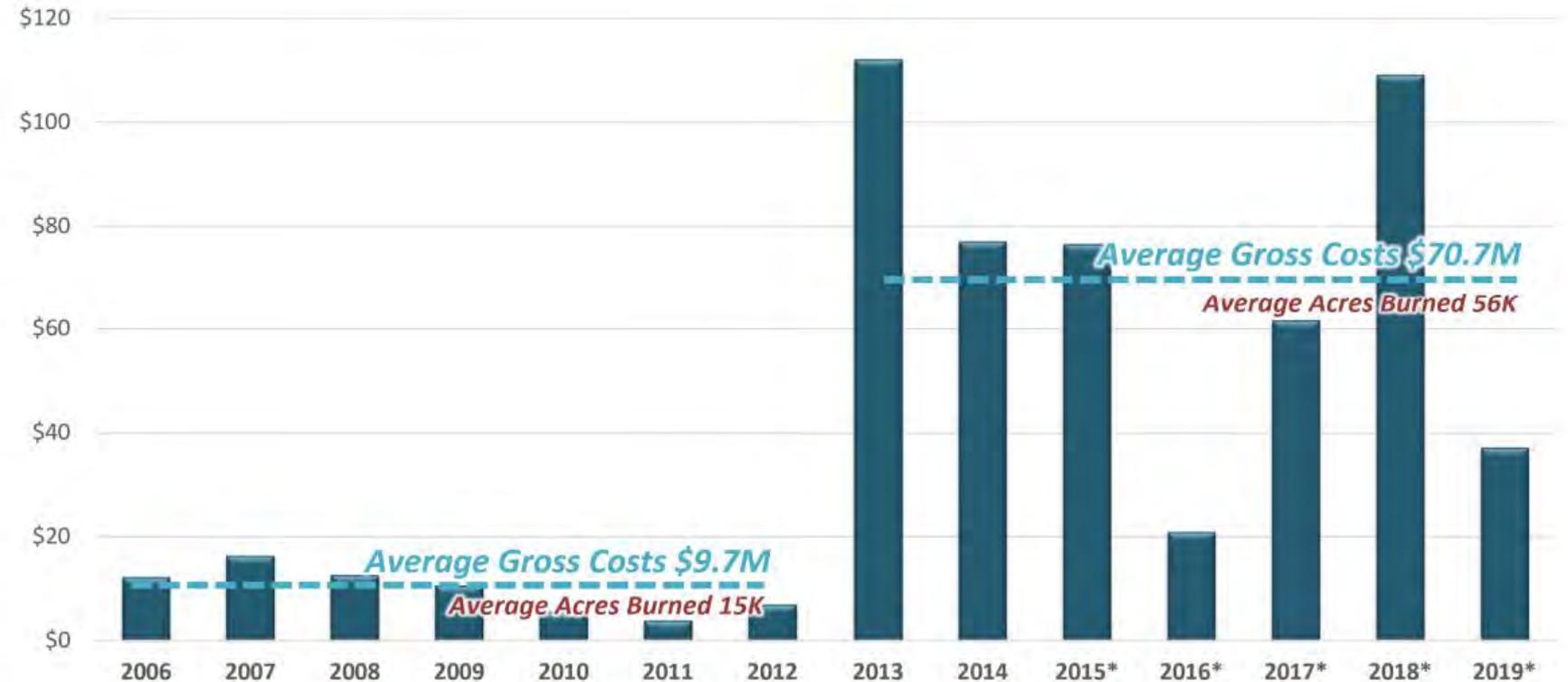


ODF Large Fire Costs

ODF Protection Finance and EFCC Data 6/02/2020.

Values are gross costs by calendar year including non-jurisdictional fires for 2013-2019.

Gross Costs
(Millions)



*includes draft claims figures



2020 Fire Season Readiness

COVID-19 Preparedness

Readiness/Preparedness

- Training
- Wildfire Prevention/Public Information

Initial Attack

- Aggressive and safe initial attack
- Keep large fires off the landscape

Extended Attack/IMT Support

- Closed Incident Command Post
- Forward operating base camp





COVID-19 IMT Camp Subcommittee

- Taking a collaborative effort to operationalize existent plans
- Study lessons learned and ground truths from current fire assignments

COVID-19 Prevention & Response Guidelines for Large Fires

- Protocols for prevention, coordination and response efforts specific to fire camp

COVID-19 Module

- A three-person team assigned to an incident specifically for the purpose of COVID-19 mitigation in fire camp
- Health Liaison, COVID-19 Responders

COVID-19 Coordinators

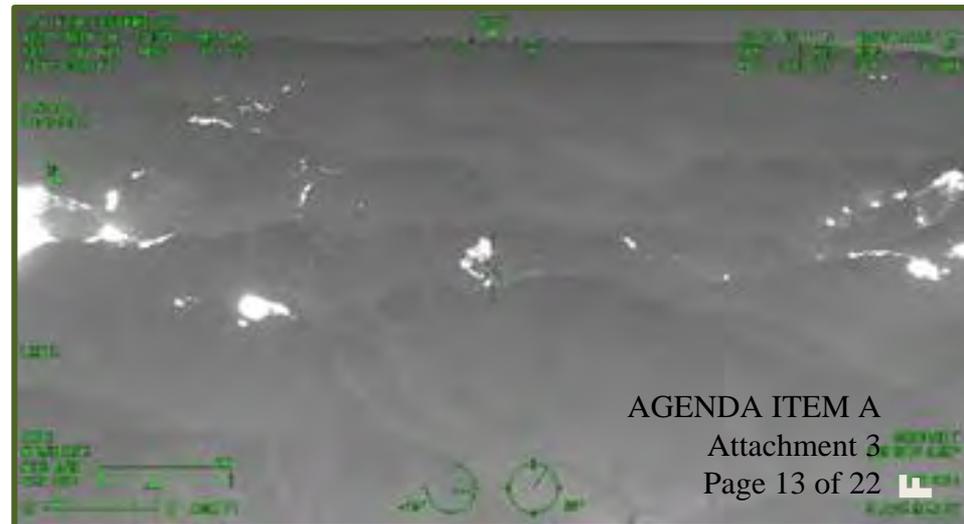
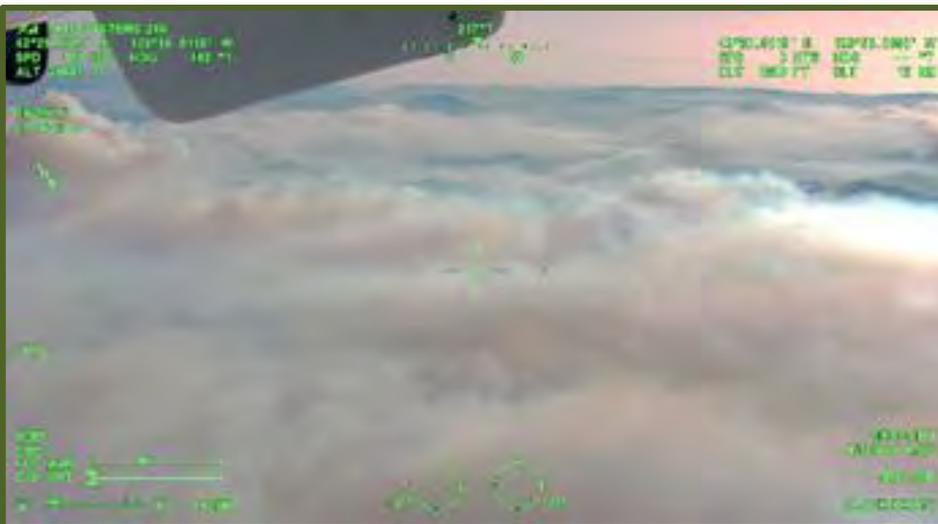
- Experts in field of emergency response and public health
- Regionally staffed to assist with coordination/communication between ODF districts and local public health



Strategic Investments

Infrared (IR) & Mapping System

- Night Vision
- Mapping
- Software
- Total investment: \$692,336.00



AGENDA ITEM A

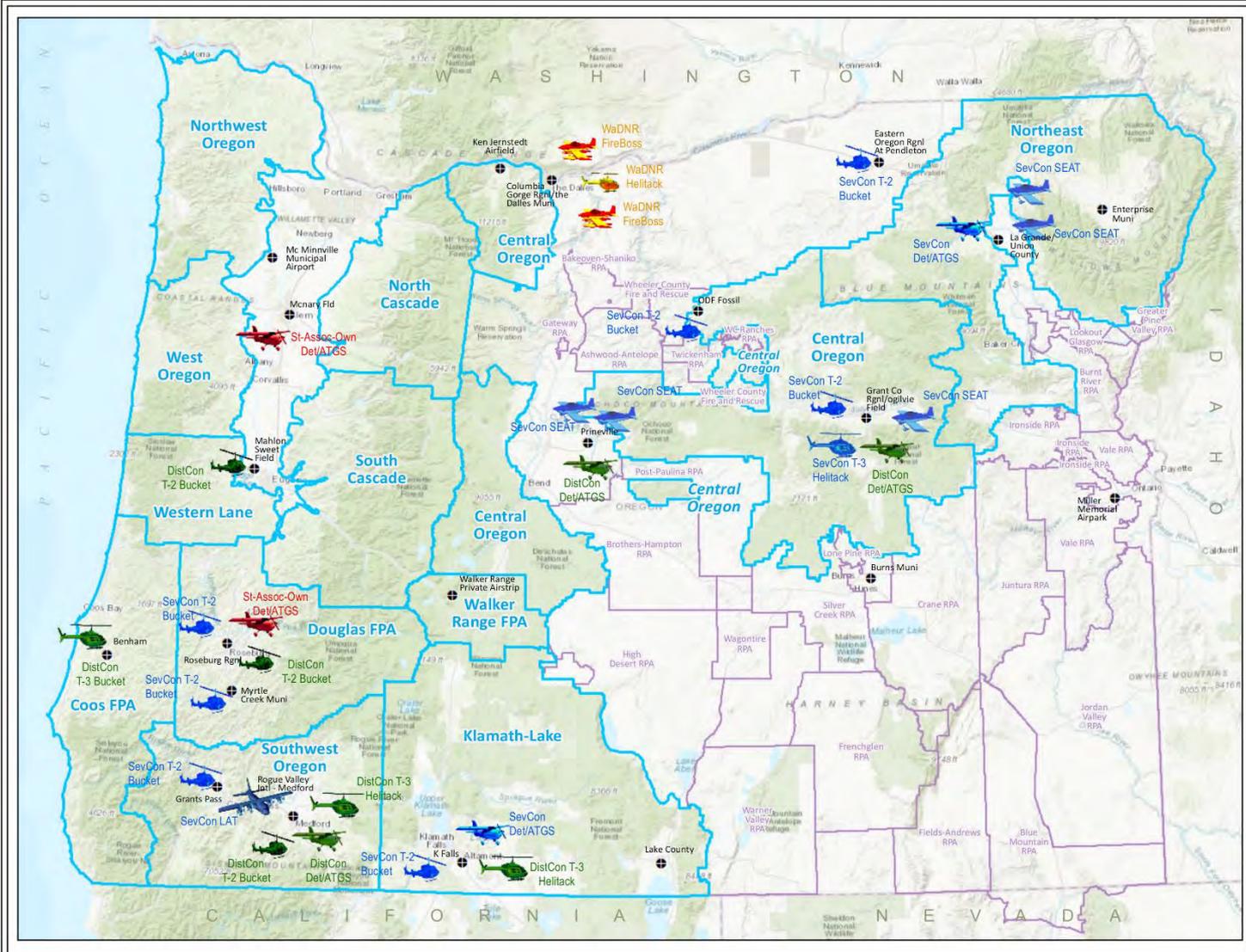
Attachment 3

Page 13 of 22





Aviation Resources - Including Severity



ODF Aviation Resources

State & Association

Detection/ATGS
150 miles/60 mins

District Contracted

Detection/ATGS

T2 Bucket
60 miles/30 mins

T3 Bucket & T3 Helitack
50 miles/30 mins

Severity Contracted

Detection/ATGS

T2 Bucket

SEAT
75 miles/20 mins

T3 Helitack

LAT
250 miles/60 mins

WA DNR

Fireboss
 Helitack

Airports ODF Use

ODF Fire Protection Districts

Rangeland Protection Agency Districts

AGENDA ITEM A

Attachment 3

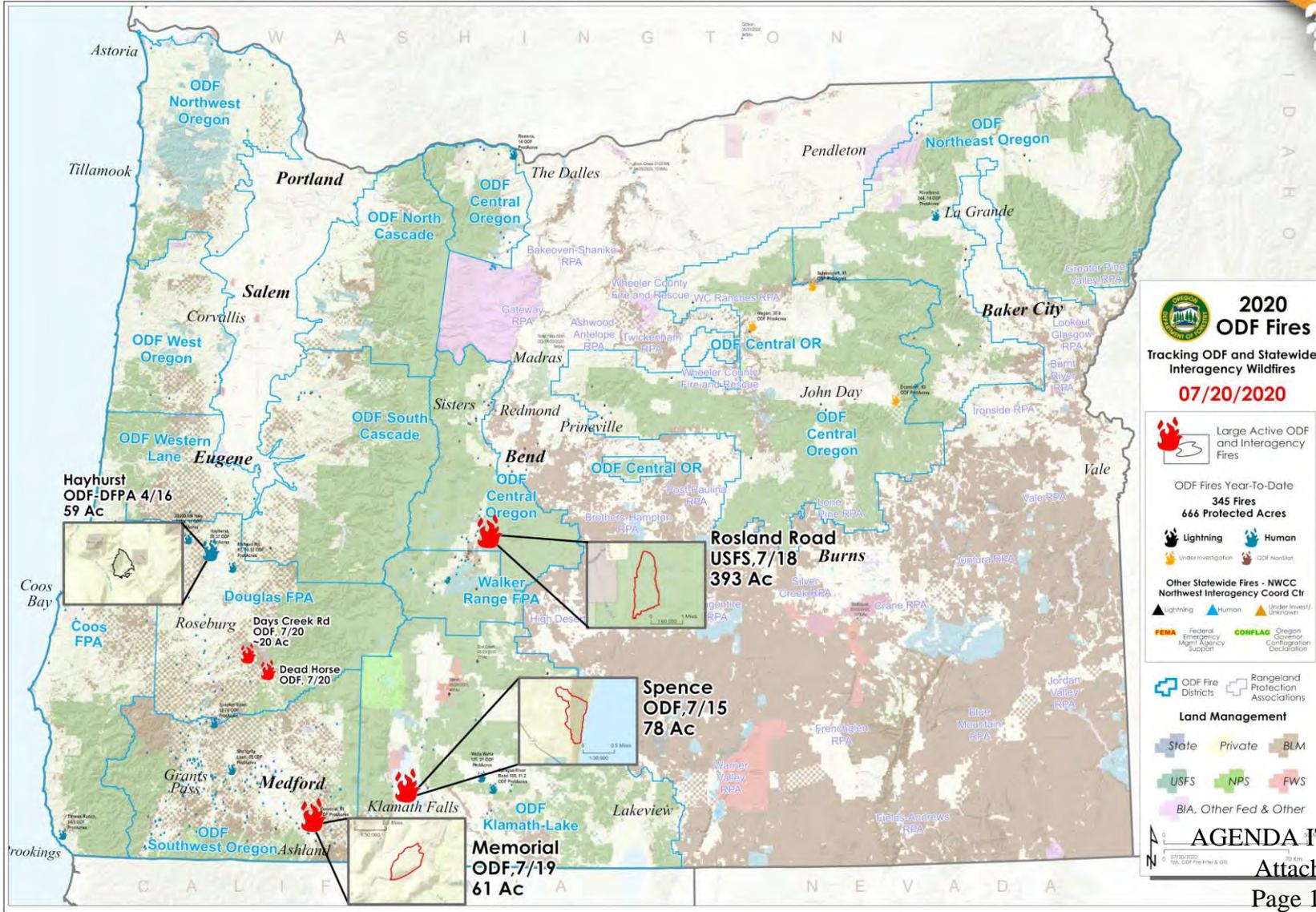
Page 14 of 22



05/07/2024
NL&SL, ODF Aviation
T2A, Fire Intel & GIS

Fire Briefing Map

July 20, 2020



2020 ODF Fires
 Tracking ODF and Statewide Interagency Wildfires
07/20/2020

Large Active ODF and Interagency Fires

ODF Fires Year-To-Date
345 Fires
666 Protected Acres

Lightning Human
 Under Investigation ODF Non/Not

Other Statewide Fires - NWCC Northwest Interagency Coord Ctr
 Lightning Human Under Invest/Unknown

FEMA Federal Emergency Mgmt Agency Support CONFLAG Oregon Governor Configuration Declaration

ODF Fire Districts Rangeland Protection Associations

Land Management
 State Private BLM
 USFS NPS FWS
 BIA, Other Fed & Other













SOFSA: State of Oregon Fire Situation Analyst

A partnership of ODF and OSFM: A new statewide common operating picture for fire and other emergency activities.

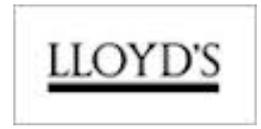
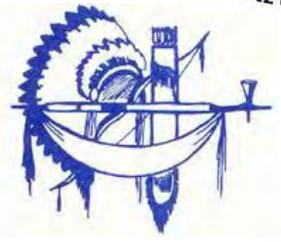
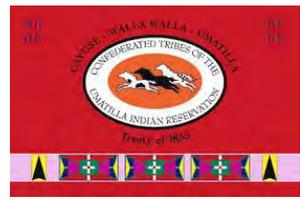


The screenshots illustrate the SOFSA interface's capabilities, including:

- Incident Details:** Panels for 'Spence', 'Teller Flats 0281 OD', and 'Rosland Road 0429 NE' showing general information, incident ID, and status.
- Map Views:** Topographic maps with various overlays representing fire lines, resources, and land ownership.
- Legends:** Multiple legends for 'Federal Owner (SMA)', 'Surface Management Agency', 'MODSVIRS Detection', and 'VIRS Control'.
- Resource Management:** A panel for 'Oregon State Fire Marshal' showing resource types like 'Attack', 'Water', and 'Support'.
- MODSVIRS Detection:** A legend for 'MODSVIRS Detection' with categories for 'MODS Control' and 'VIRS Control' with duration ranges (0 to 6 hours, 6 to 12 hours, 12 to 24 hours, 24 to 48 hours, over 48 hours).



Oregon's Complete & Coordinated Fire Protection System



Who owns the forest?

60% Federal government

(17.8 million acres)

22% Large private

(6.6 million acres)

12% Small private

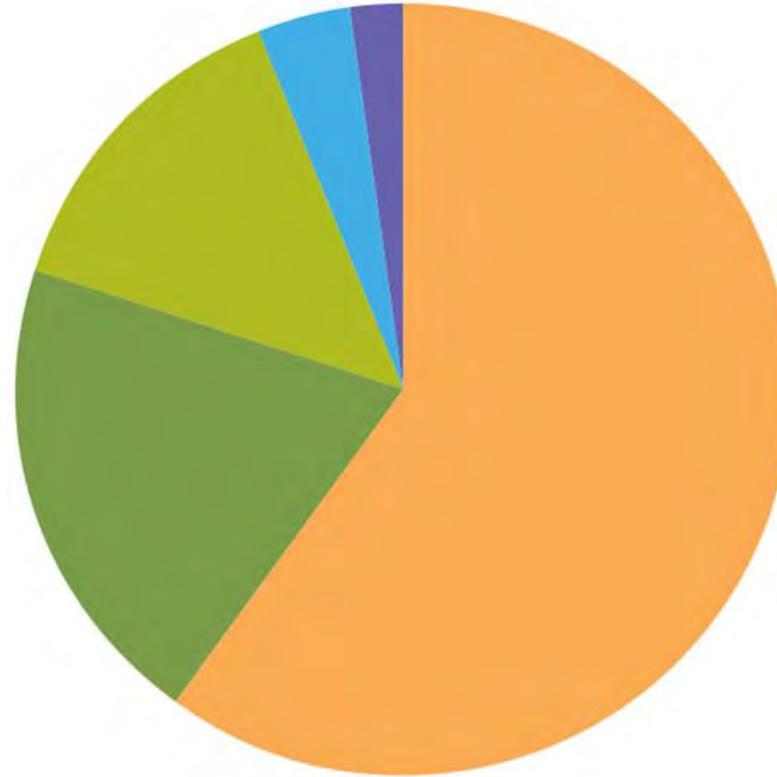
(3.6 million acres)

4% State

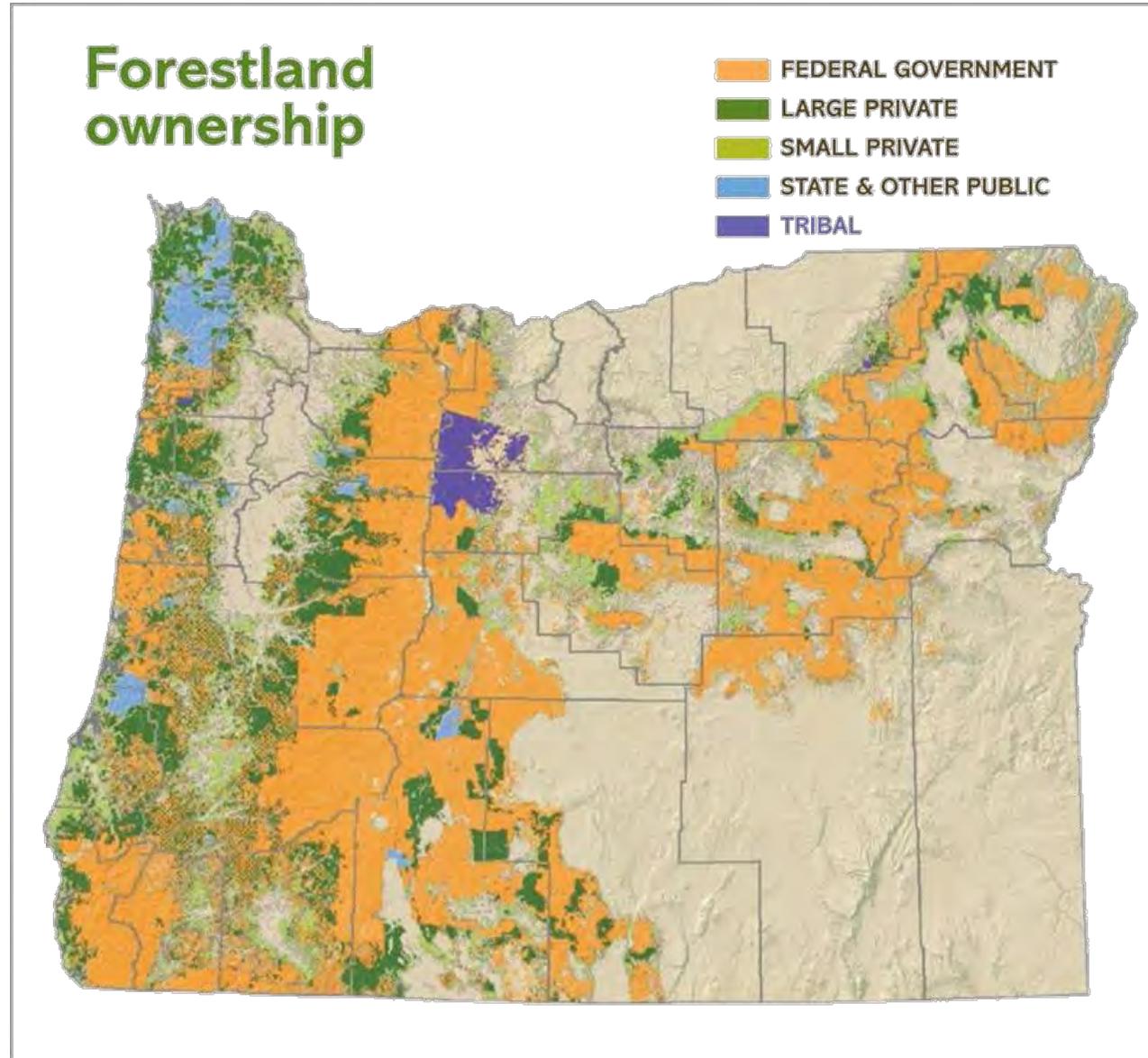
(1.1 million acres)

2% Tribal

(.5 million acres)



Forest ownership map



Hello. Thank you for the opportunity to speak today. My name is Kathleen Sullivan. I am a Clatsop County Commissioner. I serve as our county FTLAC representative. I am currently also serving as chairperson for our board of commissioners, but today, I am here speaking as an individual commissioner, not as a spokesperson for the entire board.

I have and continue to support the work being done around establishing a Habitat Conservation Plan on Oregon State Forest lands. An HCP would offer certainty in both revenue and conservation.

During my term, the Clatsop Board of Commissioners voted 3-2 to opt out of the Linn County Lawsuit. I voted to opt out because I believe the greatest permanent value mandates that our state forest lands be managed for revenue, recreation, and habitat. The Linn County lawsuit is still being litigated. In fact, lawsuits and the threat of lawsuits remain a factor in managing state forests.

Clatsop County depends on the generous revenue received from state forest lands within Clatsop County. We have no federal forest lands to speak of, nor school trust lands. We use the timber revenue received for essential services, as well as capital projects. It is important to have consistent and reliable funding. A Habitat Conservation Plan could be thought of as an insurance policy for this timber revenue stream. It makes practical business sense, compared to the Take Avoidance Strategy.

The process to determine the feasibility of an HCP however is a multi-year public process. I want to thank Liz Dent, Brian Pew, Cindy Kolomechuk, and staff, along with the team of stakeholders working to explore the possibility of creating a Habitat Conservation Plan on state forest lands. I appreciate the ongoing information that has been shared throughout this process, online and in person.

I want to thank Oregon State Forester, Peter Daugherty, and Board Chair Tom Imeson for their July 14th letter sent to all Commissioners of the 15 Forest Trust Land Counties. I agree, and am also frustrated with the cancellation of FTLAC meetings since December 2019. The FTLAC has a role in advising the Board of Forestry as well as consulting each other on forestry related issues. Clatsop county has not been consulted on the cancellations of meetings, nor the

statements brought to the Board of Forestry. I am worried about this continuing breakdown in process. What purpose does silence serve?

The challenges facing decision makers during this time of pandemic, economic disruption, social unrest and climate disturbances can be overwhelming. I respect that more is being demanded of not only our citizens, but also our elected leaders. Still decisions must be made. State Forest lands still need to be managed. The endangered species act is law. Ensuring consistent streams of timber revenue is vital for our trust land counties to provide essential services to our communities. I believe establishing an HCP will go a long way toward stability of both revenue and conservation.

I am once again asking for open, and transparent communications between the forest trust land counties in order that we may do the people's business in public. We are indeed in difficult times, but these times call for more communication, more listening, more compassion, not less[KS1].

Finally, I would like to thank the Board of Forestry Members for their continued extraordinary service during these unprecedented times, Nils Christoffersen, Cindy Deacon Williams, Michael Rose, Joe Justice, Jim Kelly, and Brenda McComb. Thank you for your service and thank you for listening.



Western Oregon State Forests HCP Update

Oregon Board of Forestry
July 22nd , 2020



Liz Dent

ODF State Forests Division Chief

Brian Pew

ODF State Forests Deputy Division Chief

Mike Wilson

ODF State Forests Resource Unit Leader

Cindy Kolomechuk

ODF State Forests HCP Project Lead

Troy Rahmig

ICF Senior Managing Director, Conservation Planning

Brett Brownscombe

Oregon Consensus, Senior Project Manager

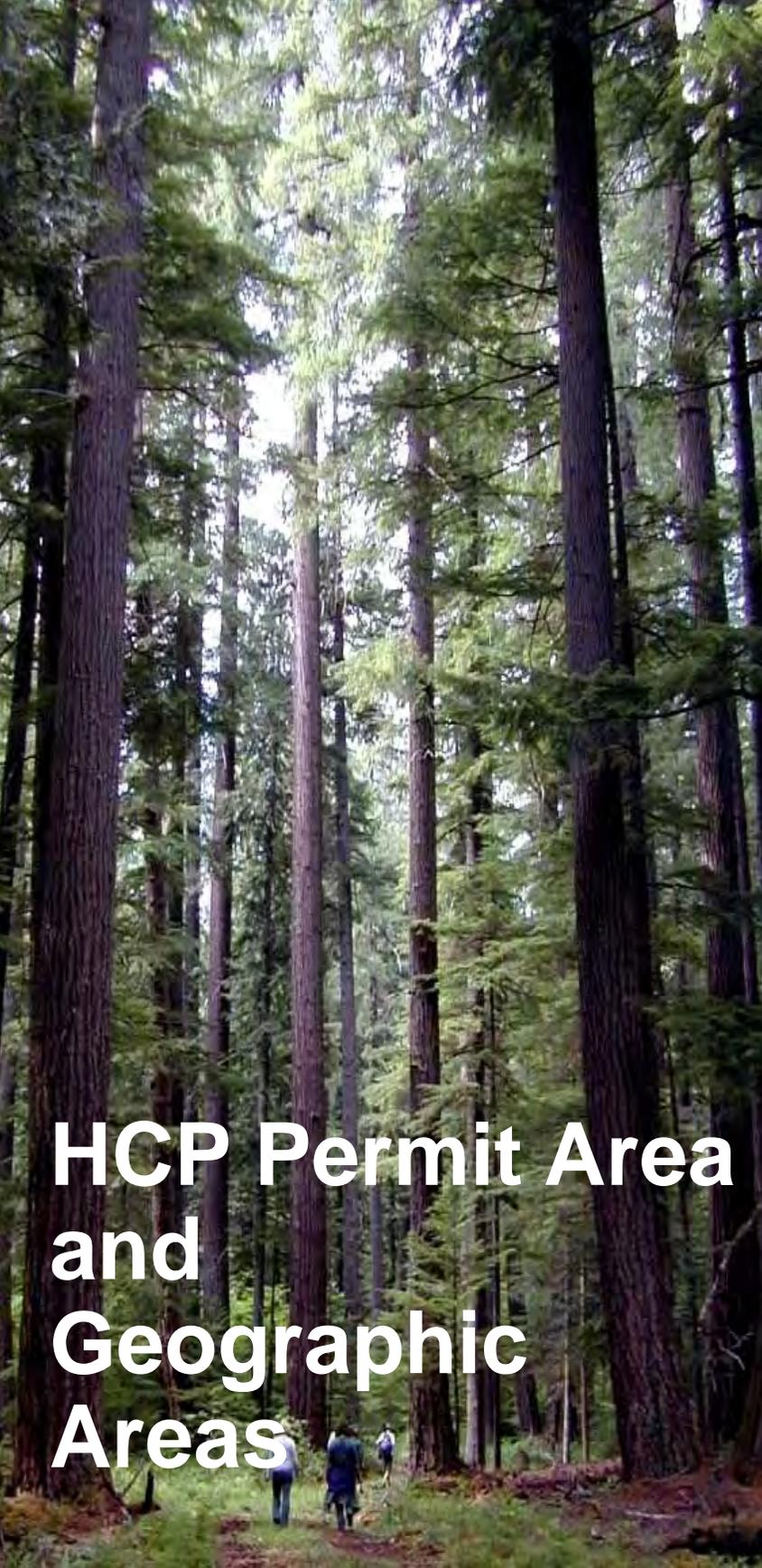


K E A R N S WEST

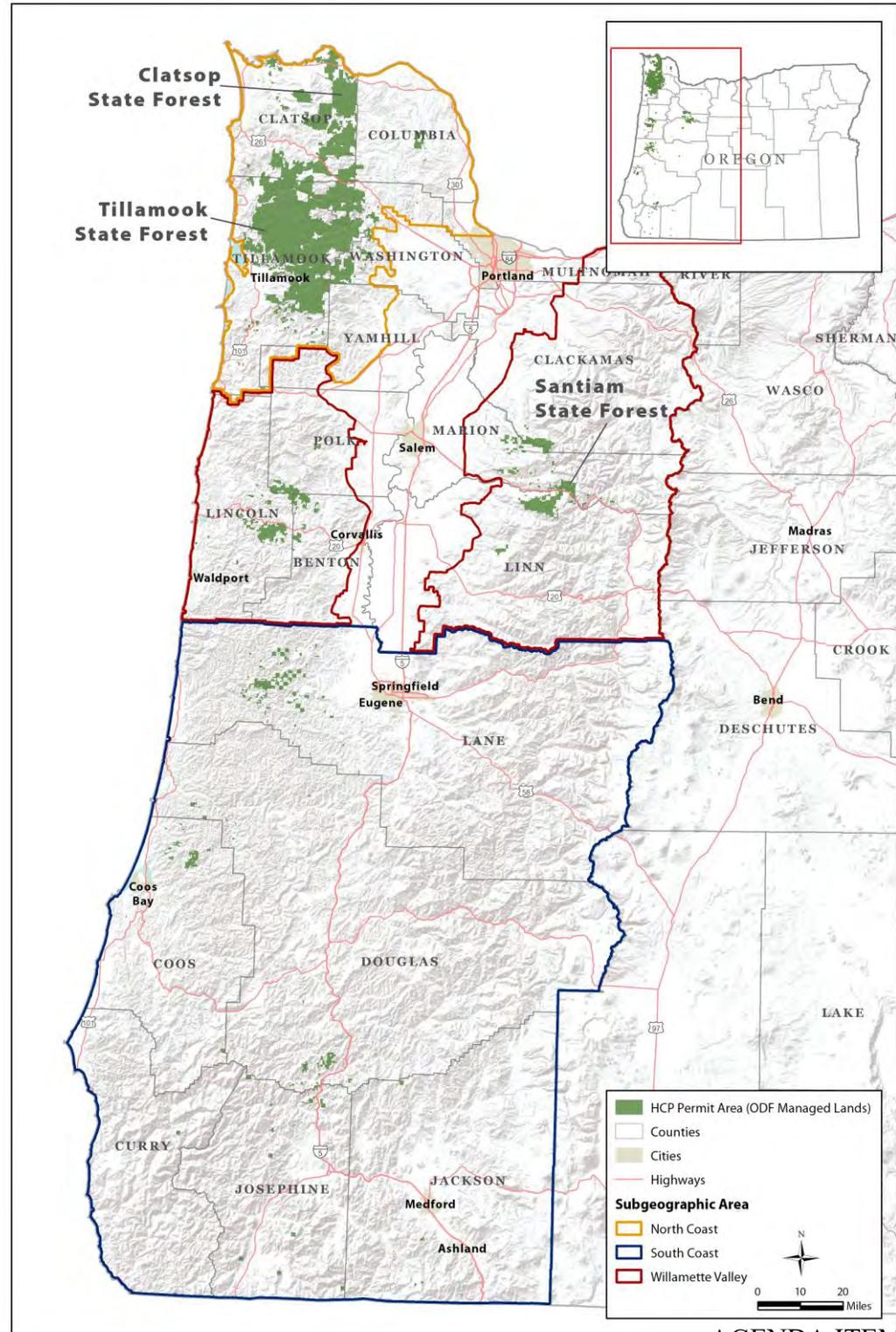
AGENDA ITEM A

Attachment 6

Page 1 of 35



HCP Permit Area and Geographic Areas





HCP Update

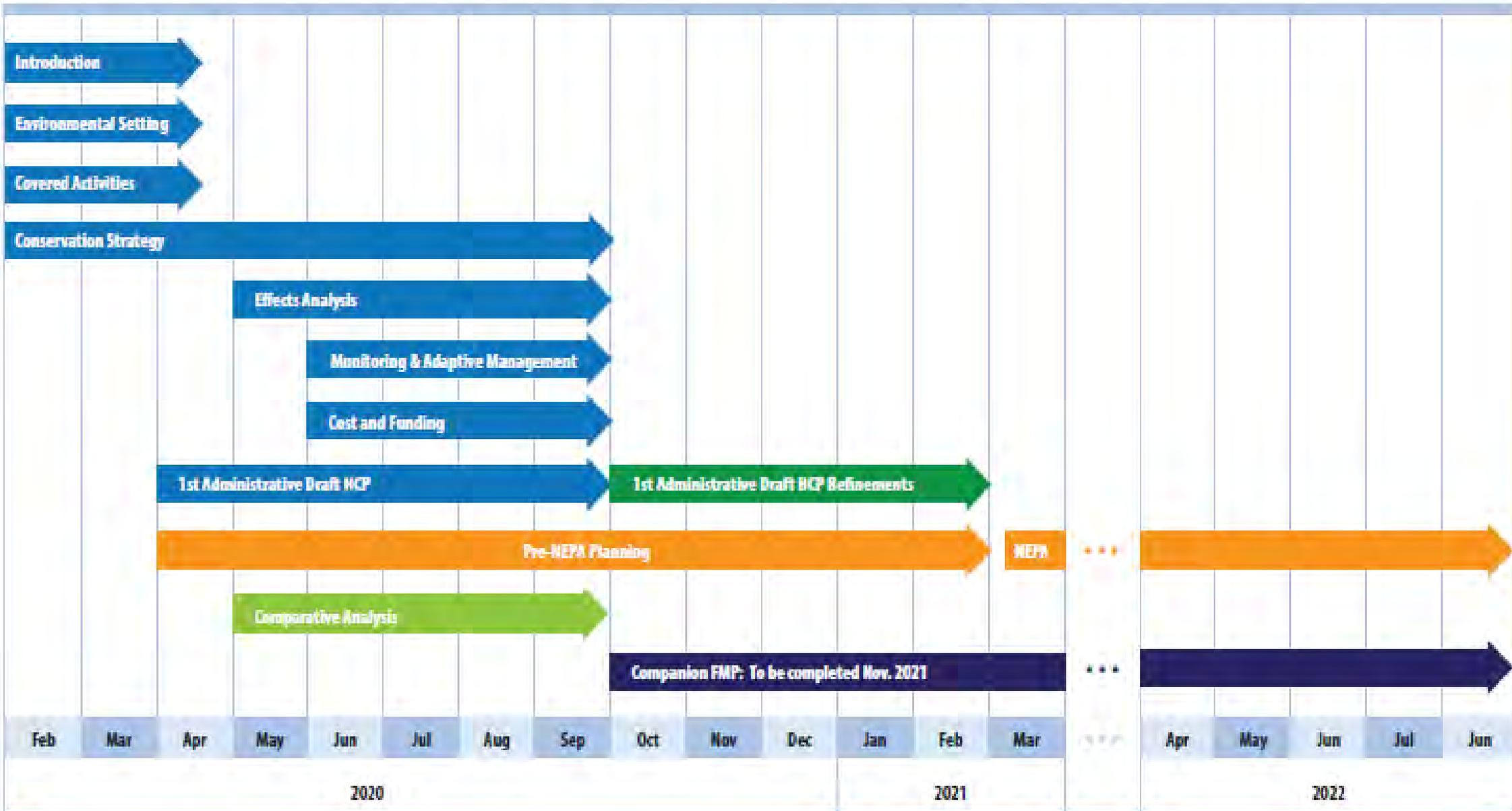
Topics to be Covered

- HCP Process Update
- Stakeholder Engagement
- Conservation Strategies
 - Aquatic
 - Terrestrial
- Forest Management Modeling
- Forest Goals and Objectives
- Next Steps



HCP Process Update

Draft HCP Development Timeline





Stakeholder and County Engagement Update



Stakeholder engagement since the last Board update:

- Meetings Open to the Public
 - March
 - July
- Additional Stakeholder Engagement
 - Interest group meetings
 - Focused on:
 - Conservation Strategies
 - Timber Harvest
 - Modeling
 - Recreation

**Stakeholder
Engagement**

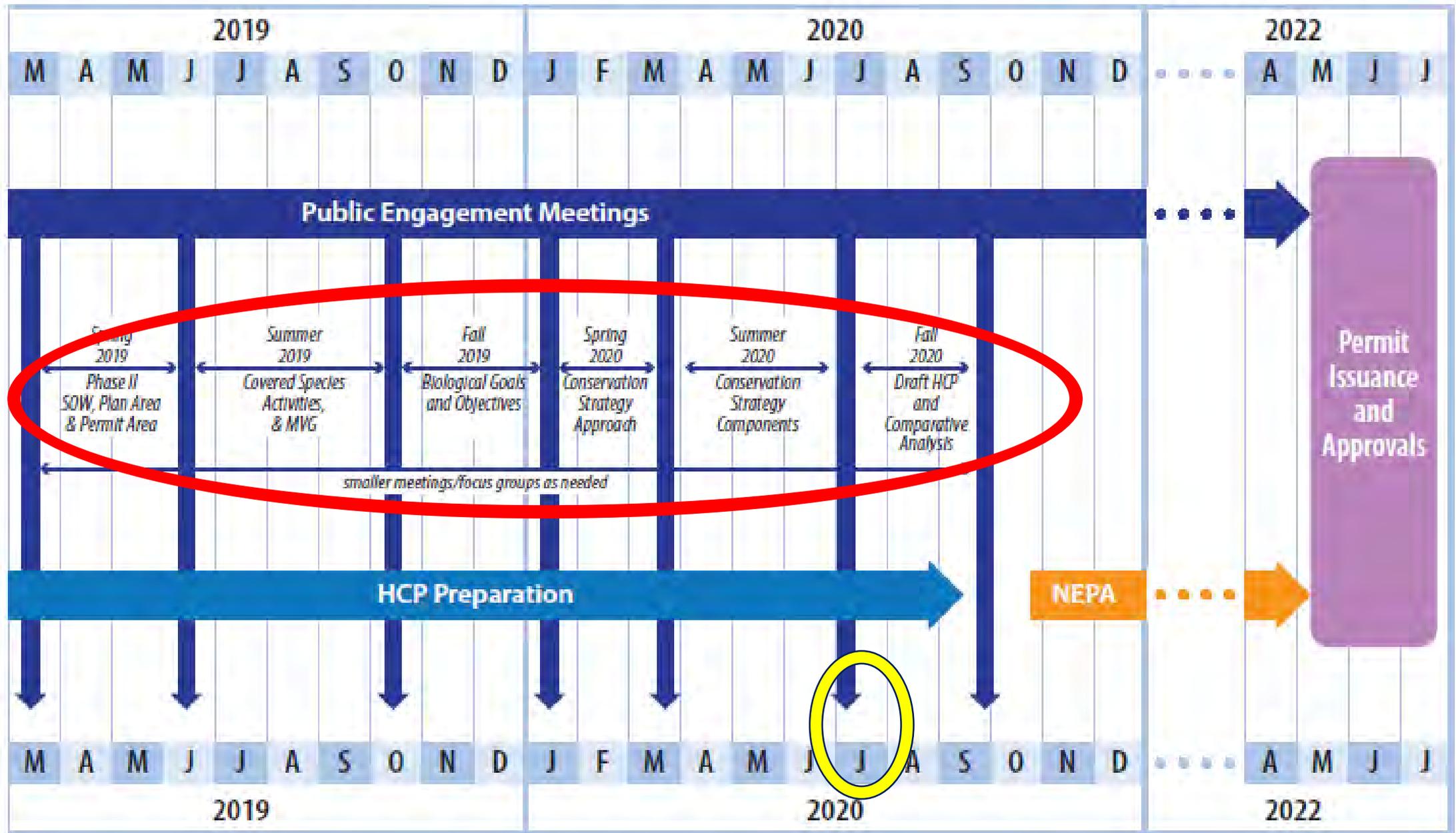


County Engagement

County Engagement since last Board Update:

- FTLAC meetings—desired venue for engagement
- COVID Challenges
- Continued effort and opportunities

Western Oregon State Forests HCP Stakeholder Engagement





Stakeholder & County Engagement

Future Schedule

▪ Counties:

- Continued effort to engage in FTLAC meetings
- Individual representative conversations

▪ Stakeholders:

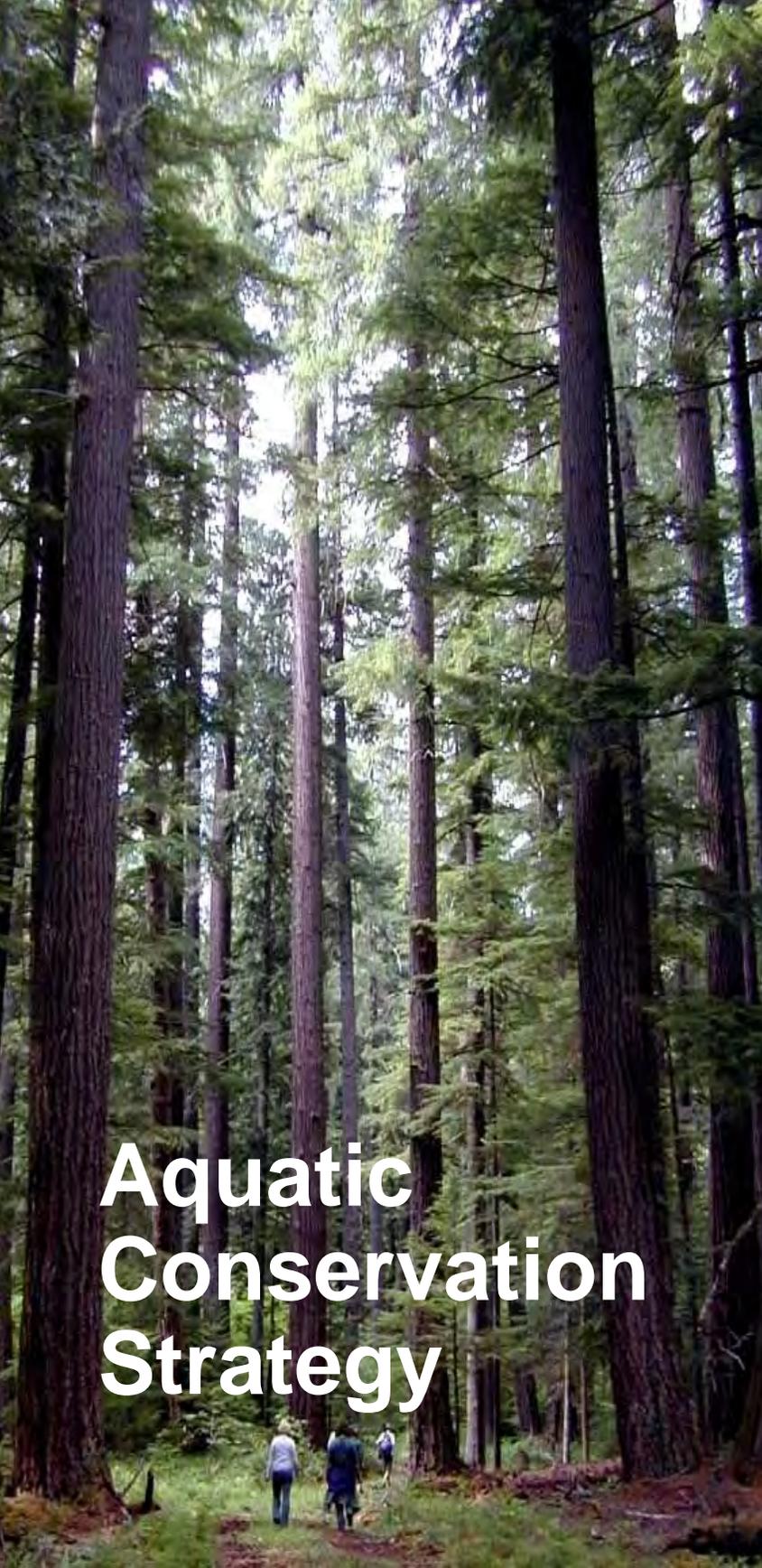
- Joint Focus Group Meetings (Aug. and Sept.)
- Individual representative conversations
- State Forest Advisory Committee (Sept.)

HCP Meeting Open to the Public Sept. 16th (1-4pm)



Riparian Conservation Strategy

- Riparian Conservation Area
- Road System Management
- Restoration



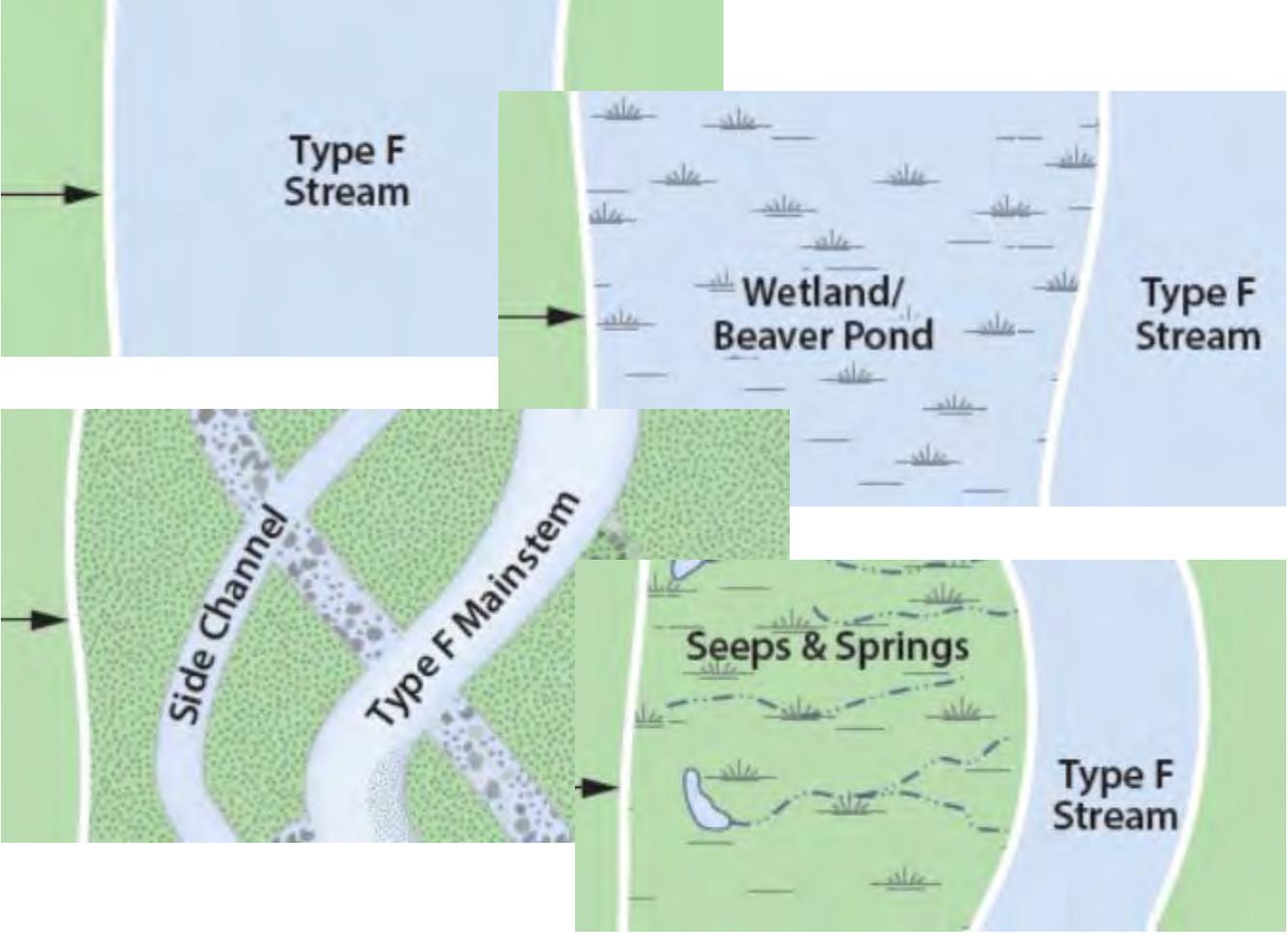
Aquatic Conservation Strategy

Focus on Key Processes

- Instream habitat
 - Primarily wood recruitment
- Stream temperature
- Sediment delivery

Riparian Conservation Areas (RCA)

- Tiered buffering approach
 - Stream type and function
 - Minimum buffer widths
 - Horizontal distance
- Little to no management
 - Standard Practices
 - Exceptions (reported annually)



Horizontal Distance & Aquatic Zone

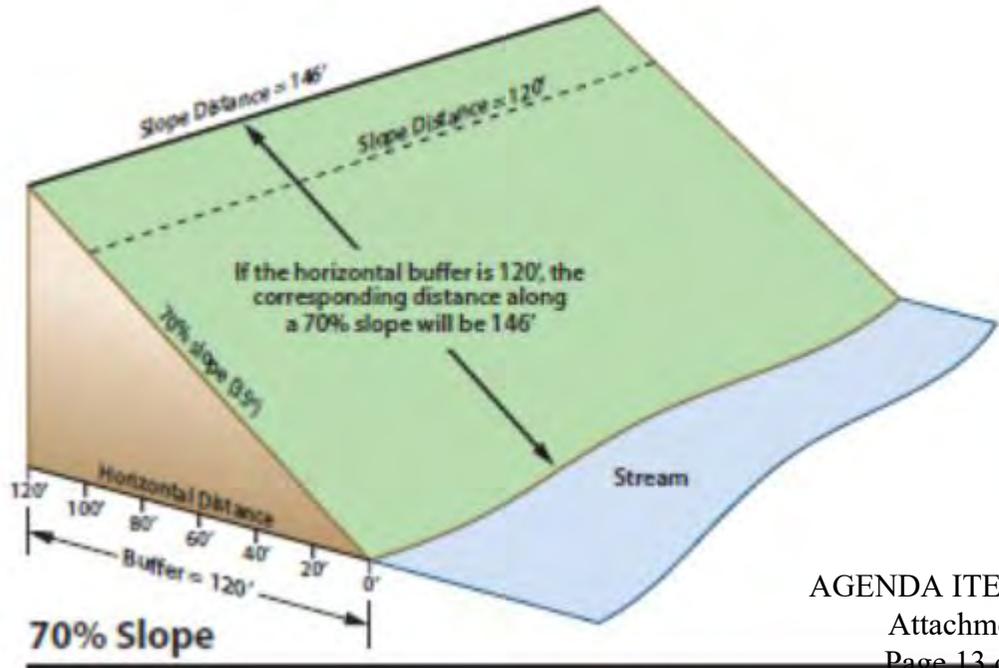


Table 4-3. Minimum Buffer Widths (Horizontal Distance) for All Type F and Large and Medium Type N

Stream Type	Minimum Management Area Width (feet)	
	Type F	Type N
Large	120	120
Medium	120	120
Small	120	See Table 4-4
Seasonal ^a	50	See Table 4-4

^a Seasonal: A stream that does not have surface flow after July 15.

Table 4-4. Minimum Riparian Conservation Area Widths (Horizontal Distance) for Small Perennial and Seasonal Type N Streams

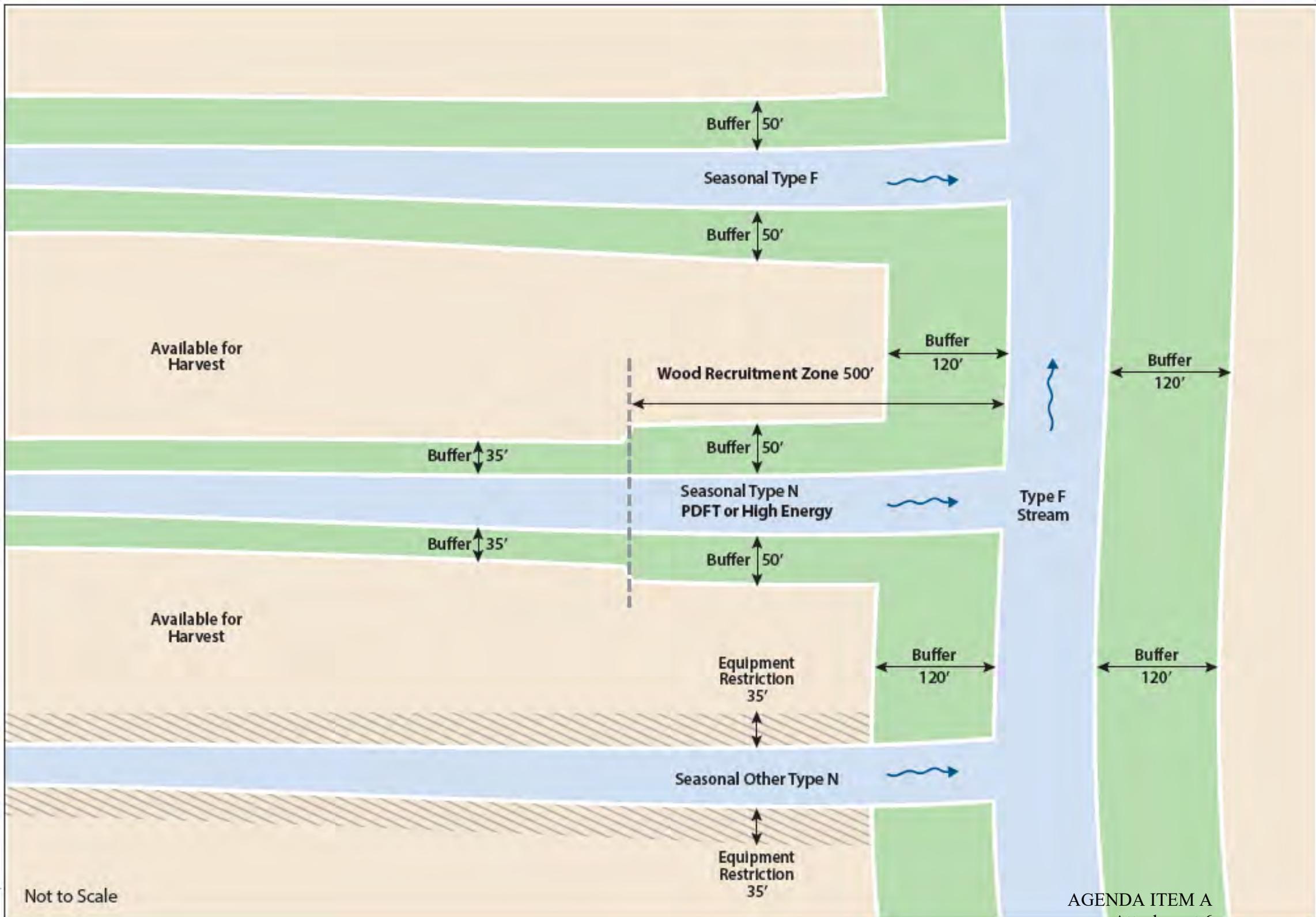
Stream Type	Minimum Management Area Width (feet)	
	Within 500-foot Temperature Zone	Upstream of 500-foot Temperature Zone
Perennial Small Type N	120	35
Potential debris flow track (Seasonal Type N) ^a	50	35
High energy (Seasonal Type N) ^b	50	35
Seasonal other (Type N) ^c	0 ^d	0 ^d

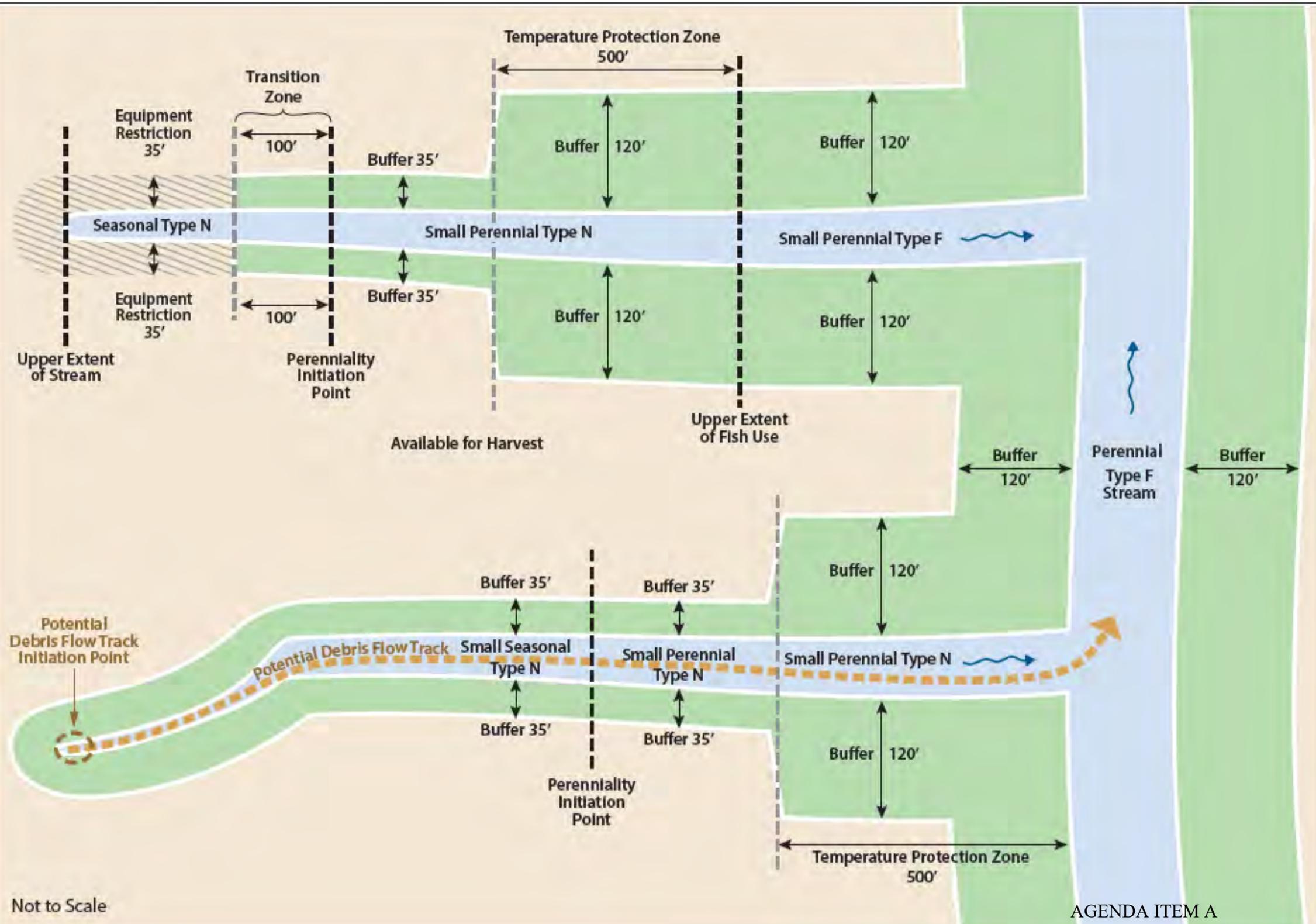
^a Potential debris flow tracks: Reaches on seasonal Type N streams that have a high potential of delivering wood to a Type F stream.

^b High Energy: Reaches on seasonal Type N streams that have a high potential of delivering wood and sediment to a Type F stream during a high-flow event.

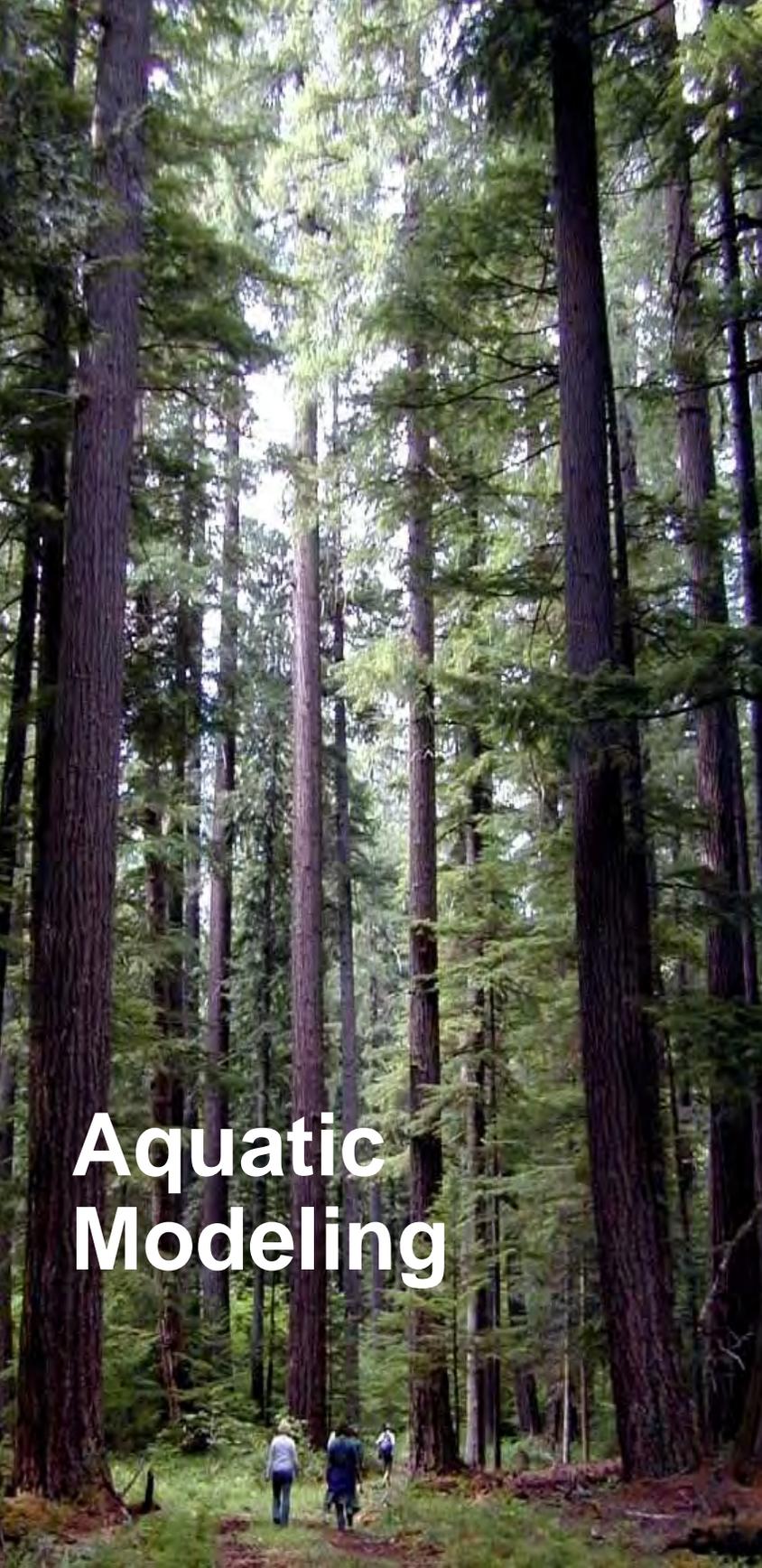
^c Seasonal: A stream that does not have surface flow after July 15.

^d Ground Based Equipment Restriction Zone





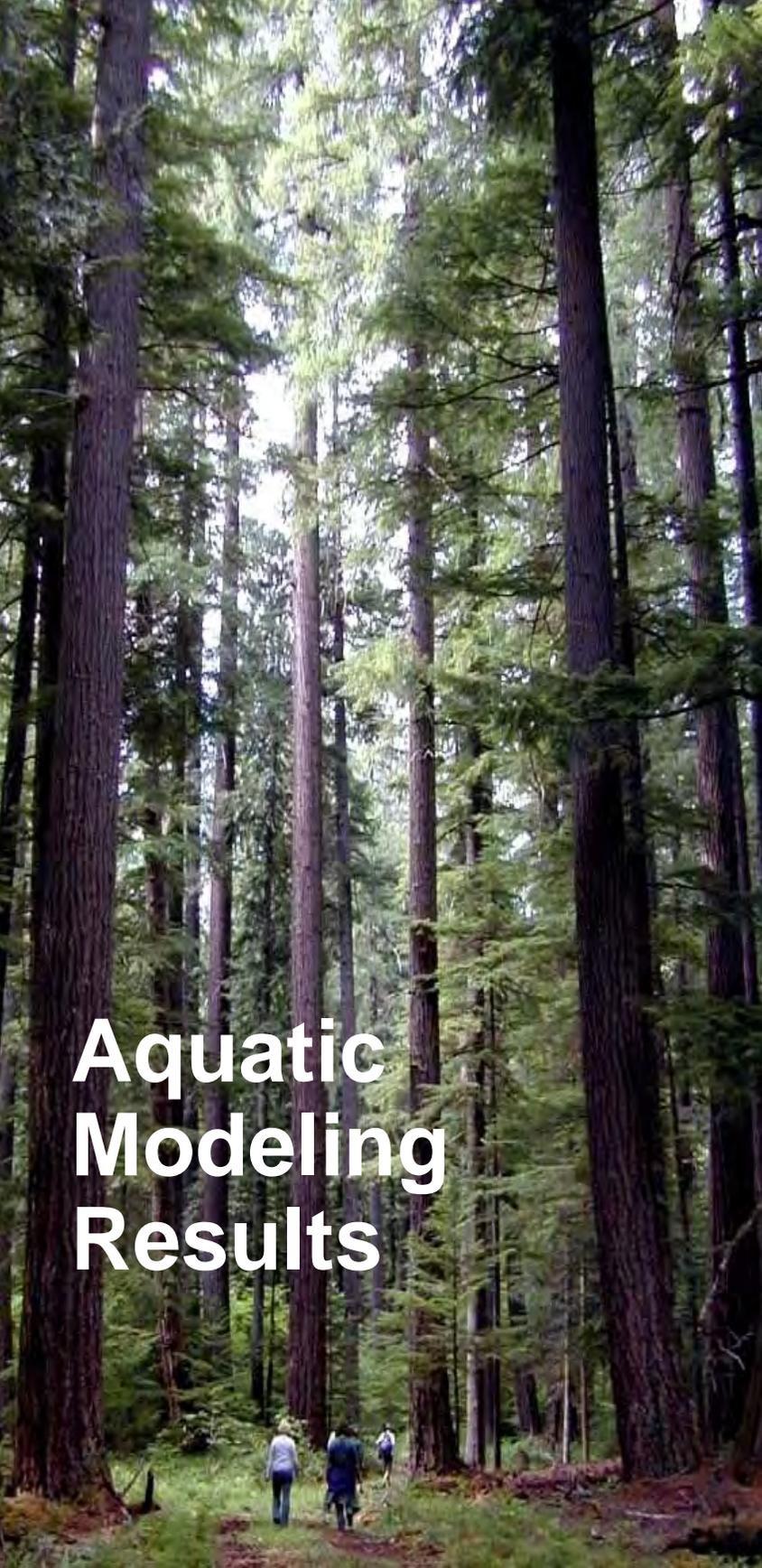
Not to Scale



Aquatic Modeling

Objectives of Aquatic Modeling

- Goal to determine if RCA buffering strategy achieves BGOs
- Wood recruitment modeling by source
 - Adjacent riparian tree fall
 - Landslides and Mass wasting events
- Temperature sensitive stream reaches
- Modeling parameters
 - RCA buffer widths (horizontal distance)
 - ODF forest inventory data, grown forward
 - Random tree fall
 - Calibrated to the 1996 flood event
 - 70 year HCP permit term



Aquatic Modeling Results

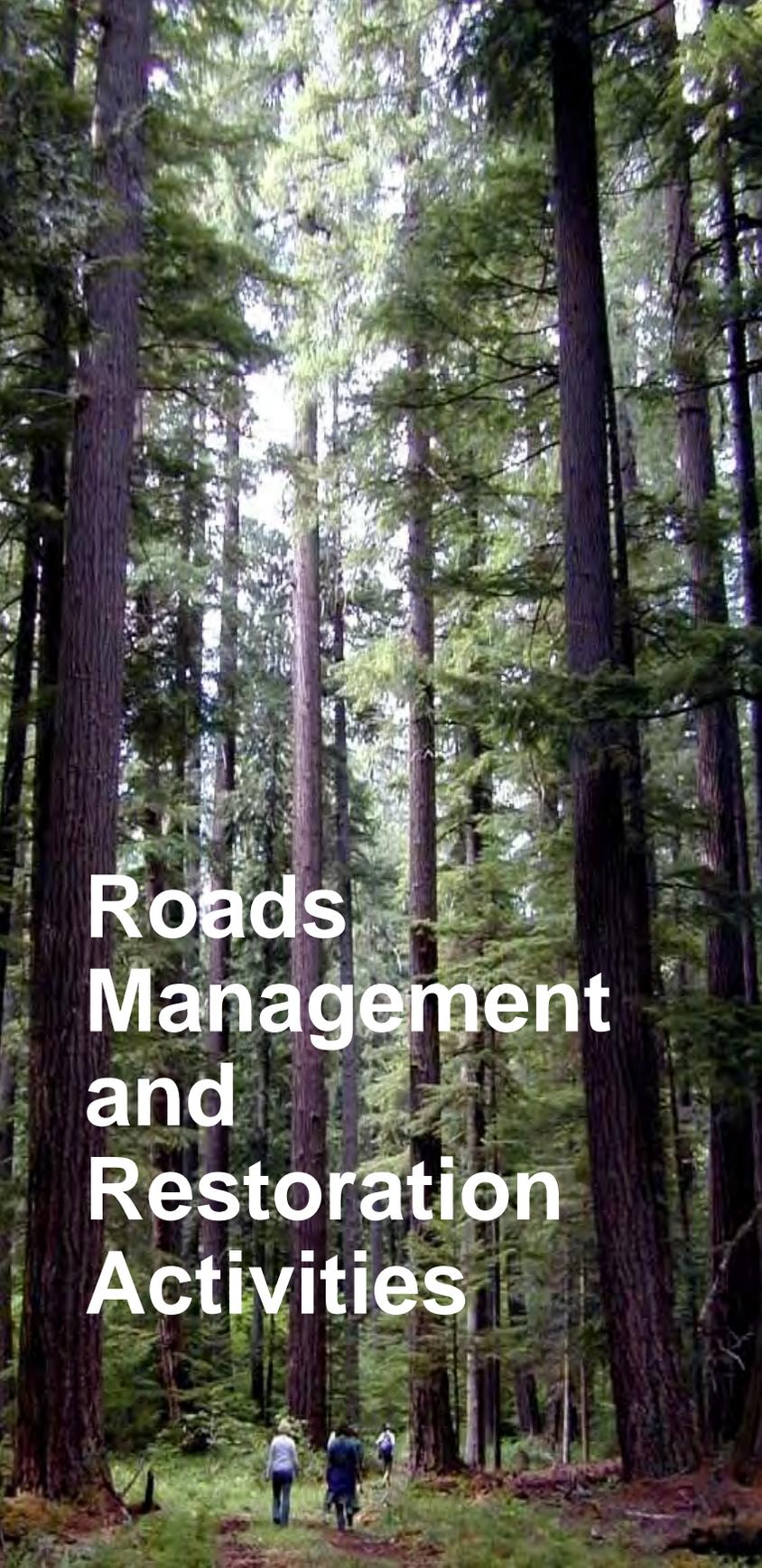
Results of Aquatic Modeling

■ Wood recruitment

- RCAs captures 99% of available wood
- 88% of from standing trees in Type-F buffers
- 12% of total wood is recruited from debris flows
- 45% of the non fish-bearing streams deliver wood to fish-bearing streams

■ Temperature

- Streams with a southern aspect
- Maximum channel width of 36'
- 67 stream miles (< 1% of total) within the permit are susceptible to warming



Roads Management and Restoration Activities

Roads Management

- Management Direction and BMPs
 - Avoid road construction in RCA
 - Road location and design BMPs
 - Vacating legacy roads

Restoration Activities

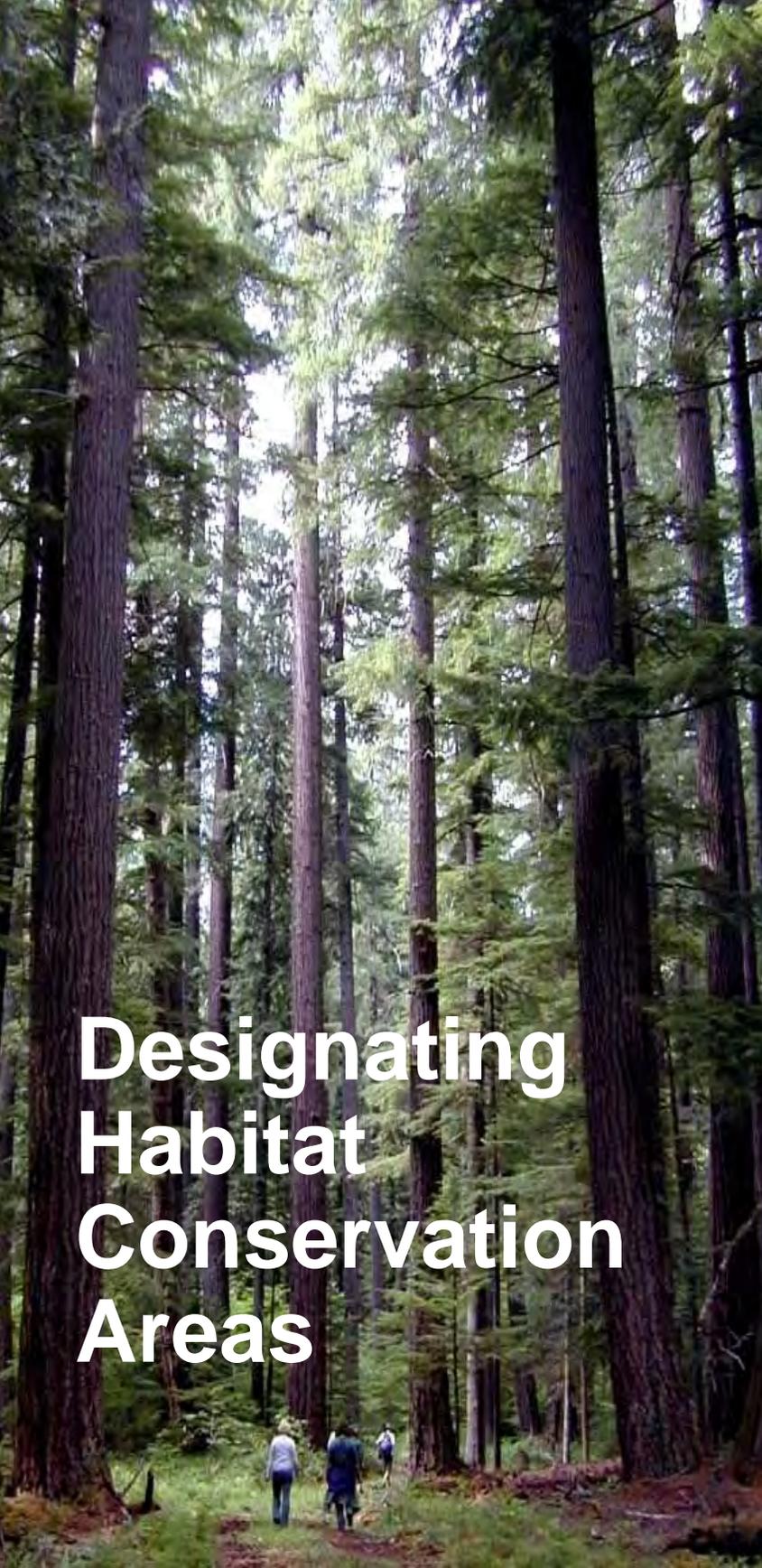
- Independent population limiting factors
 - Large wood placement
 - Deep pool and off-channel habitat creation
 - Removal of artificial barriers
- Funding stability
 - Development of conservation fund
 - Both aquatic and upland projects



Terrestrial Conservation Strategy

Habitat Conservation Area (HCA)

- Protecting
 - Known occurrences
 - Highly suitable habitats
 - Landscape connectivity
- Active management
 - Increase quantity and quality of habitat over the permit term



Designating Habitat Conservation Areas

Boundaries of HCAs:

- Protecting most currently active sites
 - Northern spotted owl activity centers
 - Marbled murrelet occupied habitat
 - Red Tree Vole nests
- Protecting historic NSO sites
 - Record of reproduction
 - Record of consistent occupancy
- Suitable habitat
 - Incorporates majority of highly suitable habitat
- Connectivity
 - Areas that provide for movement across the landscape
 - Improving areas of current low suitability to create larger suitable patches



HCA Management

Management Activities

- Management focus
 - Aligned with Biological Goals and Objectives
 - Management increases the quantity and quality of habitat over the permit term
- Silvicultural Treatments
 - Density management to promote growth in young stands – large trees, canopy diversity
 - Selective harvests employing variable retention to promote horizontal diversity and patch dynamics
 - Treatments localized disease (e.g. *Phellinus weirii*)
 - Regeneration of stands with low potential to develop habitat for covered species
 - Swiss Needle Cast infected stands
 - Hardwood stands that lack conifer
- Implementation of Activities
 - Pace and scale of activities being determined
 - Primarily early in permit term

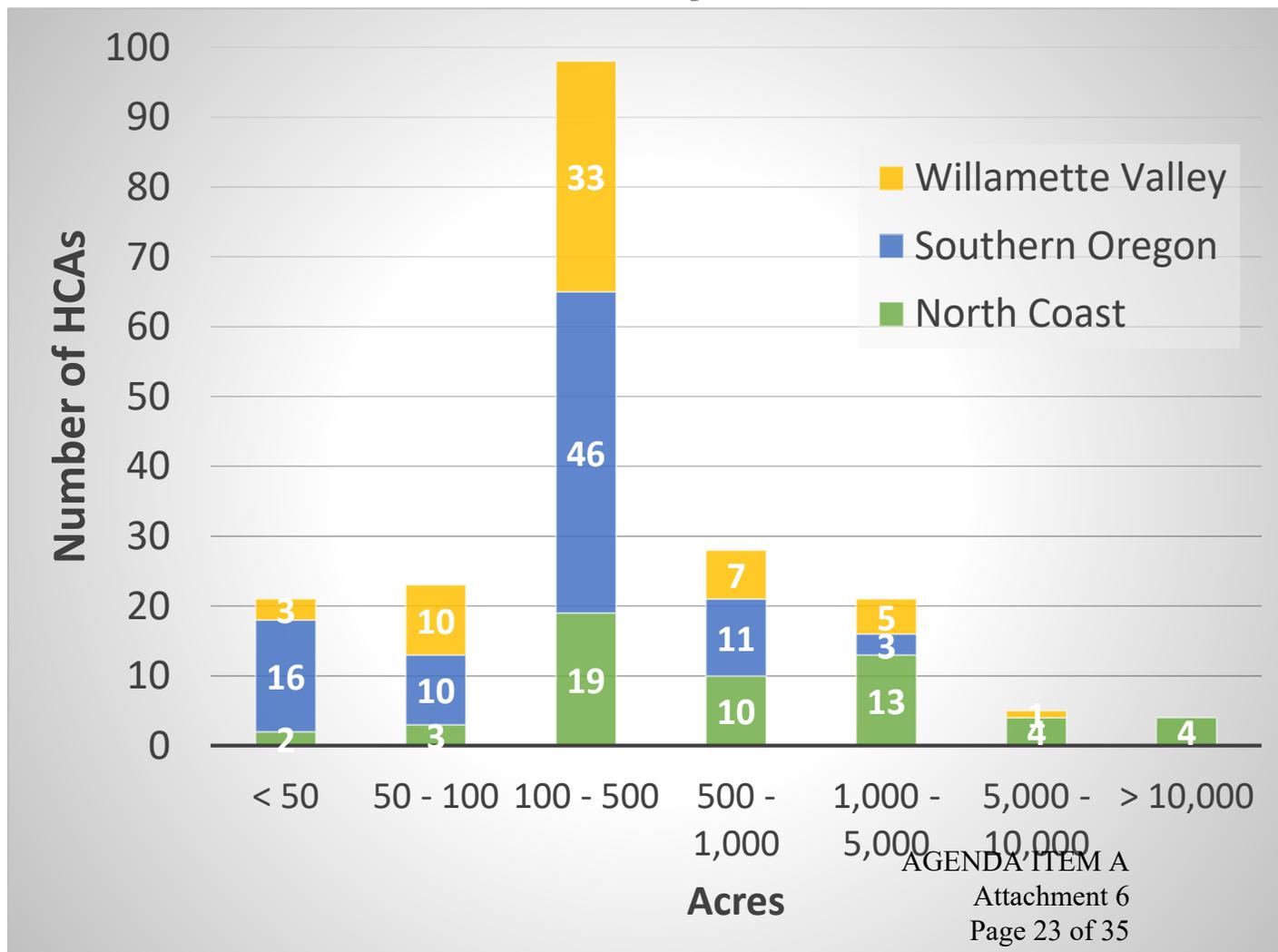


Summary of Draft HCAs

Draft HCA Size and Distribution

Permit Area	273,000 (43%) to 289,000 (45%)
North Coast	214,000 (43%) to 226,000 (45%)
Willamette Valley	34,000 (40%) to 36,000 (43%)
Southern Oregon	25,000 (47%) to 27,000 (51%)

Sizes of Draft HCAs vary across Permit Area





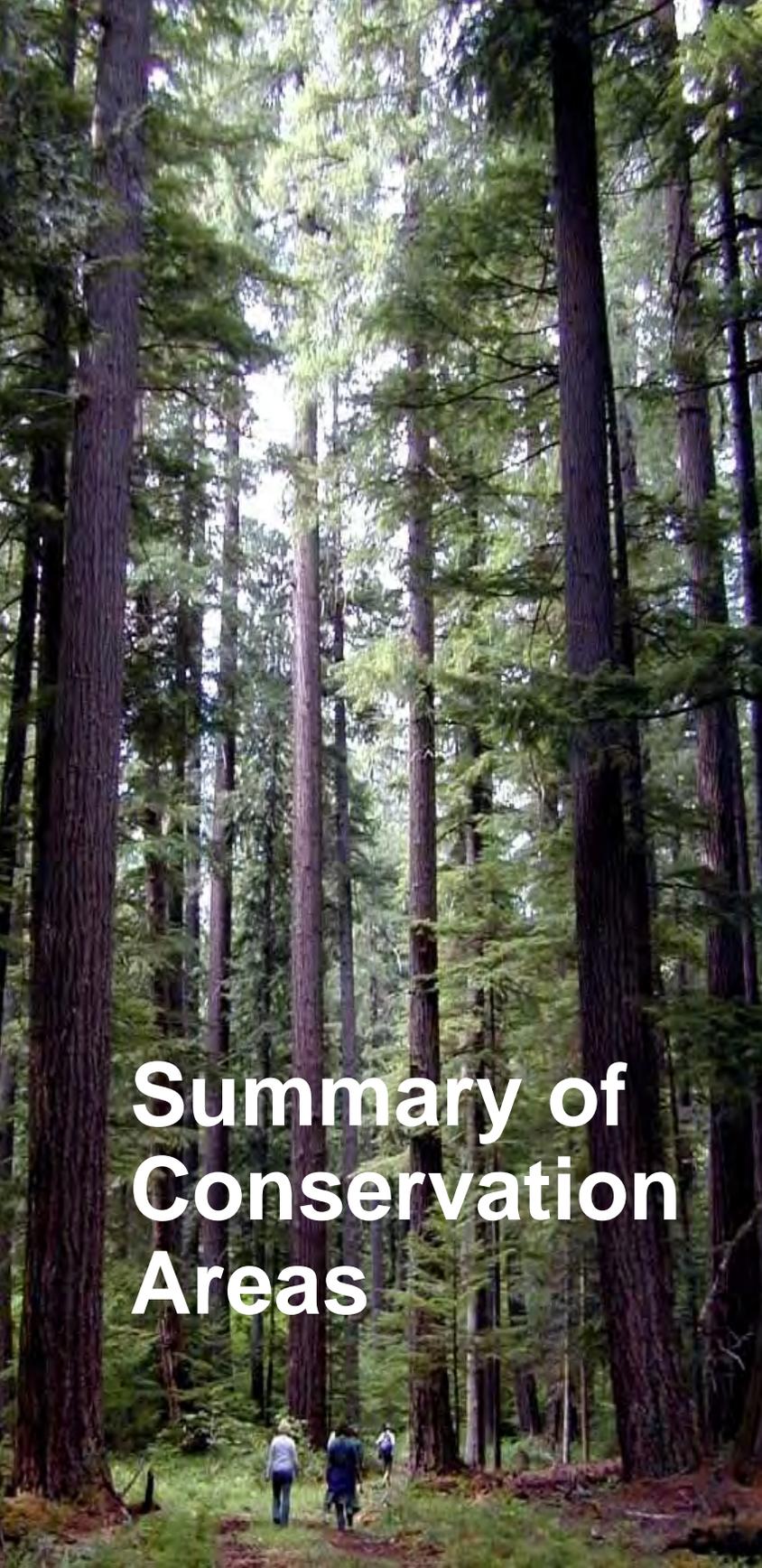
Summary of HCAs

Draft HCA Suitable Habitat

- Habitat suitability models
 - Used existing published models for:
 - Northern spotted owl
 - Marbled murrelet
 - Red tree vole
 - Oregon slender salamander
 - Adapted to inventory metrics
 - Reviewed by model authors

Current Suitable Habitat in HCAs

Species	Highly Suitable	Suitable
NSO	97%	59 – 63%
MM	96 – 97%	69 – 74%
RTV	76 – 81%	59 – 65%
OSS	65 – 69%	40 – 43%



Summary of Conservation Areas

Draft HCA and RCA

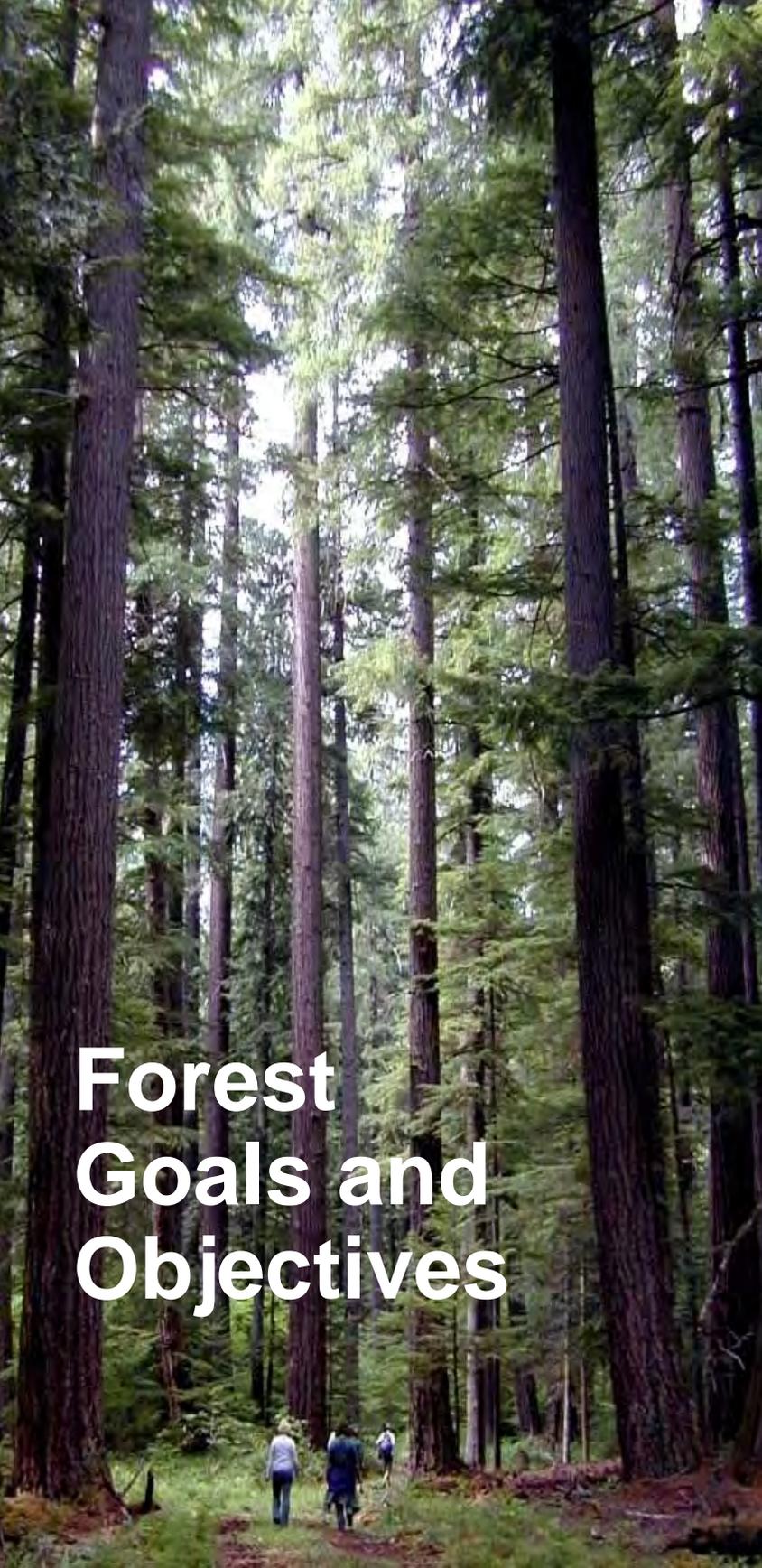
- HCA and RCA are complimentary
- All covered species benefit from both
 - 49 to 52% of Permit Area combined
 - 12% of Permit Area in RCA
 - 46% of RCA is within HCA

Total Combined Draft HCA and RCA (to nearest 1,000 acres)

Permit Area	315,000 (49%) to 331,000 (52%)
North Coast	250,000 (50%) to 261,000 (52%)
Willamette Valley	38,000 (45%) to 41,000 (48%)
Southern Oregon	27,000 (51%) to 29,000 (54%)



Forest Goals and Objectives



Forest Goals and Objectives

Forest Goals and Objectives to implement GPV in context of the HCP

- Created by ODF staff, reviewed by stakeholders
- Will be written into FMP that accompanies the HCP
- Divided into three categories:
 - Social
 - Environmental
 - Economics

Forest Goals and Objectives

Social

Goal 1: Support local and statewide Oregon economies and community well-being.

Economics

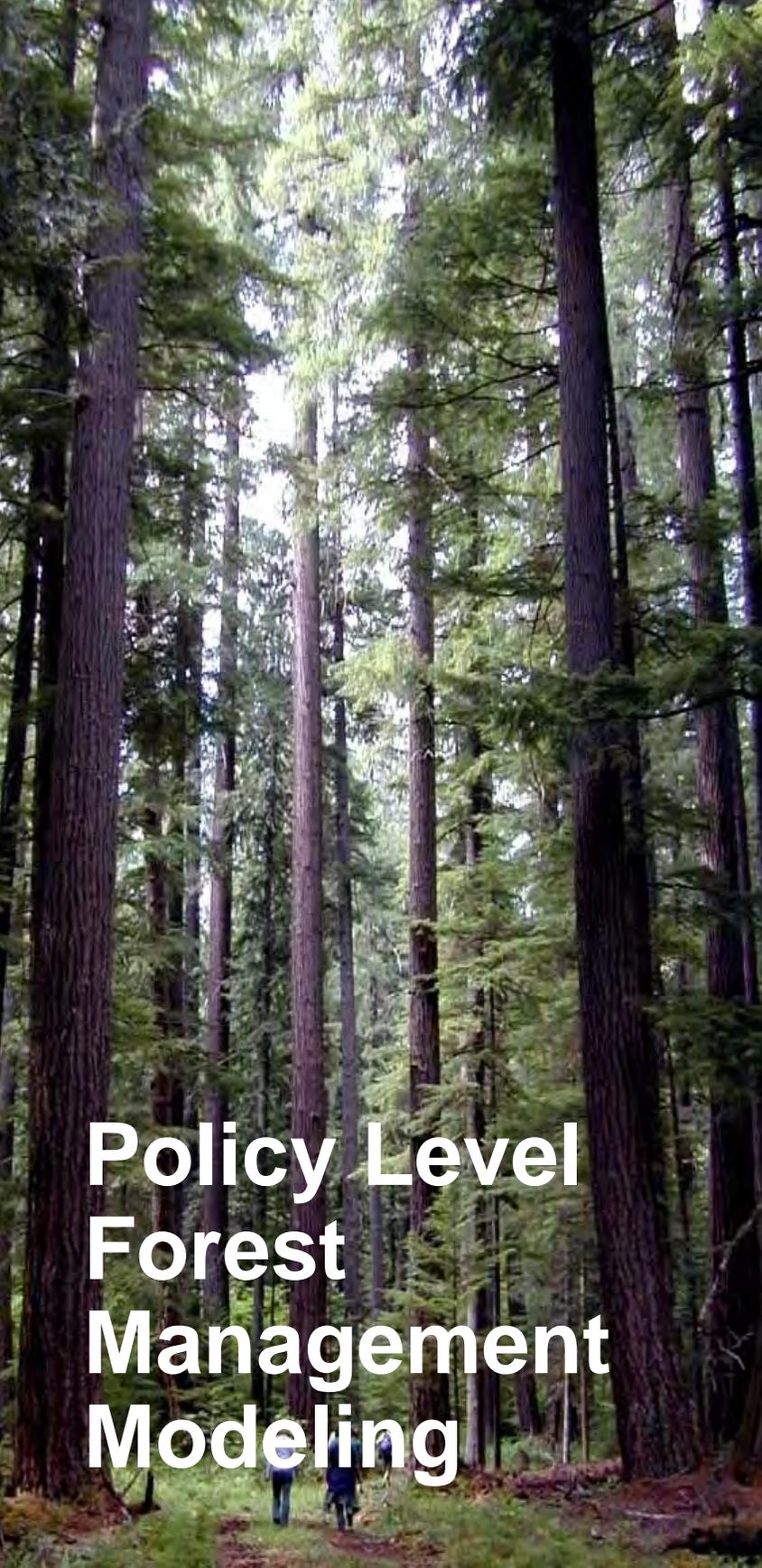
Goal 2: Ensure sustainable and predictable revenues across the Western Oregon Forest Permit Area over the term of the permit.

Environmental

Goal 3. Maintain, enhance or restore the health of western Oregon state forests, thereby promoting sustainable, productive and resilient ecosystems.



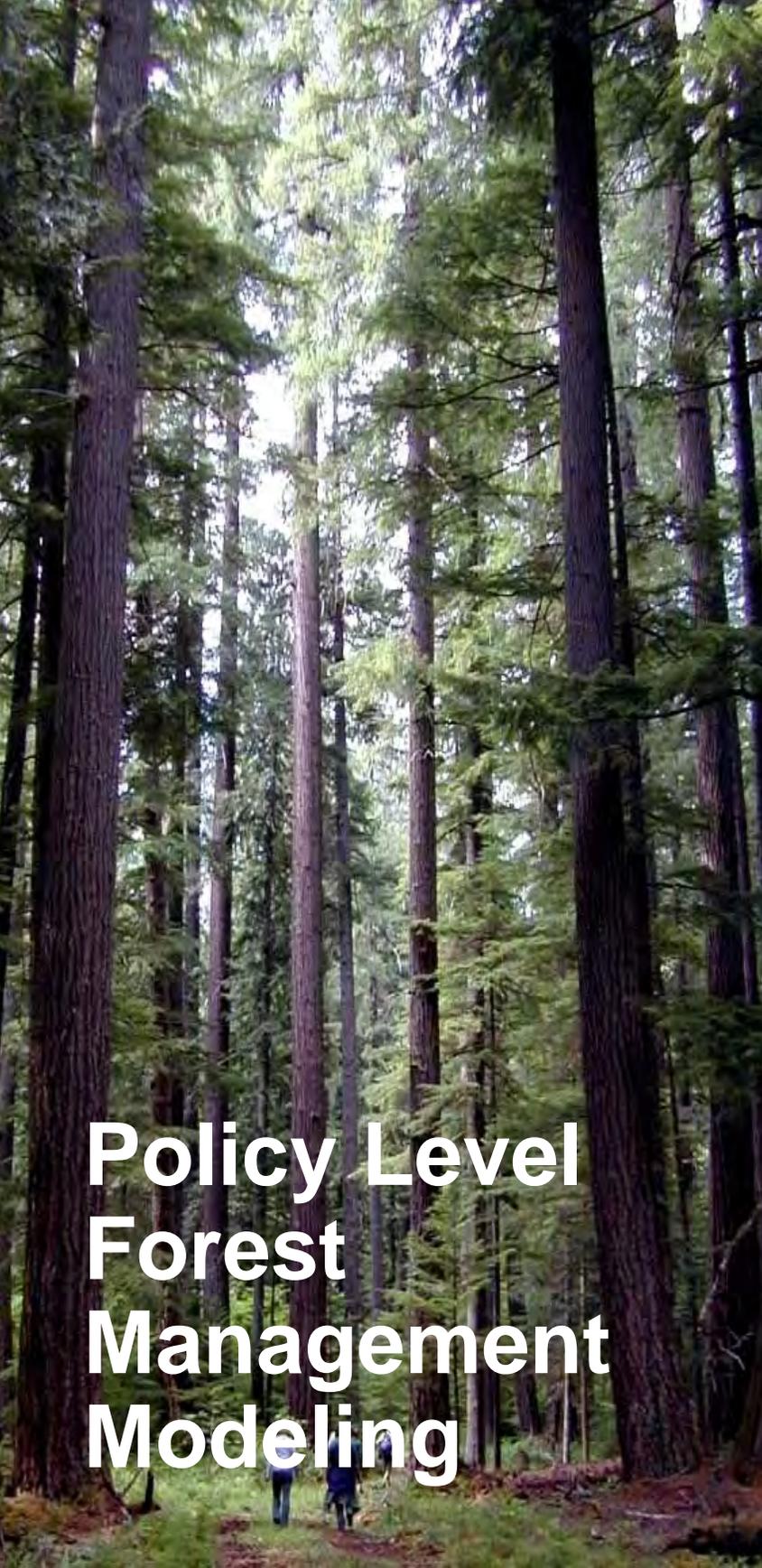
Policy Level Forest Management Modeling



Policy Level Forest Management Modeling

Policy Level Forest Management Modeling

- Supports decision making by ODF and Board of Forestry
- Understand anticipated HCP outcomes
- Informs effects analysis on species
- Modeled across all ODF Managed lands in the permit area, using sub- geographic area



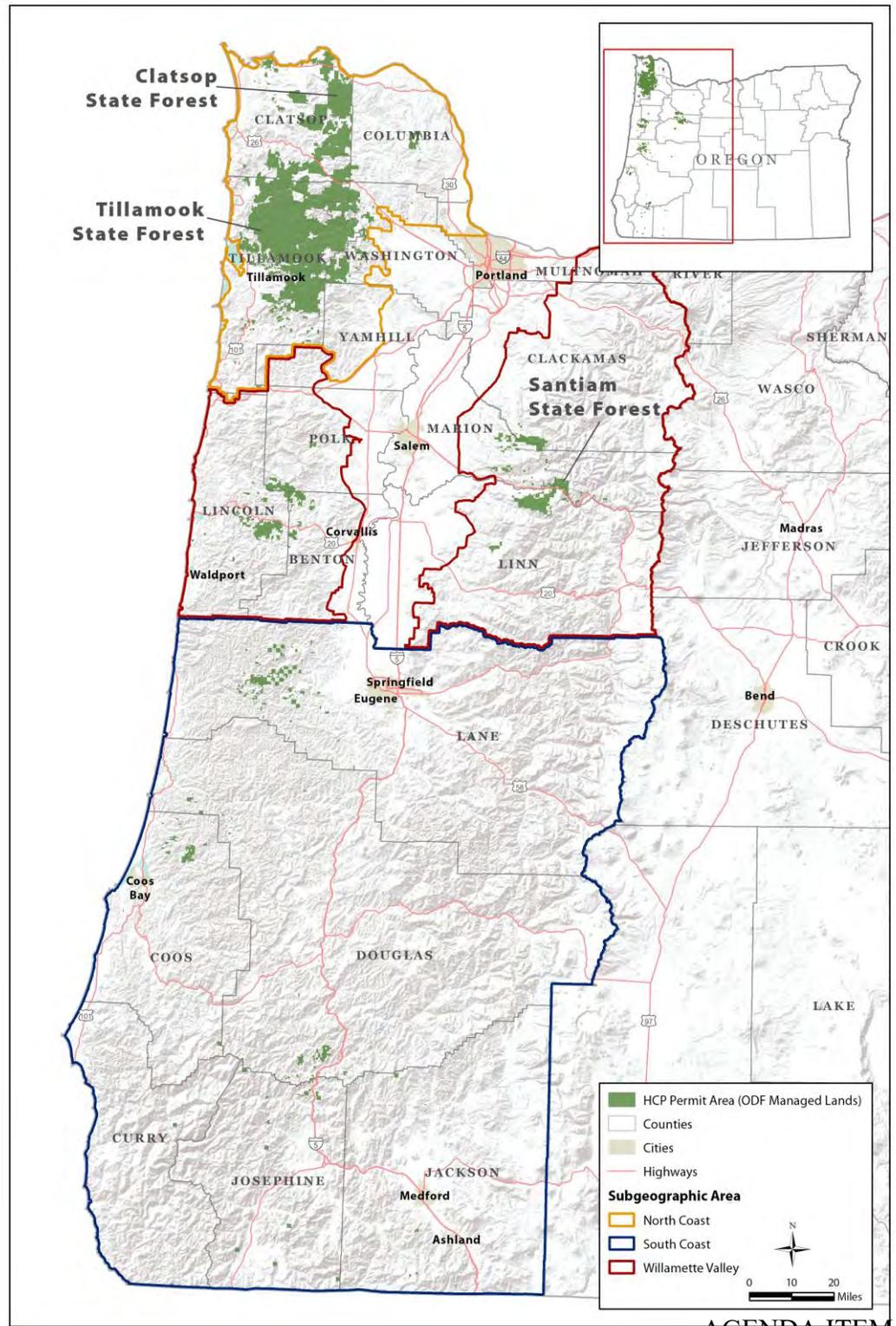
Policy Level Forest Management Modeling

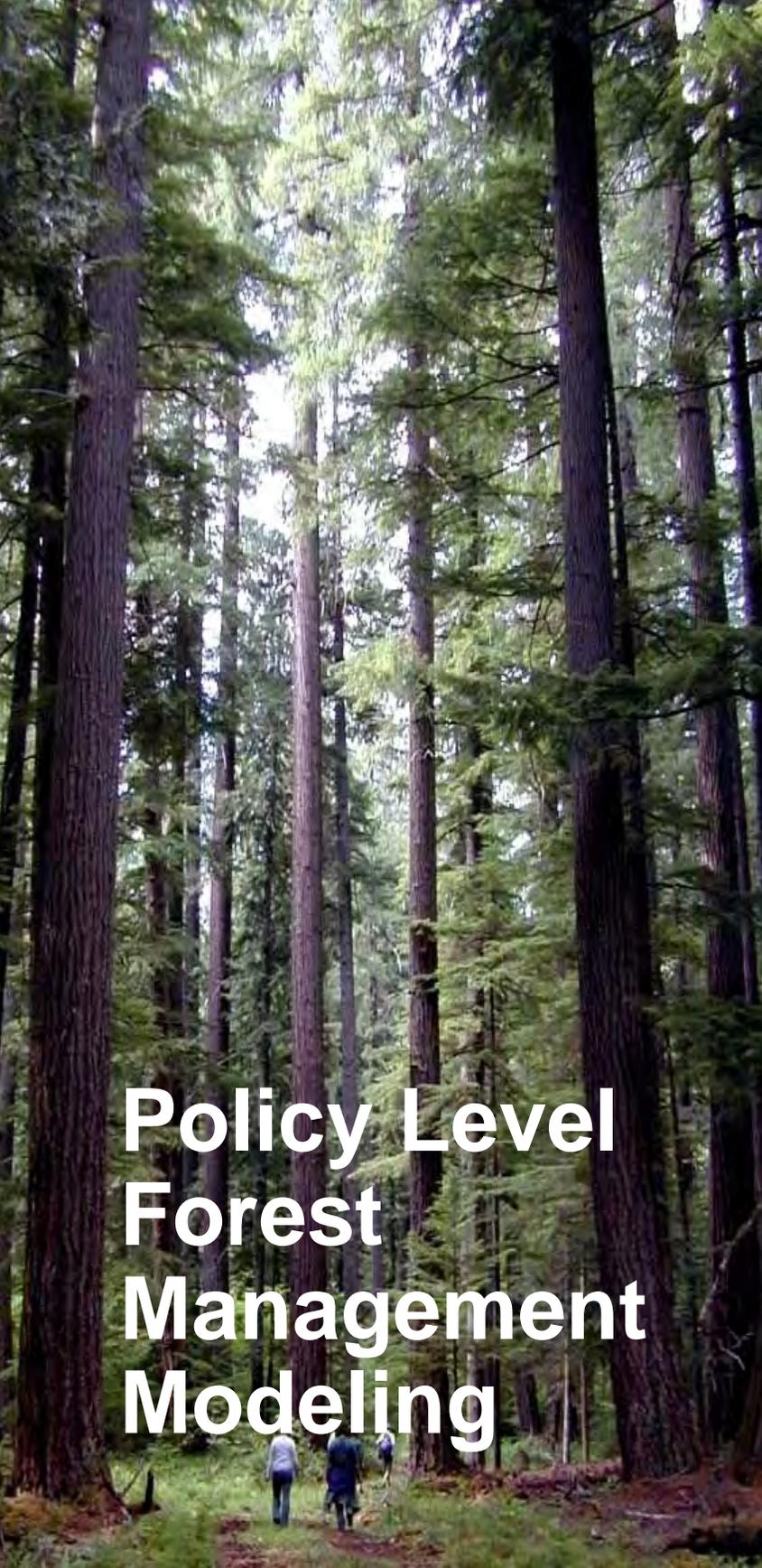
Model Outputs to be Evaluated

- Timber Harvest Volume
- Revenue Generated
- Forest Inventory Over Time
- Covered Species Habitat Quantity & Quality
- Carbon Storage



Geographic Areas





Policy Level Forest Management Modeling

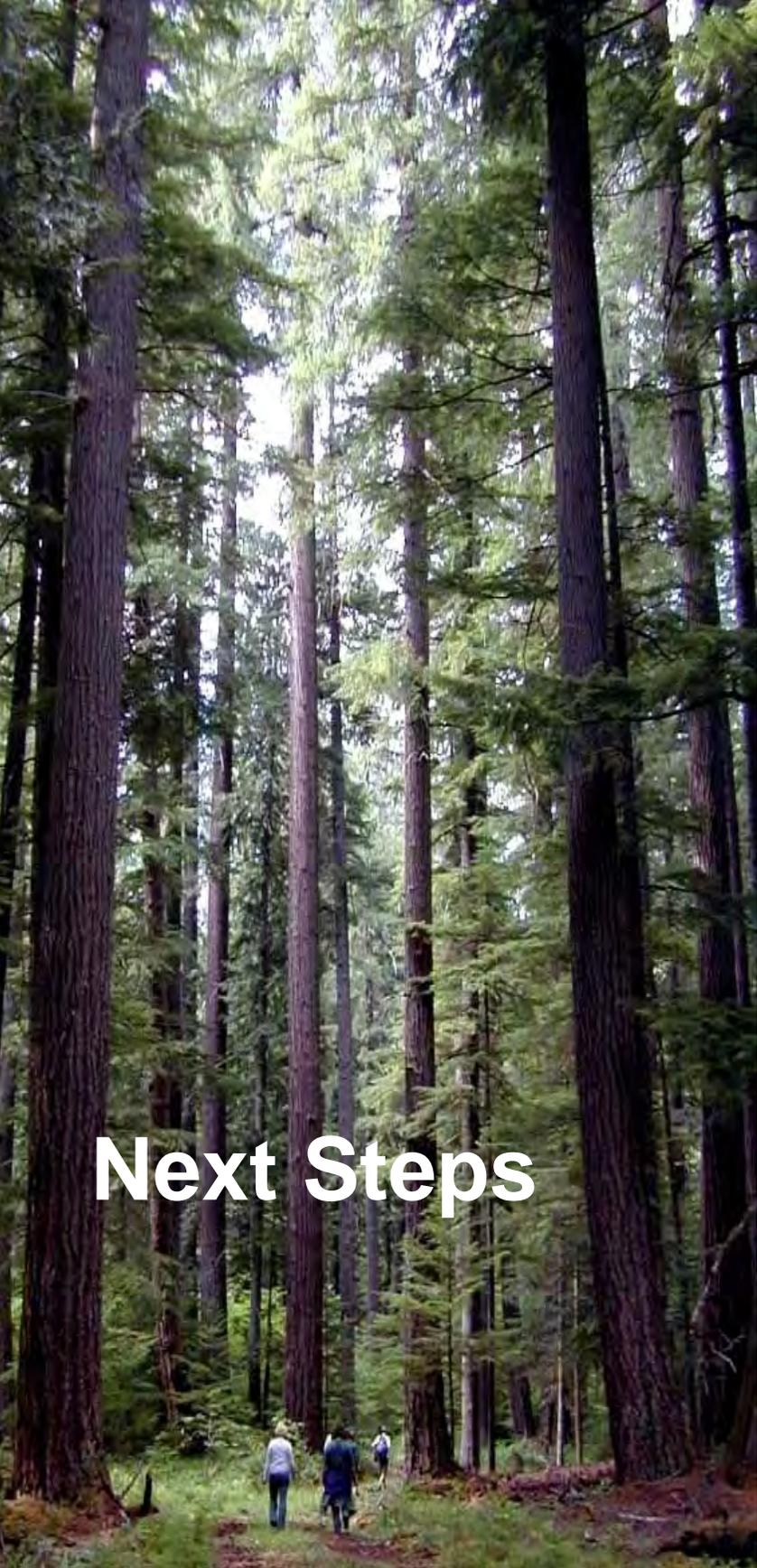
Anticipated Outcomes for Timber Harvest

- Harvest volumes are avg. over permit term (70 years)

Permit Area	196 to 206 MMBF
North Coast	146 to 153
Willamette Valley	30 to 32
Southern Oregon	20 to 21

Next model run:

- Refined HCA configuration
- Adjustments to the forest management model



Next Steps

- Work with Scoping Team and Steering Committee toward Draft Western Oregon HCP
- September Board Meeting
 - FMP Update
 - Comparative Analysis Assumptions
- October Board Meeting
- Public Engagement
 - Meeting Open to Public Sept. 16th
- County Engagement

Next Steps



Western Oregon State Forests HCP

More Information

<https://www.oregon.gov/ODF/AboutODF/Pages/HCP-initiative.aspx>

Contact

Cindy Kolomechuk,
cindy.kolomechuk@oregon.gov,
503-502-5599

Thank You!



Associated Oregon Loggers, Inc. • P.O. Box 12339, Salem, OR 97309
503/364-1330 • fax 503/364-0836 • email: rstorm@oregonloggers.org
"Representing the logging industry since 1969"

August, 5, 2020

Oregon Board of Forestry
2600 State St.
Salem, OR 97310 VIA [EMAIL: BoardofForestry@oregon.gov](mailto:BoardofForestry@oregon.gov)

Subject: State Forests Habitat Conservation Plan Update

Dear Board of Forestry Members,

I am writing to express our opposition to the conservation measures and modeled outcomes for the proposed habitat conservation plan (HCP) for western Oregon state forests.

These comments are provided on behalf of the 1,000+ Associated Oregon Loggers (AOL) member companies, representing logging, transportation, construction, reforestation, improvement, protection, and allied forest management businesses working in Oregon. AOL member companies are the forest professionals who provide services to manage public and private forestlands on a contract basis, including Northwest Oregon's state forests. These companies may also purchase state forest timber-sale contracts. The revision of the forest plan/proposed habitat conservation plan are of critical concern to our work today and tomorrow.

We are dissatisfied with and oppose the Board and Department's proposed conservation measures and modeled outcomes in pursuit of a future Habitat Conservation Plan (HCP) with the federal regulating agencies—US Fish & Wildlife Service and NOAA Fisheries Service.

I concur with those remarks today made by my peers representing Oregon Forest & Industries Council.

On July 13, Oregon Department of Forestry staff revealed for the first time the conservation measures and modeled outcomes for the proposed HCP. That modeling revealed ODF intends to dedicate vast swaths of the forest to species management, which will result in a staggering decrease in harvest volumes. The conservation commitments ODF described three weeks ago far exceed anything other landowners have suffered to obtain similar HCP assurances from the federal wildlife services. Unless the Board is able to alter the course of this proposed version of the HCP, we see that its adoption would result in completely unacceptable and meaningful losses to rural Oregon communities, the region's forest sector, and to the family businesses represented by AOL.

In terms of the conservation measures, ODF described two large categories in the form of riparian buffers and "habitat conservation areas" that will be managed exclusively for habitat conservation and recruitment. Between those two designations, ODF intends to commit 315,000 to 331,000 acres to species habitat, which with a forestland base of

639,269 acres, comes to 49% to 52% of the forest. Importantly, *this does not include other land classifications such as inner gorges, seeps and springs, roads, and other inoperable acres*. All in, it is likely that ODF will pull more than 60% of its forestland base out of production to obtain an HCP. This is a shocking commitment, and many multiples more than any other landowner has committed to obtain an HCP.

The consequence of conservation commitments that large is a further reduction in modeled harvest volumes. In the past five years, ODF has sold an average of 234 million board feet (“mmbf”) per year, and actual harvest has averaged 274 mmbf. ODF anticipates an average harvest under the HCP of 196-206 mmbf. That’s a reduction of 28-38 mmbf relative to average sold volumes, and 68-78 mmbf relative to average harvested volumes. Put another way, in order to obtain an HCP, ODF is proposing to decrease production by 12-16% relative to sold volumes, and 25-28% relative to recent harvested volumes. At those reduced volumes, mills would close, forest contract businesses would be shuttered, and communities will suffer.

These numbers stand in stark contrast to the “business case” analysis ODF shared with the Board in 2018. And we opposed the further reduction from the 2018 projection.

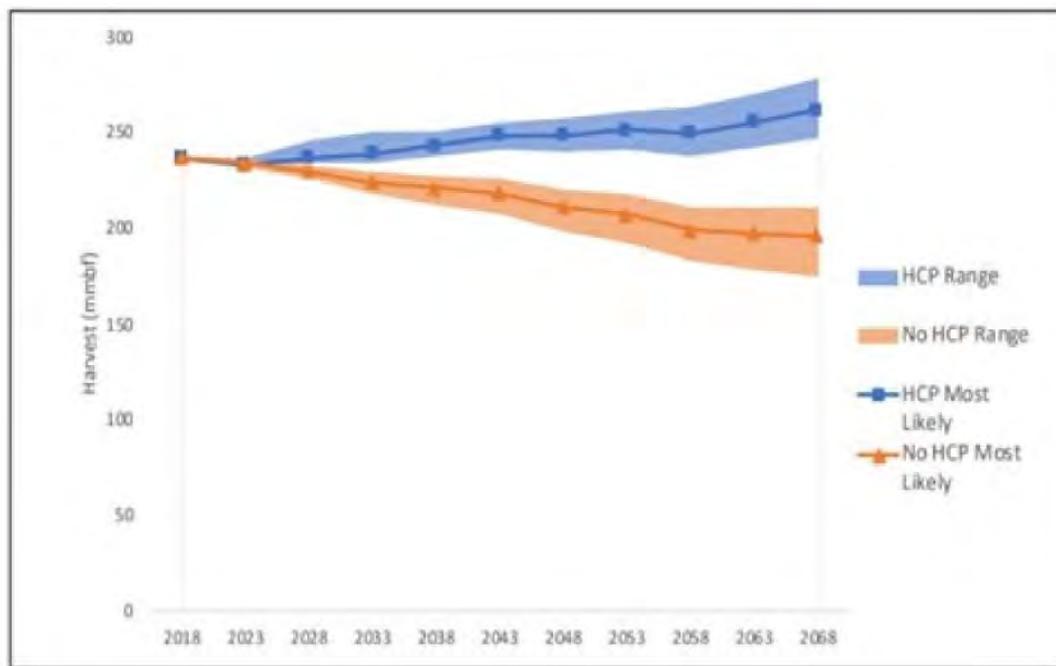


Figure 2. Annual Harvest Volume Range, With HCP and No HCP
 Note: Points represent 5-year averages (e.g., 2023 represents 2021-2025).

Under that 2018 analysis (shown above), an HCP was projected to produce annual harvest volumes greater than current sold volumes, and increasing over time. This would result in an annual volume much higher than current planned volumes. Instead, ODF is now proposing an average harvest volume of approximately 50 mmbf lower than anticipated two years ago.

With this harmful reduction, we're left with several questions. What has changed relative to the 2018 business case analysis? What is driving harvest volumes so much lower than anticipated? Why would you presume incorrectly that state forests would be held to a conservation standard so fundamentally different and costly (in terms of reduced forest management opportunities) than would be other landowners, including other forest landowners in Oregon?

Maybe more pressing for ODF state forest, how would the Department pay for all of this? At current harvest volumes, the Forestland Development Fund is projected to be insolvent in a matter of years—sooner would a plausible market cycle or disruption occur. Decreasing harvest by an additional 25-28% as envisioned by the proposed HCP would cause huge losses to ODF and the surrounding regional economy—costly opportunity foregone of millions of dollars per year. How would the agency suffer these shortfalls? What staff positions will need to be cut? How will this affect wildland firefighting capacity? These are questions worthy of answer, prior to the Board and Department pursuing such a detrimental HCP that would upset the region's sustainability and explode any potential for Greatest Permanent Value derived from state forest management.

We intend to dig into these issues more ourselves, but in the meantime we appreciate your help asking the hard questions. Again, unless we see some change, the Board will set in motion reductions that will cost hundreds of good paying Oregon jobs, including jobs at the Oregon Department of Forestry. Please help us understand why this must be, and why ODF's HCP cannot look more like other forest landowner HCP's.

We disagree with the validity of the assumptions made in the HCP that falsely presume the state forests would contribute and strive to be managed for ESA species recovery. The HCP objectives of federal forests do not equate non-federal species and habitats. This federal-like species preeminence contradicts the Board's state forest Greatest Permanent Value mandate. The HCP Business Case Analysis, and subsequent modeled conservation measures, fail to address the many pitfalls reasonably predictable to transpire under HCP negotiations with federal regulators who function under exclusively different mandates than does the Board.

In closing, I urge the Board's rejection the current July proposals of HCP exploration. Thank you for your consideration.

Respectfully as forest stewards,

Rex Storm

Rex Storm, Certified Forester
Executive Vice President
Associated Oregon Loggers, Inc.

Submitted: Sat 07/18/2020 10:47 AM

Subject line: Comments to the board

Thank you for the opportunity to comment on a Habitat Conservation Plan (HCP) for Oregon state forests. Please add my comments to the discussion scheduled for the BOF meeting Wednesday afternoon July 22, 2002. I have 14 acres of river frontage on the Trask River, and I'm surrounded by the Tillamook State Forest. In my 25 years living here, I've seen a lot of tree harvesting in the Trask watershed. I've seen a public asset managed primarily to generate money. I've seen first hand what that means on the ground, and how a variety of species are suffering from a clear-cut and spray approach to where they live. Finally, we have a chance to create diverse forest set asides that can be managed by science, not the immediate need to make money. We have seen too often what happens when we ignore our science. Now, we have a chance to focus part of our state forest lands on broader things like endangered species, water quality, carbon collection, and allowing recreational pursuits currently unavailable given logging practices. In order to maximize the benefits of a HCP, we need to create high quality set asides. They need to offer the best opportunities to achieve the goals of the HCP. They need to be managed so our grandchildren's kids can share in the vision and results. This is our chance. I applaud the effort to create a more balanced, diverse public forest. Most of the people I know living here agree with the need for a HCP, so thank you for taking this on.

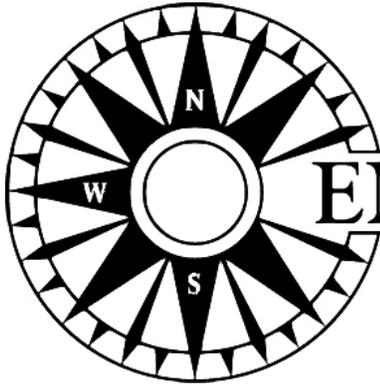
Ron Byers
PO Box 667 Tillamook, OR 97141
rontraskbyers@gmail.com

Submitted: Mon 07/20/2020 2:33 PM

Subject line: Comments to the board

Oregon's State forests should be managed sustainably to maintain habitat for our diverse fish and wildlife, enhance biodiversity of flora and fauna, and for future generations of humans to recreate in. Our forests provide essential ecosystem services and should be managed to protect them.

Clark Chesshir
1987 SW 13th Ave., Portland OR 97201
chesshir.neko@gmail.com



ENGLUND MARINE & INDUSTRIAL SUPPLY

95 Hamburg Ave, PO Box 296 Astoria OR 97103

July 21st, 2020

Oregon Department of Forestry,

Englund Marine & Industrial Supply has three locations on the Oregon coast, and each of those locations is closely tied to the timber industry. We sell supplies that are used in direct support of the timber industry. We also sell sport fishing gear and marine supplies to people who make their living in the timber industry, and spend some of their discretionary income on outdoor recreation.

We are deeply concerned about the proposed new nature reserves in our state forests which will greatly reduce timber harvests. This will have a devastating impact on our rural communities through decreased income, and a loss of tax revenue to our local governments. It will also further decrease ODF's operating income which could burden the state's general fund.

It is our understanding that the proposed reserves go well beyond any ESA recommendations to meet conservation efforts. We urge you to stand up for rural communities, and not succumb to further pressure by environmental groups. Please do not further reduce allowable harvest levels.

Sincerely,

Kurt Englund
President
Englund Marine & Industrial Supply



July 21, 2020

VIA EMAIL: BoardofForestry@oregon.gov

Oregon Board of Forestry
2600 State St.
Salem, OR 97310

Re: State Forests Habitat Conservation Plan Update

Dear Board of Forestry Members,

On July 13, Oregon Department of Forestry staff revealed for the first time the conservation measures and modeled outcomes for the proposed habitat conservation plan (“HCP”) for western Oregon. That modeling revealed ODF intends to dedicate vast swaths of the forest to species management, which will result in a staggering decrease in harvest volumes. The conservation commitments ODF described last Monday far exceed anything other landowners have suffered to obtain similar assurances from the federal wildlife services. Unless the Board is able to alter the course of the proposed HCP, we fear its adoption will result in meaningful losses to rural Oregon communities.

In terms of the conservation measures, ODF described two large categories in the form of riparian buffers and “habitat conservation areas” that will be managed exclusively for habitat conservation and recruitment. Between those two designations, ODF intends to commit 315,000 to 331,000 acres to species habitat, which with a forestland base of 639,269 acres, comes to 49% to 52% of the forest. Importantly, *this does not include other land classifications such as inner gorges, seeps and springs, roads, and other inoperable acres*. All in, it is likely that ODF will pull more than 60% of its forestland base out of production to obtain an HCP. This is a shocking commitment, and many multiples more than any other landowner has committed to obtain an HCP.

The consequence of conservation commitments that large is a further reduction in modeled harvest volumes. In the last five years, ODF has sold an average of 234 million board feet (“mmbf”) per year, and actual harvest has averaged 274 mmbf. ODF anticipates an average harvest under the HCP of 196-206 mmbf. That’s a reduction of 28-38 mmbf relative to average sold volumes, and 68-78 mmbf relative to average harvested volumes. Put another way, in order to obtain an HCP, ODF is proposing to decrease production by 12-16% relative to sold volumes, and 25-28% relative to recent harvested volumes. At those reduced volumes, mills would have to close and communities will suffer.

These numbers stand in stark contrast to the “business case” analysis ODF shared with the Board in 2018.

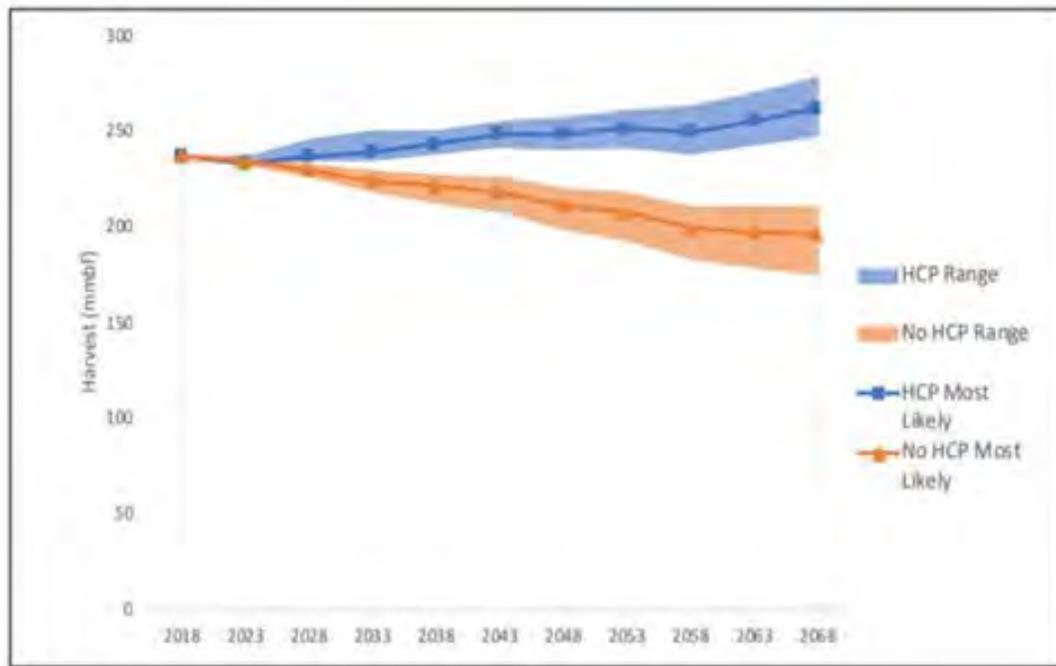


Figure 2. Annual Harvest Volume Range, With HCP and No HCP
Note: Points represent 5-year averages (e.g., 2023 represents 2021-2025).

Under that analysis, an HCP was projected to produce annual harvest volumes even better than current sold volumes, and increasing over time. This would result in an annual volume much higher than current planned volumes. Instead, ODF is now proposing an average harvest volume of approximately 50 mmbf lower than anticipated.

With all of that, we’re left with several questions. What has changed relative to the 2018 business case analysis? What is driving harvest volumes so much lower than anticipated? And why is ODF being held to a conservation standard so fundamentally different than other landowners, including other forest landowners in Oregon?

Maybe more pressing for the agency, how is ODF going to pay for all of this? At current harvest volumes, the Forestland Development Fund is projected to be insolvent in a matter of years. Decreasing harvest 25-28% will cause huge losses to ODF, to the tune of millions of dollars per year. How will the agency suffer these shortfalls? What staff positions will need to be cut? How will this affect wildland firefighting capacity?

We intend to dig into these issues more ourselves, but in the meantime we appreciate your help asking the hard questions. Again, unless we see some change, the Board will set in motion reductions that will cost hundreds of good paying Oregon jobs, including jobs at the Oregon Department of Forestry. Please help us understand why this must be, and why ODF's HCP cannot look more like others.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Heath A. Curtiss', with a stylized flourish extending to the right.

Heath A. Curtiss

Vice President of Legal & Government Affairs

Submitted: Thu 07/23/2020 1:54 PM

Subject line: Comments to the Oregon Dept. of Forestry

I am writing to thank the Oregon Department of Forestry for moving forward on a much needed Habitat Conservation Plan for Tillamook and Clatsop Counties. Over the past ten years, I have watched our Spotted Owl population dwindle to nothing. As an owl surveyor, I found the Spotted Owl in hard to reach areas such as steep rocky crags and in remnants of the Tillamook Burn. The cost to harvest in these areas is prohibitive and the likelihood of post harvest erosion guaranteed. Why then, has ODF harvested in these areas, even in the 1 mile protected circle and areas where owls were detected?. These stands have the diverse canopy and other characteristics that many species need to survive. Set them aside. From a personal point of view, the Oregon forests have been mismanaged. The large swaths of watersheds that have been clear cut here in Oregon is unparalleled in any state and replaced with an unhealthy, crowded monoculture. By reducing the size of a sale, selectively cutting, leaving buffer zones on streams, ODF will protect its investment, people will have a place to recreate, and biodiversity will have a chance. As I fly over the coastal range from California to Washington and look at the miles of clear cuts in Oregon, I wonder how we are going to support our state in the future when we are shipping our best asset, the forest and unmilled timber, to China. Lastly, if there is a small gem of a watershed, leave it be. Leave us a place to recreate, a place for other living things to thrive, and a token of good risk management. This is my selfish plea. Returning to the woods, seeing students running, biking, fishing, and hiking in these small groves, gives us renewed energy to go back to the classroom and work. Your willingness to form a plan to protect the few remaining areas of diverse, second growth forests, limit clear cuts, protect buffer zones, and limit spraying is an investment in the future.

Thank you.

Denise C Harrington
deniseharrington@yahoo.com
5417143057

Submitted: Wed 07/29/2020 8:48 AM

Subject line: Conservation Plan

Our state needs a Habitat Conservation Plan that protects family-wage jobs, keeps providing fiber for local mills, and invests in healthy forest management that reduces the risk of catastrophic wildfire. We do not need a plan that puts 10s of thousands of acres off-limits to harvest and forfeits millions of dollars in timber revenues that our communities need. Especially now.

Please make sure that you endorse a plan includes things like effective reforestation tools, controlled burns, and smart, science-based forestry.

Please do the right thing. Please make sure you keep in mind that the long-term impacts of this plan. The future our communities rely on making sure a Habitat Conservation Plan on our state forests protects critical jobs and a sustainable fiber supply. We need our state to do everything it can to protect jobs and provide revenue for the economy.

Thank you.

Kim Kotter
Oregon Women In Timber
1917 Jackson Avenue
La Grande, OR 97850

July 21, 2020

To: Oregon Board of Forestry
From: North Coast Communities For Watershed Protection
Re: Habitat Conservation Plan for State Forests

North Coast Communities For Watershed Protection (NCCWP) is comprised of coastal citizens working together to protect the air we breathe, the water we drink, and the ways we use the state forests that surround us. We are the people who feel the impacts of forest harvesting and replanting practices.

We applaud the effort to create significant state forest set asides in a Habitat Conservation Plan (HCP). It's not just for ourselves that we comment, but for all kinds of other species. For the fish that can't find spawning habitat that was once there. For the frogs we don't hear any longer, and for the chanterelle mushrooms that need stands of old growth forest.

We want to ensure that our drinking water sources are safeguarded. What role can the HCP play in this? We want to see if avoiding clear-cuts on steep slopes can increase fish populations. We want to hike in protected old growth and diverse forest settings. We want to watch wildlife in their natural homes. It would be great if we had forest sanctuaries for learning, and for passing on to those that follow. What role do our forests play in carbon collection, and in addressing climate change? We can build all of the above into a HCP.

The effort to create a more balanced plan for our state forests is badly needed, and appreciated by those of us who are neighbors of the forests you manage for everyone. It's not just about revenue; it's also about where we live and raise our families, where we recreate. How much value is in that? Thank you for factoring that into to your deliberations, and for supporting high quality set asides. Show us more. We can't wait to see maps and details.

Thank you for tackling the HCP at such a critical and historical time.



July 22, 2020

Via Email: BoardofForestry@Oregon.gov

Oregon Board of Forestry
2600 State St.
Salem, OR 97310

RE: State Forest Habitat Conservation Plan Update

Dear Chair Tom Imeson, State Forester Peter Daugherty and members of the Board,

As you are aware, the Oregon Department of Forestry (ODF) has been involved in a process to create a new management plan for State Board of Forestry lands for over a decade now. You will recall that in 2018 Staff presented a Business Case to the public and the Board for pursuing an HCPA as a means of achieving the twin goals of increasing both conservation and financial viability. I've attached that document to my testimony for your convenience. The Business Case that was presented during Phase 1 of this three phase process made several "**Key Findings**", including;

- *"Over a 50-year timeframe, acres available for harvest would likely increase from the current 51 percent of all BOF forest lands to 63 percent with an HCP. Without an HCP, available acreage is expected to decline to 46 percent."*
- *"Annual harvest net revenues would likely increase from current \$50 million to \$53 million with an HCP while dropping to \$26 million by 2070 without an HCP."*
- *"The cumulative net present value of the HCP investment over 50 years of implementation is worth over \$250 million relative to without an HCP."*

Two important graphics within the Business Case illustrated these *key findings*. Below is Figure 1 from the document. It shows predicted acreage designations with and without an HCP. The analysis predicted more lands in an unconstrained condition under the HCP scenario- to the tune of approximately 360,000 acres.

In Figure 1.b., also below, I've taken the findings of Figure 1 and plotted them side by side with the current proposal ODF shared with stakeholders at their July 13th public meeting. In Figure 1.b. you can clearly see the very wide discrepancy between the case that was laid out at the outset of this process and what is now being considered by the agency and this board. This graphic further illustrates these constraints side by side with the predicted "No HCP" alternative. Relative to these very large policy constraints currently being proposed, the better alternative appears to be the No HCP Alternative. To be clear, OFIC still believes that a far better HCP scenario is possible, one that resembles the Business Case analysis that was carefully laid out at the outset of this process.

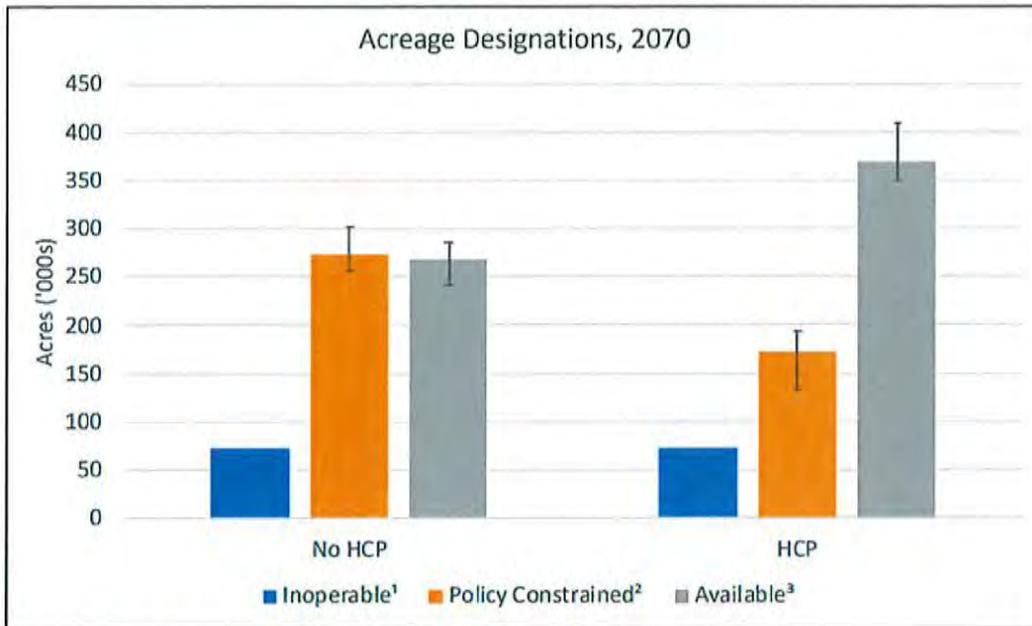


Figure 1. Acreage Designations by Scenario, 2070

Notes: Error bars show ranges of high and low scenario range estimates.

¹ Inoperable acres either do not hold forest or would be impractical to harvest.

² Policy constrained acres are either unavailable for harvest or severely limited for harvest by policy and regulatory constraints (e.g., Oregon Forest Practices Act, federal Endangered Species Act and FMP stream buffers).

³ Available acres would be available for harvest according to appropriate policy requirements.

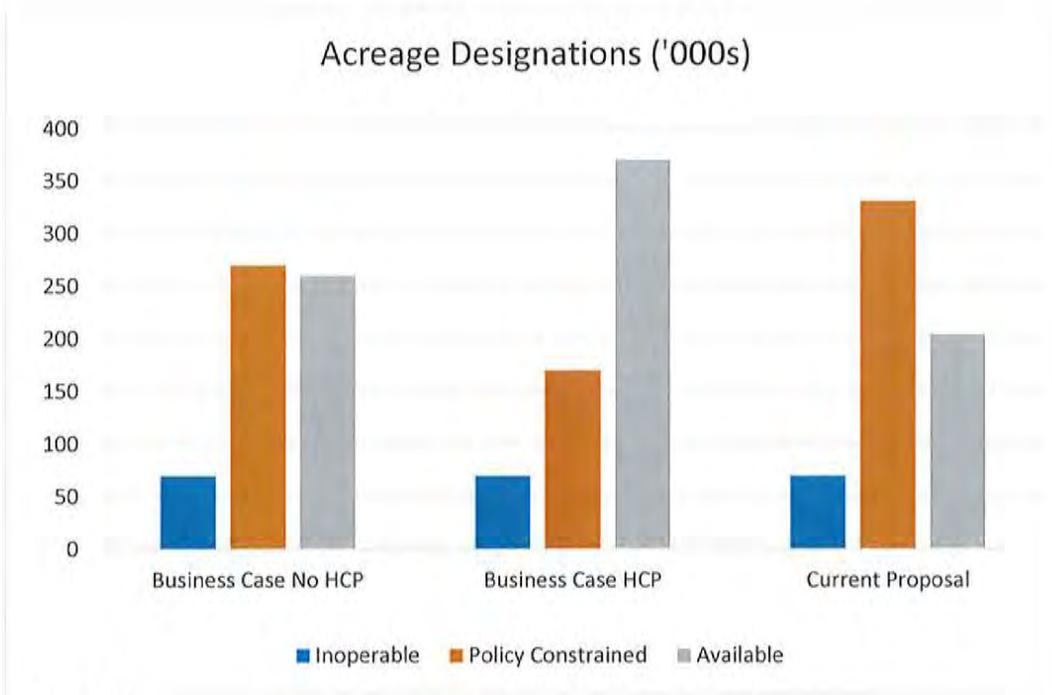


Figure 1.b.

A further illustration of these points can be seen as we consider Figure 2 from the Business Case document. I've also included that figure below for convenience. As you can see, Figure 2 illustrates the expected range of harvest levels under an HCP as compared to the No HCP option over the coming decades.

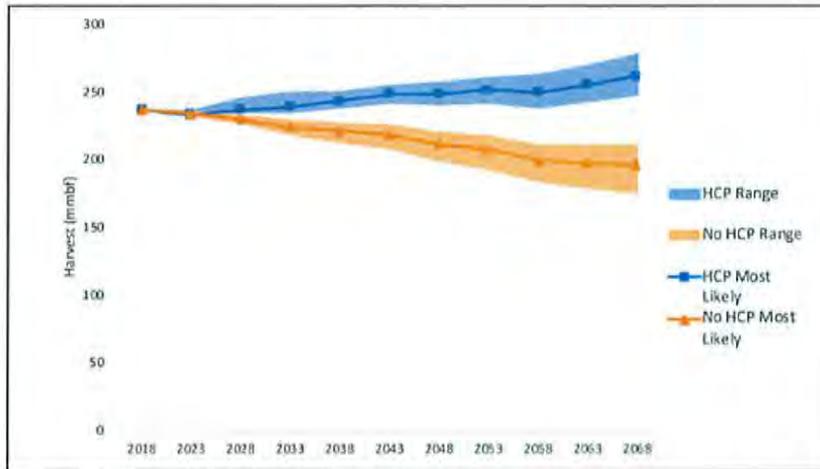


Figure 2. Annual Harvest Volume Range, With HCP and No HCP
 Note: Points represent 5-year averages (e.g., 2023 represents 2021-2025).

In Figure 2.b. below, I've once again taken the data provided in the Business Case document relative to harvest volumes and superimposed the average harvest volume currently expected from the policy constraints as proposed and presented to stakeholders at the July 13th public meeting.

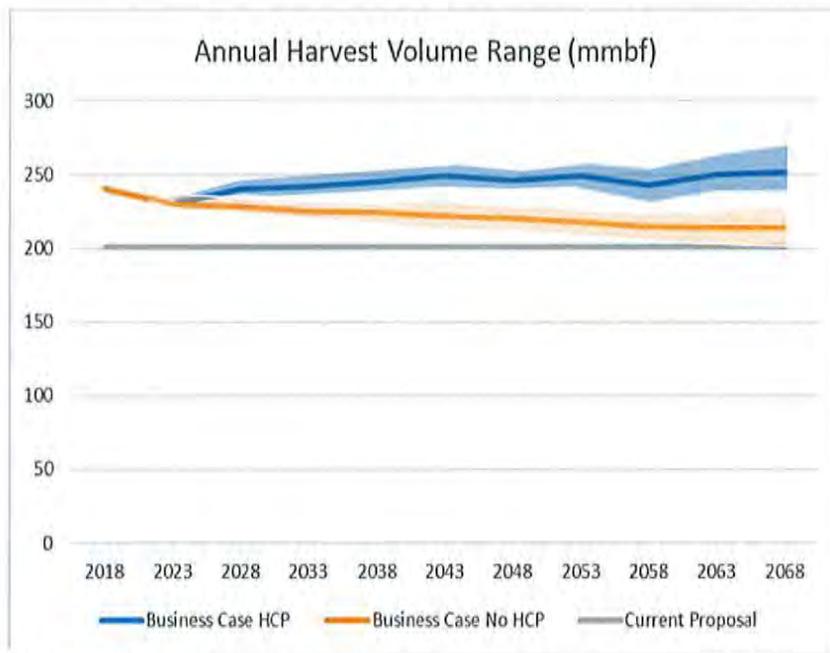


Figure 2.b.

Once again, this clearly illustrates just how far the current proposal is from the Business Case that was presented in 2018. These harvest levels are FAR below even the expected No HCP alternative. These findings are not surprising, of course, when you consider the dramatic numbers of acres currently being considered for inclusion as Habitat Conservation Areas (HCAs)- as illustrated in Figure 1.b. above.

These figures largely speak for themselves in illuminated the level of disappointment that OFIC and our member companies feel at this point in the process. We have been closely following and tracking with ODF Staff, engaging at every opportunity, and supporting negotiations with the federal services in hopes that a plan could be achieved that truly rose to the vision of increasing both financial viability and conservation values. That balance has clearly NOT been achieved by this current proposal and we would hope that members of this board recognize that.

I would close with these questions to consider;

If the lines on the Figures 1.b. and 2.b. above had been placed before you back in October of 2018 as the "Business Case" for an HCP, would that have sparked an approval to move forward, or would that have simply made the case for status quo? In other words, are you satisfied with these outcomes?

This current proposal fails to properly manage one our states most valuable assets, and will result in further economic decline in the form of job losses and even greater restrictions to vital revenue streams in vulnerable communities throughout Oregon. OFIC strongly believes that a better forest management plan is achievable- one that meets the ideals of the twin goals. We encourage this board and ODF staff to aggressively work to achieve that outcome. In its current form OFIC cannot support this HCP proposal, and feels strongly that it severely underserves our members, this agency, our communities, the county beneficiaries, and all Oregonians.

Sincerely,



Seth A. Barnes
Director of Forest Policy

Oregon Department of Forestry Habitat Conservation Plan A Business Case Analysis

October 2018

Prepared for:
Oregon Department of Forestry

Executive Summary

ECONorthwest
ECONOMICS • FINANCE • PLANNING



Executive Summary

Key Findings

- *HCP preparation will cost ODF up to \$4.0 million over three years.*
- *An HCP will reduce average annual ESA compliance costs by approximately \$2.2 million.*
- *Over a 50-year timeframe, acres available for harvest would likely increase from the current 51 percent of all BOF forest lands to 63 percent with an HCP. Without an HCP, available acreage is expected to decline to 46 percent.*
- *Annual harvest net revenues would likely increase from current \$50 million to \$53 million with an HCP while dropping to \$26 million by 2070 without an HCP.*
- *The cumulative net present value of the HCP investment over 50 years of implementation is worth over \$250 million relative to without an HCP.*

Introduction and Background

State forestlands in western Oregon provide habitat for several fish and wildlife species protected under the Endangered Species Act (ESA). As such, forest management activities must comply with ESA requirements, ensuring that no “take” of listed species occurs. Without an incidental take permit, provided by a Habitat Conservation Plan (HCP), the Oregon Department of Forestry (ODF) employs a “take avoidance” approach to ESA compliance. The take avoidance approach costs ODF millions of dollars in survey and monitoring costs annually, and creates uncertainties in timber harvest levels. As the number of listed species increases, ODF faces growing challenges to generate a sustainable and predictable stream of revenue from timber harvest activities while avoiding harm to listed species.

In November 2017, the Board of Forestry (BOF) directed ODF staff to evaluate whether or not pursuing an HCP, and an associated incidental take permit, makes sense from a business perspective. This report addresses the business case by providing analysis on two related questions: what are the estimated costs of developing and implementing an HCP, and how would an HCP affect ODF management activities including costs and revenue? The findings of the analysis allow ODF staff and the BOF to better understand how ODF revenue would respond over time under two scenarios: 1) adopting and implementing an HCP, versus 2) continuing the current “take avoidance” strategy. This executive summary provides a brief synopsis of analysis methods, assumptions, and findings. More detail is provided in the HCP Business Case Analysis Report.

ODF has a long history of adjusting management activities to avoid take of listed species. For almost thirty years, ODF management has been significantly affected by the northern spotted owl, marbled murrelet, and several fish species such as coho salmon. Additional species known

¹ Take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S. Code [USC] 1532). Harm includes “significant habitat modification or degradation.”

to exist on or adjacent to ODF lands are expected to become listed in the near future; these listings are likely to further constrain ODF's management activities.

The take prohibitions of Section 9 of the ESA are strict, and come with serious penalties for violations. In addition, the ESA has provisions that allow citizens to sue ODF and the federal wildlife agencies for non-compliance. To avoid these risks, ODF may seek to obtain incidental take authorization from the federal government.

The incidental take permit application must include an HCP that describes the requested take authorization and the avoidance, minimization, and mitigation measures the applicant proposes to offset the take of each species covered by the HCP. The HCP must also describe a monitoring and adaptive management program and provide assurances to the federal agencies that the applicant is able to fully fund HCP implementation, among other requirements.

It is important to recognize that ODF operates under certain legal mandates, most significantly, Board of Forestry lands are managed to meet "Greatest Permanent Value" (GPV). This includes providing a full range of social, economic, and environmental benefits to the people of Oregon. A key component of GPV is to maintain these lands as forest lands and actively manage them in a sound environmental manner to provide sustainable timber harvest and revenues to the state, counties, and local taxing districts. Under the current revenue distribution law, approximately one-third of the revenue generated from the timber harvest goes to ODF for operating costs and the remaining revenue goes to the counties and local taxing districts.

The current Forest Management Plan (FMP) is the primary mechanism for achieving GPV, and serves as the baseline to evaluate costs for each scenario in this analysis. This study presents a range of possible outcomes (not negotiation starting points) to inform the Board of Forestry in its consideration of whether or not to continue pursuing an HCP. The actual details of an HCP for ODF would be the result of negotiations with state and federal wildlife agencies. Should the Board of Forestry continue to pursue an HCP, ODF would begin working with state and federal wildlife agencies to negotiate and evaluate potential strategies to be included in an HCP.

Scope of the Analysis

Timeframe. The analysis considers a 3-year HCP planning timeframe (2018-2020) followed by a 50-year time horizon (2021-2070) under all scenarios, which is approximately equivalent to the time period an HCP would likely cover, if implemented. Future costs and benefits are discounted at a 3 percent real rate. Values are in constant 2018 dollars (without inflation).

Geography. The analysis covers BOF lands in western Oregon, including those in all 8 districts from Astoria in the north to Southwestern Oregon to the south. It does not include lands in the Klamath-Lake district or in eastern Oregon. Due to uncertainty regarding ODF's future management of Common School Forest Lands, only Board of Forestry lands were included in the business case results. The included land is referred to as the "plan area."

Covered Species. The plan area includes a range of forest resources that support a variety of species, including several species listed under state and federal endangered species protection

laws. The analysis team worked with ODF staff to identify a list of 16 species expected to be proposed for coverage in an HCP (Table 1). This species selection process is preliminary, but it was reviewed by staff from the United States Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration Fisheries (NMFS), and Oregon Department of Fish and Wildlife (ODFW). If the Board of Forestry decides to pursue an HCP, ODF will verify this species selection process with additional data and with further input from state and federal agencies.

Table 1. List of Covered Species Assumed for the HCP Business Case

Aquatic Species (NMFS Jurisdiction)	Wildlife Species (USFWS Jurisdiction)
Oregon Coast coho (<i>Oncorhynchus kisutch</i>)	Oregon slender salamander (<i>Batrachoseps wrighti</i>)*
Lower Columbia River coho (<i>O. kisutch</i>)	Columbia torrent salamander (<i>Rhyacotriton kezeri</i>)*
Upper Willamette River spring chinook (<i>O. tshawytscha</i>)	Cascade torrent salamander (<i>R. cascadae</i>)*
Upper Willamette River winter steelhead (<i>O. mykiss</i>)	Northern spotted owl (<i>Strix occidentalis</i>)
Lower Columbia chum (<i>O. keta</i>)	Marbled murrelet (<i>Brachyramphus marmoratus</i>)
South Oregon/Northern California coho (<i>O. kisutch</i>)	Red tree vole (<i>Arborimus longicaudus</i>)*
Lower Columbia chinook (<i>O. tshawytscha</i>)	Coastal marten (<i>Martes caurina caurina</i>)*
Lower Columbia steelhead (<i>O. mykiss</i>)	
Eulachon (<i>Thaleichthys pacificus</i>)	

Notes: * Indicates species that are not currently listed as federal threatened or endangered, but which are expected to become listed during the analysis timeframe.

Methods and Assumptions for the Analysis

This analysis defines and models effects on ODF’s costs and management activities for two scenarios: 1) continuing take-avoidance (the “**No HCP Scenario**”) and 2) preparing and implementing an HCP (the “**HCP Scenario**”). Because the purpose of this analysis is to help ODF staff and the BOF decide whether to move forward in developing an HCP, the analysis team made some assumptions about what an HCP would include, but could not fully develop or define the HCP. Therefore, the analysis presents findings that are not precise or spatially explicit, but are accurate within appropriate ranges of assumptions to support ODF’s decision process.

The project team (ECONorthwest and ICF) considered low and high bounding scenarios around the “most likely” scenario for both HCP and no HCP to provide more confidence in the findings should key assumptions differ from those incorporated into an HCP. Upper and lower bounds are primarily based on possible future cost and species conservation acreage requirements. Ranges do not incorporate changes in stumpage prices or deviation from the current FMP in terms of harvest scheduling principles. In general, ranges of outcomes are provided rather than point estimates to better demonstrate this uncertainty.

To develop the analysis, the project team worked closely with ODF staff to identify and interpret relevant data on costs, forest inventory, and management activities; develop assumptions about future conditions; and review model inputs and outputs. The project team contributed their subject-matter expertise and knowledge developed from experience preparing and implementing over 75 HCPs around the country to vet and affirm all data and assumptions that were ultimately used in the analysis. Timber inventory and harvest plans are based on comprehensive inventory data and district-level implementation plans for the six districts with

the greatest BOF forest acreage: Astoria, Forest Grove, Tillamook, West Oregon, North Cascade, and Western Lane. Harvest plans for Coos and Southwest are extrapolated from the above six districts with Implementation Plans based on inventory proportions.

Key Assumptions. Assumptions applied in this analysis include future species conditions and policy, market conditions, and a range of negotiated terms of a potential HCP. Although these assumptions hold a degree of inherent uncertainty, they are based on review of the best available data, and are described in more detail in the main report.

Key assumptions for the most likely HCP and No HCP Scenarios are:

- All agency costs will increase at a real (inflation adjusted) rate of 0.5 percent annually.
- Under the No HCP Scenario survey costs and ODF administrative costs will continue to rise over time at about 2.8 percent annually to maintain the no take approach to ESA compliance.
- Initial constraints are based on take avoidance protections associated with sites currently occupied by listed species.
- Under the HCP Scenario, stream buffers will decrease acres available for harvest by about 11,000 acres immediately based on HCP's covering similar species elsewhere.
- Under the HCP Scenario, conservation acreage for northern spotted owl and marbled murrelet will increase by 15,000 acres under the HCP, and an additional 20,000 acres for new species listings (for a total of 46,000 acres in both terrestrial protections and stream buffers).
- Under the No HCP Scenario, constrained acreage due to habitat requirements for the northern spotted owl, marbled murrelet, and future listed species will gradually increase over time by about 59,000 additional acres by 2070.
- Under the HCP Scenario, areas currently managed with limited harvest (about 10 percent)—landscape design and conservation (Terrestrial Anchor Sites)—will gradually be released back to available acres.
- Timber prices are the average of ODF stumpage prices from 2013 to 2017 (\$350/MBF).
- Harvest schedules assume implementation of non-declining even flow.
- Harvest schedules were adjusted to update for current inventory levels.
- Future costs and benefits are discounted at a real (inflation-adjusted) discount rate of 3 percent.

Actions Affected

The HCP is likely to affect only a subset of actions that ODF engages in while fulfilling its mission. The analysis focuses on those actions that may result in changes in cost and revenue to ODF, if an HCP were pursued. It is based on the expert judgement of the project team and input from ODF staff. These actions include:

- **Administration of ESA Compliance**—Staff time is required to ensure ODF is operating in compliance with the ESA, including internal coordination with harvest planners, and coordination with USFWS, NMFS, and ODFW to confirm take avoidance. *From a business case perspective, changes in these actions affect ODF costs.*
- **Pre-Harvest Species Surveys**—Efforts are undertaken to survey for species presence in harvest units prior to offering units for harvest. *From a business case perspective, changes in these actions affect ODF costs.*
- **Species Habitat Management Actions**—Efforts are undertaken to monitor the forest and collect data to determine if species and habitat management activities are achieving their intended objectives. This monitoring is distinct from pre-harvest surveying. *From a business case perspective, changes in these actions affect ODF costs.*
- **Harvest Activities and Inventory Management**—All activities involving planning and design of harvest units, redesign efforts should surveys identify the presence of listed species, and restrictions imposed on harvest to avoid take. *From a business case perspective, changes in these actions affect ODF costs and revenues.*
- **Other Activities**—An HCP may affect the planning and implementation of actions affecting other forms of resource planning on ODF lands, including recreation and ecosystem management (which produces goods and services, such as carbon and habitat). Based on discussion with ODF staff, the effects of an HCP on these activities are likely indirect and limited. *Changes in these actions primarily affect benefits enjoyed by the public, therefore these are less important for a business case analysis; the analysis addresses these effects qualitatively.*

Effects of an HCP

HCP Preparation and ESA Compliance Costs

Table 2 summarizes the costs to ODF for preparing an HCP. Total cost over three years to ODF would be about \$4.0 million. In 2018, ODF was awarded a \$750,000 USFWS Habitat Conservation Planning Technical Assistance grant cover Phase 1 of the HCP, offsetting costs for the first year of HCP preparation. ODF will continue to seek grant funding to cover costs associated with developing an HCP, under the direction of the Board of Forestry.

Table 2. HCP Preparation Costs

Cost Category	Annual Cost (2018 Dollars)	Total Cost (Over 3 years)
ODF Staffing	\$388,000	\$1,164,000
HCP Consultant	\$450,000	\$1,350,000
Economic Consultant	\$50,000	\$150,000
Environmental Impact Statement (EIS) Consultant	\$300,000	\$900,000
HCP Facilitators	\$165,000	495,000
Total	\$1,353,000	\$4,049,000

Annual ESA compliance costs are expected to decline substantially with implementation of an HCP. Starting in 2021, ESA compliance is expected to cost ODF an estimated \$5.2 million in direct administration and species survey costs (Table 3). This amount includes \$2.5 million of

current species surveys costs as well as an additional estimated \$1.7 million due to future listings and increased regulations. Under an HCP, these costs are expected to be less by \$2.2 million annually. Species management costs include stream restoration and barred owl control, much or all of which can potentially be provided via grants and partner agency contributions, reducing these costs potentially to zero. This suggests that approximately two years under the HCP should more than pay for the costs to ODF of preparing the HCP in terms of reduced direct costs of ESA compliance.

Table 3. ESA Compliance Costs to ODF With and Without HCP

Cost Category	No HCP	HCP	Annual HCP Cost Savings
Administration of ESA Compliance	\$784,000	\$490,000	\$294,000
Pre-Harvest Species Surveys	\$4,216,000 ^a	\$2,121,000	\$2,095,000
Species Management Costs ^b	\$150,000	\$350,000	(\$200,000)
Total	\$5,150,000	\$2,961,000	\$2,189,000

Notes: ^a Assumes new species listing would result in over \$1.7 million of additional annual survey costs.
^b Assumes continued grant-funding of stream restoration.

Changes in Timber Harvest and Revenues

More acres are expected to be available for harvest with an HCP than without by the end of the 50-year implementation timeframe (Figure 1). Without an HCP, future acres available for harvest are expected to decline by approximately 59,000 acres over time due to increased protections for currently listed species and new species listings. These increasing take avoidance measures draw from areas of limited harvest availability (policy constrained) and available acres (about 29,500 of each).

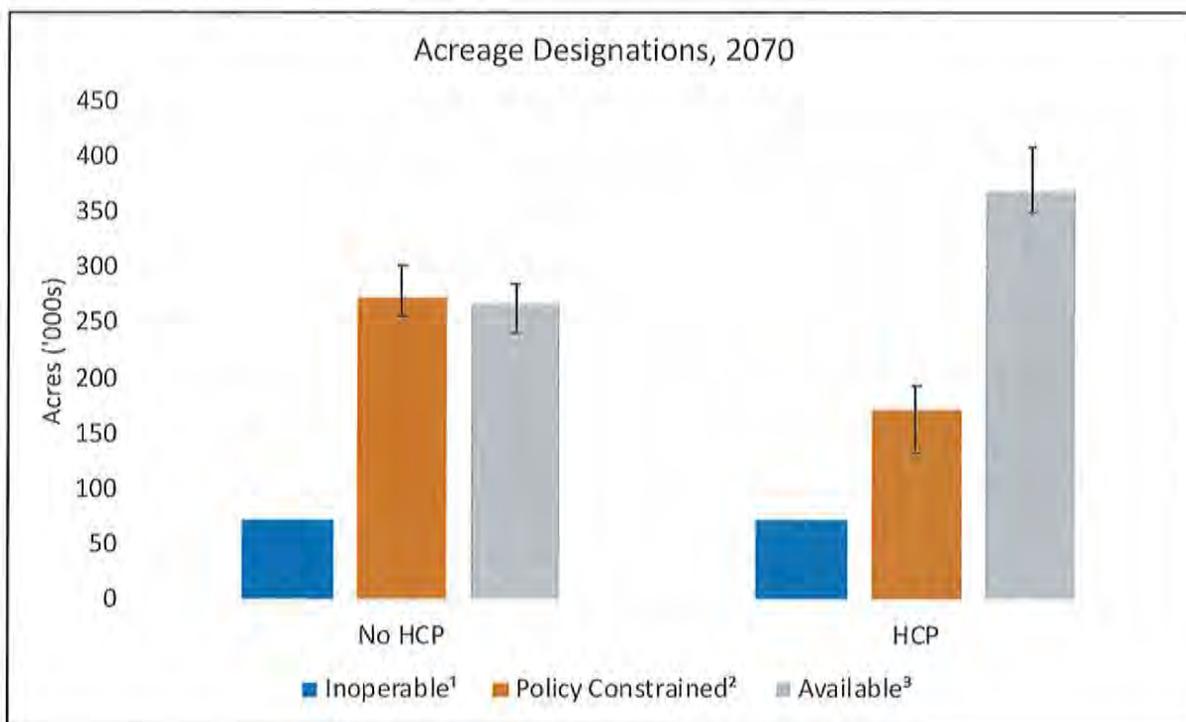


Figure 1. Acreage Designations by Scenario, 2070

Notes: Error bars show ranges of high and low scenario range estimates.

¹Inoperable acres either do not hold forest or would be impractical to harvest.

²Policy constrained acres are either unavailable for harvest or severely limited for harvest by policy and regulatory constraints (e.g., Oregon Forest Practices Act, federal Endangered Species Act and FMP stream buffers).

³Available acres would be available for harvest according to appropriate policy requirements.

In contrast, total available acres for timber harvest are expected to increase over time with an HCP because policy objectives can be more deliberately aligned with potential HCP conservation strategies. Approximately 11,000 of currently available acres become unavailable under an HCP due to a potential increase in stream buffers. An additional 35,000 acres would be excluded from all harvest for protection of northern spotted owl, marbled murrelet and covered species habitat. These 35,000 acres are primarily drawn from areas currently under policy constraints with limited harvest potential. With ESA compliance assured under the HCP, a portion of the acres currently constrained for policy objectives can transition over time to fully available for harvest. It is important to recognize that an HCP may require harvest practices that minimize environmental impacts in these areas.

Without an HCP, acres available for harvest are expected to decline from current conditions of 51 percent of BOF forest lands to 46 percent. Under an HCP, acres available for harvest are projected to increase 51 percent to 63 percent of BOF forest lands. In both scenarios, 72,000 acres are considered inoperable (i.e. roads, non-forest, unable to log and administratively removed areas).

Across the full range of scenarios analyzed, available acres are greater for all with HCP scenarios than all No HCP scenarios by 2070 .These resulting acreage ranges are based primarily upon the identified ranges of possible acreage requirements for northern spotted owl, marbled murrelet, and new species listings. These ranges correspond to available acres as a share of all BOF forest lands at 41 to 49 percent (about 241,000 to about 285,000 acres) for No HCP scenarios and 59 to 70 percent (about 349,000 to about 409,000 acres) for the with HCP scenarios.

Under the HCP Scenario ranges, harvests are expected to stay relatively consistent or slightly climb over time (Figure 2). Decline over the first time period in the HCP Scenario is due to reduction in available acres associated with stream buffer constraints. Without an HCP though, harvests are expected to consistently decline over the full timeframe, falling farther and farther below planned harvests. This decline is primarily due to increasing ESA constraints on available acres and inability to access currently constrained acres anticipated to be accessible with an HCP. Note that annual variability will cause actual annual harvest trends to vary more than the chart suggests, although the harvests are expected to be more consistent under an HCP than otherwise.

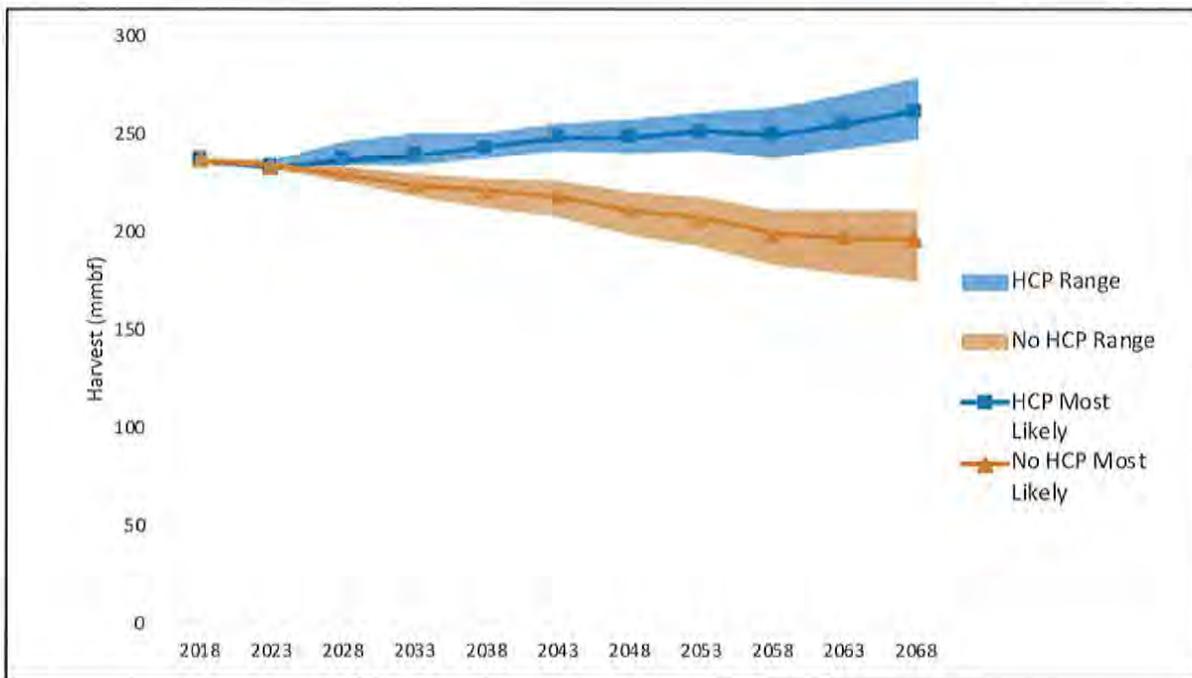


Figure 2. Annual Harvest Volume Range, With HCP and No HCP

Note: Points represent 5-year averages (e.g., 2023 represents 2021-2025).

Similar to harvest volume, net revenue is expected to increase under an HCP and decline without one. Net revenue in this case is gross timber revenue including county payments minus ODF costs. The most likely No HCP Scenario shows a decline from current net revenue levels of \$50 million down to \$26 million annually by 2070, compared to a slight increase to \$53 million with an HCP (in 2018 dollars) (Figure 3). These trends are due to the declining available acres for harvest without an HCP combined with climbing cost assumptions across all scenarios, particularly without an HCP.

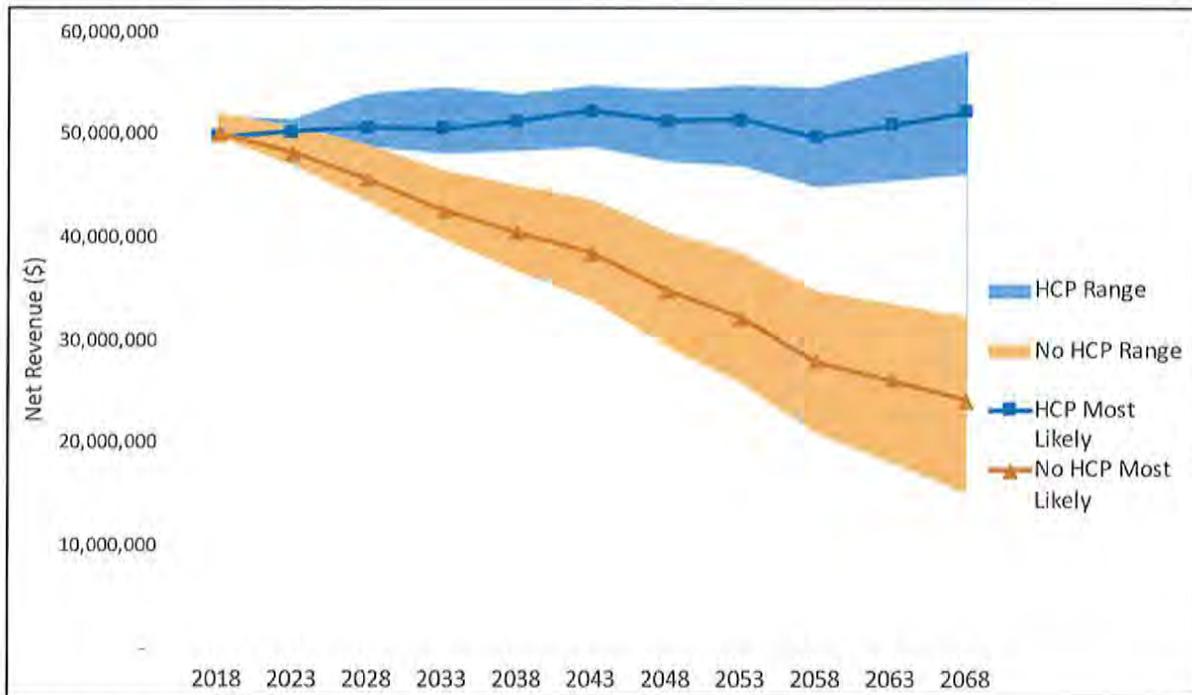


Figure 3. Annual Harvest Net Revenue Range, With and Without HCP
Note: Points represent 5-year averages (e.g., 2023 represents 2021-2025).

Summed over the 50-year timeframe of 2021 to 2070 and discounted at 3 percent, the cumulative net revenue under the most likely No HCP Scenario would be \$900 million compared to \$1.15 billion for the most likely With HCP Scenario. This is a \$250 million net revenue benefit of the HCP over a 50-year timeframe.

Across the range of assumptions for both scenarios, the financial (business case) outcome is better with an HCP than without. In all cases the costs are lower and harvests greater under an HCP. These ranges are based on the highest and lowest possible costs and acreage constraints identified, described in more detail in the full report.

Reduction in Regulatory and Legal Risk

An important benefit of a comprehensive HCP are the regulatory assurances provided by USFWS and NMFS to ODF through the incidental take permits. These assurances guarantee that USFWS and NMFS will not require HCP permittees to provide any more land, water, or money than what is committed to in the HCP in the event of unforeseen circumstances.

Unforeseen circumstances are defined as changes to the environment that may affect the status of the covered species that were not anticipated by those who prepared the HCP. These assurances provided by an HCP will enable ODF to greatly reduce the uncertainty and increase the predictability of its costs related to listed and other non-listed species. An HCP may also reduce litigation costs in the long-term, but the present value of these costs is probably not material to the business case. Rather it is the increase in predictability and certainty that is significant.

Conclusions

These analyses suggest that while there are initial costs to prepare an HCP to receive an incidental take permit, annual ESA compliance cost savings achieved by obtaining such a permit more than cover the preparation costs in the first couple of years of implementation. Furthermore, timber harvest revenue is expected to be much greater under an HCP. Without an HCP, harvest volumes and revenues are expected to consistently decline. This results in approximately \$250 million in (cumulative) net present value of the HCP over 50 years of timber harvests, in terms of summed net revenue under an HCP vs. without an HCP. In addition, the HCP will reduce litigation risk and associated costs as well as the significant amount of staff time required for continued forest management plan revision processes.

Invited Testimony: Western Oregon Habitat Conservation Plan-Item 8

July 22, 2020

Submitted by: W. Ray Jones, Scott Gray

Representing Stimson Lumber Company

We have been engaged in the discussions relative to ODF's efforts to scope out and possibly obtain an HCP in conjunction with a new Forest Management Plan. To that end, there have been many meetings and most recently many Modeling Meetings leading up to the meeting last week on July 13th to share the first Modeling outputs.

After reviewing the information presented by ODF and the associated outputs, we have serious concerns based upon what was shared.

Harvest Projections

The harvest levels collectively (all six Districts) range from 196-206 mmbf/yr. for the HCP period of 70 years. This is a drastic drop from the Current FMP and less than the harvest rate of 230-250 mmbf/yr. included in the Business Case presented to the Board. The Business Case information was presented by ODF and acted upon by the Board of Forestry to move ahead with Phase 1 exploration of an HCP.

The current Harvest Projections are not acceptable for many reasons: 1) This harvest level will not meet the requirements of Financial Viability for ODF. 2) The harvest levels will not create enough revenue to maintain inventory, fund needed silvicultural improvements and young growth management. 3) The associated revenues from this level of harvest also cost the Counties and Taxing Districts millions in lost revenues. 4) The drop in harvest levels will cost family wage job loss (logging and Manufacturing) in those rural counties. 5) The harvest levels do not represent balance when considering the overall objectives of the Greatest Permanent Value Rule. Social and Economic values must be weighed in concert with Conservation Values.

HCA's and RCA's

The combined projected acres for HCA's and RCA's range from 315,000-331,000 acres. This total represents 58% or more of the total landscape. This percentage of set aside acres compares to 49% included in the present FMP. In the proposed HCP there is little to no management contemplated in these set aside acres. At a minimum there should be the option to harvest whether it be thinning, addressing forest health issues or creation of needed habitat through harvest operations.

Conversion of Underproductive Lands (Swiss Needle Cast and Mature Alder Stands)

The HCP and Proposed FMP contemplate 200-500 acres annually of conversion of these types of lands. There are more than 100,000 acres of lands contained in both categories. At the pace represented in the proposed plan it would take three consecutive 70-year HCP periods to work through these lands. This is an unacceptable pace and a huge lost opportunity both for long-term productivity and habitat improvement. As stated previously in Testimony to the BOF, conversion of these underproductive lands needs to be called out as a defined plan objective. There is a great opportunity to enhance long term productivity, harvest and revenues and create more suitable habitat.

Summary

The Draft HCP, associated Land Allocations and resulting Model Outputs are difficult to accept without further modification. We do not believe that the HCP coupled with an FMP represents a balanced approach to management of the State land Assets. The conservation measures are really preservation measures since little to no management is allowed. Yet there is very little consideration to conservation measures that can occur during and because of management activities. These measures can include large wood placement in streams during harvest, snag creation and improved fish passage. At this point, we believe the perceived Conservation/Preservation benefits are given a heavier weight than all other aspects of plan outcomes. The Counties, Taxing Districts, Forest Jobs and employment in these rural counties need to be weighed heavier in the plan development.

Finally, before the BOF Meeting in October, there needs to be revisions addressing the concerns stated above. A credible side by side comparison needs to be developed of the current FMP, New FMP without an HCP and an FMP with an HCP. The comparison needs to clearly demonstrate the costs and benefits of each plan. This comparison is very important for overall transparency and informs BOF Members and all other Stakeholders as to the cost and benefit of each plan.

Respectfully submitted by W. Ray Jones and Scott Gray

General Trailer Parts LLC

1420 SOUTH "B" STREET • P.O. BOX "G" • SPRINGFIELD, OREGON 97477-0067
(541) 746-8218 • FAX (541) 726-4707 • TOLL FREE (800) 452-9532
www.generaltrailerparts.com

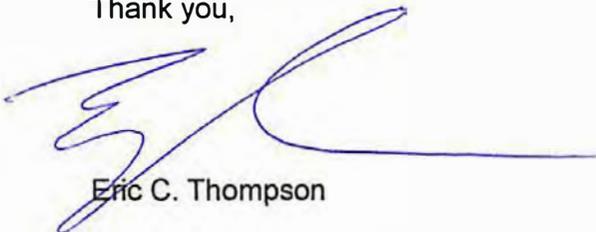
July 22, 2020

To Whom It May Concern

I am writing today in regards to ODF's recent announcement that they are considering setting aside as much as 331,000 acres of productive state forestland mainly for spotted owl and marbled murrelet habitat. By doing this, nearly 80% of those conservation set asides and the economic losses they inflict would be borne by North Coast communities. By ODF's own math, this new harvest model would reduce harvests on Forest Grove, Tillamook and Clatsop State Forests by 25-30%. Our community will not accept such a hit to our economy. Small businesses like mine depend on the work that is generated by the North Coast state forests in the form of logging and transportation. Our entire community depends on the mill jobs and tax revenue these working forests create.

ODF's proposed habitat conservation set asides go far and above current state and federal environmental protection requirements. My business and community cannot afford a plan that would turn productive, healthy state forests into a wildlife reserve. I urge you to reconsider your current path and focus first and foremost on our obligations to the counties and rural communities that surround these forests and enact responsible harvest levels on these lands.

Thank you,



Eric C. Thompson

MANUFACTURERS / SERVICE / PARTS SALES FOR:

LONG & SHORT LOG TRAILERS
MACHINERY TRAILERS

CHIP TRAILERS
BOOSTER AXLES
TRANSFER TRAILERS

BELLY DUMP TRAILERS
BEAM HAULING UNITS

AGENDA ITEM A

Attachment 17

Page 1 of 1

Submitted: Wed 07/22/2020 8:56 AM

Subject line: Comments to the board

Dear Respected Members of the Oregon Board of Forestry,

I am writing to you regarding the Habitat Conservation Plan for Tillamook and Clatsop State Forests. I am a resident of Tillamook County and a frequent visitor to these forests. I love the majestic beauty of the tall trees, mountains, hills, streams, waterfalls, wildflowers and variety of animal species. I am a lover of nature and find it essential to my physical and mental well-being. I would like to express my support for any HCP that includes *more* protection of these wonderful forests. I am *opposed* to logging and other forms of extraction or mining of any kind within our state forests. The timber companies have enough private land where they can log, we shouldn't be allowing it on our public lands. I am in *support* of any and all efforts to protect endangered and threatened species within these forests. Furthermore, I am opposed to any pesticide spraying or use of chemicals on our forest lands. Let's preserve the natural beauty and health of these areas. Thank you for your efforts to protect, conserve and safeguard our forests. The people of Oregon benefit greatly from these natural areas.

Sincerely,

Sara Todd

stodd@gmail.com

To: Oregon Board of Forestry

From: David Moskowitz, Conservation Angler
Nancy Webster, North Coast Communities for Watershed Protection
Lisa Arkin, Beyond Toxics
Greg Jacob, Sierra Club
Joseph Youren, Salem Audubon Society
Steve Griffiths, Audubon Society of Lincoln City
Doug Moore, Oregon League of Conservation Voters
Bob Rees, Northwest Guides and Anglers Association
Jennifer Fairbrother, Native Fish Society
Ian Fergusson, Association of Northwest Steelheaders
Nick Cady, Cascadia Wildlands
Bob Van Dyk, Wild Salmon Center
Noah Greenwald, Center for Biological Diversity
Stan Petrowski, S. Umpqua Rural Community Partnership and Umpqua Wtrsheds
Bob Sallinger, Audubon Society of Portland
Michael Manzulli, Oregon Coast Alliance

Date: July 21, 2020

Re: Habitat Conservation Plan on State Forests

Our organizations continue to support the development of the Western Oregon Habitat Conservation Plan (HCP). While we need more information to assess the strategies in the HCP, we strongly encourage the board to continue making the HCP a top priority for the state forest division.

On July 13, several of our organizations had the opportunity to join a large, [public video meeting on the HCP](#). This was our first chance to see more details on the aquatic strategies that would be pursued. The presentation was well organized and helpful, and some of us are following up with questions. It was good to see the progress. While the habitat conservation areas for terrestrial species were discussed, no maps are available yet. We look forward to reviewing those maps as well as the various analyses underway that compare different plans.

The materials for the meeting note that ODF continues to plan to include a “revised take-avoidance FMP” as part of their comparative analysis for the October meeting. We do not support spending time on modeling the alternative FMP. As our comments on the revised FMP noted ([link here](#)), the FMP contains no sideboards or metrics. Instead, it presents a long list of goal statements and strategies that give the staff wide discretion to manage without clear and public sideboards. No stakeholder group supported the alternative FMP. It may be that one day the alternative FMP will be ready to be modeled. But it is certainly not now. We request that the board direct staff to model the draft HCP in comparison to the current FMP, and to stop using valuable resources by including the alternative FMP, which no one understands or supports.

Lastly, we encourage the board to take note of the complex dynamics around county input on the HCP. As you know, the chair of the FTLAC has come before you in recent meetings to suggest that the HCP work be set aside, as the counties lack the time to engage in planning, given the covid crisis. It is hard to assess the accuracy of that claim, but what is clear is that the FTLAC chair has not consulted broadly with other counties in reaching this decision. All FTLAC meetings have been cancelled since December, and the county commissioners we have contacted were not part of the decision to cancel the meetings. We strongly encourage you to reach out to a wide range of county commissioners for input on the HCP.

Thank you for the opportunity to comment on a Habitat Conservation Plan (HCP) for Oregon state forests.

Please add my comments to the discussion scheduled for the BOF meeting Wednesday afternoon July 22, 2020.

I am surrounded by the Tillamook State Forest. In my 45 years here, I've seen a lot of tree harvesting in the Nehalem watershed. I've seen a public asset managed primarily to generate money. I've seen firsthand what that means on the ground, and how a variety of wildlife species are suffering from a clear-cut and spray approach to where they live. And our local water quality threatened by both silt and pesticide spraying to the point where our Nehalem bay is becoming filled with silt

and choked for fishing, crabbing and clamming.

Finally we have a chance to create diverse forest set-asides that can be managed by science, not the need to make money. We have seen too often what happens when we ignore our science. Now we have a chance to focus part of our state forestlands on broader things like endangered species, water quality, carbon collection, and allowing recreational pursuits currently unavailable due to tree harvesting practices.

In order to maximize the benefits of a HCP, we need to create high quality set asides. They need to offer the best opportunities to achieve the goals of the HCP. They need to be permanent so our

grandchildren's kids can share in the results.

This is our chance. I applaud the effort to create a more diverse public forest. Most of the people I know living here agree with the need for a HCP, so thank you for taking this on.



July 28, 2020

Board of Forestry
Oregon Department of Forestry
Board Support Office
2600 State Street
Salem, Oregon 97310

Re: State Forest Trust Lands

Dear Board Members:

The Washington County Board recently heard a presentation from Mike Cafferata, District Forester, Liz Dent, State Forest Division Chief, and Stephanie Beall, Natural Resource Specialist, about the State Forests in Washington County.

The Board appreciated the presentation and continues to support the Greatest Permanent Value rule. The past Board and the current Board recognize that timber harvest and revenue from these lands are important, but that values to our residents for recreation, habitat preservation for fish and wildlife and clean water are equally important.

The prior Board recognized this in Resolution and Order Number 13-27 on April 2, 2013. The current Board continues to support the position stated in that R&O and “endorses efforts by the Oregon Department of Forestry and the Board of Forestry to implement conservation areas on state forest lands, including the Tillamook State Forest, and encourages the state’s policy makers to pursue a sound forest policy that acknowledges the value and benefits of all forest resources including clean water, adequate fish and wildlife habitat, sustainable timber harvest, and recreation.”

The Board supports efforts to adopt the Habitat Conservation Plans for our forests. The benefit from the certainty that these plans provide to the public for timber harvest is important. Again, equally important are the protection of the habitat and the preservation for recreation and water supply.

Sincerely,

Kathryn Harrington, Chair,
Washington County Board of Commissioners

Email Campaign Title: Continue smart, sustainable forestry

Message:

Hi,

I understand that you're in the process of making a Habitat Conservation Plan for our state forests that could impact western Oregon communities for decades to come. This is an immensely important decision, and I'm writing today to ask you to make sure that this plan ensures timber harvest.

The Oregon Department of Forestry has already reduced harvest levels to the point where there is not enough revenue to manage and protect our state forests.

Please protect our rural communities that rely on harvests from state forests for critical forestry and mill jobs. Our economy is suffering from the COVID pandemic. Please do nothing that could make it worse.

Don't make a plan that decreases active management of our forests, putting jobs at risk and increasing the risk of catastrophic wildfires that put the health of firefighters and communities in peril.

Now is not the time to reduce harvest, cut jobs, and decrease revenue from state forests.

I appreciate your help.

Message senders: 155 responses as of August 5, 2020 at 5:00 p.m.

Campaign Sponsored by: Oregon Forests Forever, <https://p2a.co/ICuHKaz>

Email Campaign Title: Let newly replanted trees thrive

Message:

Hello,

I'm an Oregonian and I'm worried about our state's economy.

That's why I'm writing to ask that you protect Oregon's forest industry and 60,000 family-wage jobs Oregonians need now more than ever.

As you're considering plans for a state Habitat Conservation Plan, please make sure it provides for reliable timber harvest. Back in the early 1990s, millions of acres of federal forests were effectively turned into a habitat reserve for the spotted owl. We saw the devastation that created, both in terms of forest fires and for local economies.

Please remember the mill workers who count on fiber from state forests. Please remember that rural communities in western Oregon rely upon the revenues from timber harvests to fund schools, libraries and other critical services.

Let's manage our forests with our children and grandchildren in mind – making sure our forests and the communities nearby will be healthy and thriving decades from now.

Message senders: 145 responses as of August 5, 2020 at 5:00 p.m.

Email Campaign Title: Please protect our rural communities

Message:

Hello,

Our state needs a Habitat Conservation Plan that protects family-wage jobs, keeps providing fiber for local mills, and invests in healthy forest management that reduces the risk of catastrophic wildfire. We do not need a plan that puts 10s of thousands of acres off-limits to harvest and forfeits millions of dollars in timber revenues that our communities need. Especially now.

Please make sure that you endorse a plan includes things like effective reforestation tools, controlled burns, and smart, science-based forestry.

Please do the right thing. Please make sure you keep in mind that the long-term impacts of this plan. The future our communities rely on making sure a Habitat Conservation Plan on our state forests protects critical jobs and a sustainable fiber supply. We need our state to do everything it can to protect jobs and provide revenue for the economy.

Thank you.

Message senders: 135 responses as of August 5, 2020 at 5:00 p.m.

UPDATE ON A SELECTION OF CURRENT CLIMATE CHANGE WORK TAKING PLACE IN THE DEPARTMENT

Oregon Board of Forestry July 22, 2020, Item 9

John Tokarczyk, Manager, Policy Analysis Unit (PAU)

Andrew Yost, Forest Ecologist, PAU

Danny Norlander, Forest Carbon and Forest Health Policy
Analyst, PAU

TOPICS FOR THE DAY

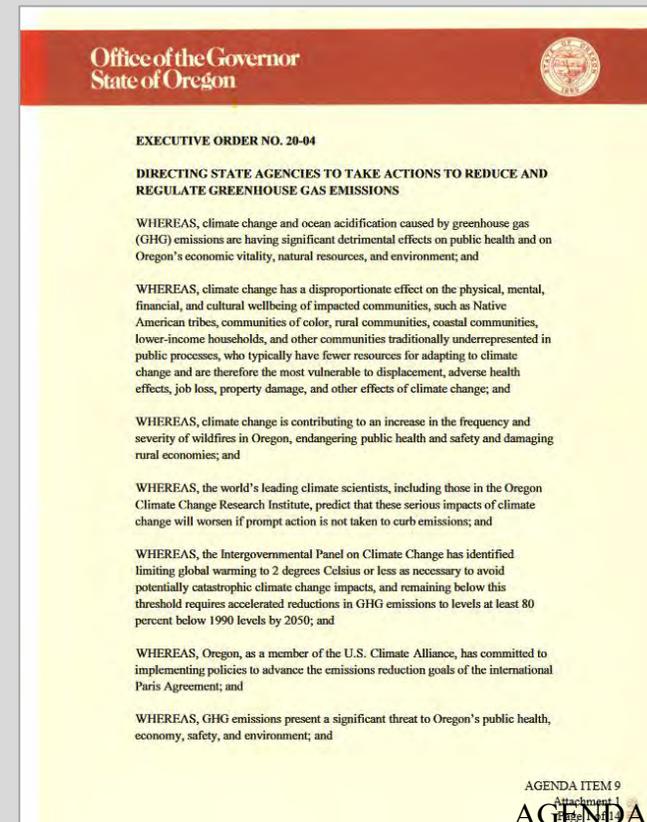
- Department of Justice Progress
- Executive Order 20-04: Content and Response
- Harvested Wood Products and Sawmill Energy Reports
- Statewide Climate Adaptation Framework

DEPARTMENT OF JUSTICE REQUEST

- Background:
 - Current BOF Work Plan
 - Questions approved and provided in June
- Current Status:
 - DOJ is reviewing all the past legislative history
 - Conducting assessment of the statutes based on the questions posed
- Future work:
 - DOJ will continue with analysis
 - Expect a memo to be prepared for presentation in late 2020

EXECUTIVE ORDER 20-04: CONTENT

- Background:
 - Governor Brown signed EO 20-04 on March 10th, 2020
 - Past attempts during previous two legislative sessions
 - Contains 26 “Whereas” statements
 - 13 paragraphs/sections
 - Amends the states GHG targets
 - 45% below 1990 by 2035
 - 80% below 1990 by 2050
- Many sections not relevant to ODF



1. **State Agencies.** The following state commissions and state agencies are subject to the directives set forth in this Executive Order:

- A. Business Oregon;
- B. Department of Administrative Services (DAS);
- C. Department of Consumer and Business Services Building Codes Division (BCD);
- D. Department of Land Conservation and Development (DLCD) and Land Conservation and Development Commission (LCDC);
- E. Environmental Justice Task Force;
- F. Environmental Quality Commission (EQC) and Department of Environmental Quality (DEQ);
- G. Oregon Department of Agriculture (ODA);
- H. Oregon Department of Energy (ODOE);
- I. Oregon Department of Fish and Wildlife (ODFW);
- J. Oregon Department of Forestry (ODF);
- K. Oregon Department of Transportation (ODOT) and Oregon Transportation Commission (OTC);
- L. Oregon Global Warming Commission;
- M. Oregon Health Authority (OHA);
- N. Oregon Water Resources Department (OWRD);
- O. Oregon Watershed Enhancement Board (OWEB); and
- P. Public Utility Commission of Oregon (PUC).

- ODF related co
- Paragraph 3: G

encies shall exercise
discretion vested in
te Oregon's
missions reduction
2 of this Executive

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 3: General Directives
- 3.B.
 - *Expedited Agency Processes. To the full extent allowed by law, agencies shall prioritize and expedite any processes and procedures, including but not limited to rulemaking processes and agency dockets, that could accelerate reductions in GHG emissions.*

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 3: General Directives
- 3.C.
 - *Agency Decisions.* To the full extent allowed by law, agencies shall consider and integrate climate change, climate change impacts, and the state's GHG emissions reduction goals into their planning, budgets, investments, and policy making decisions. While carrying out that directive, agencies are directed to:

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 3: General Directives
- 3.C.I
 - *Prioritize actions that reduce GHG emissions in a cost effective manner;*

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 3: General Directives
- 3.C.2
 - *Prioritize actions that will help vulnerable populations and impacted communities adapt to climate change impacts; and*

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 3: General Directives
- 3.C.3
 - *Consult with the Environmental Justice Task Force when evaluating climate change mitigation and adaptation priorities and actions.*

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 3: General Directives
- More on the report later
- 3.D.
 - Report on Proposed Actions. *The following agencies are directed to report to the Governor by May 15, 2020, on proposed actions within their statutory authority to reduce GHG emissions and mitigate climate change impacts: DEQ, DLCD, ODA, ODOE, ODFW, ODF, ODOT, OWRD, OWEB, and PUC.*

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 3: General Directives
- 3.E.
 - Participation in Interagency Workgroup on Climate Impacts to Impacted Communities. The Governor's Office will convene an interagency workgroup on climate impacts to impacted communities to develop strategies to guide state climate actions, with participation by the following agencies and commissions: DEQ, DLCD, ODA, **ODF**, ODFW, ODOE, ODOT, OHA, OWEB, OWRD, PUC, Environmental Justice Task Force, Oregon Global Warming Commission, Oregon Parks and Recreation Department, and Oregon Sustainability Board.

EXECUTIVE ORDER 20-04: CONTENT

- ODF related content:
 - Paragraph 12: Directives to Oregon Global Warming Commission.
- 12.A.
 - *In coordination with ODA, **ODF**, and OWEB, the Oregon Global Warming Commission is directed to submit a proposal to the Governor for consideration of adoption of state goals for carbon sequestration and storage by Oregon's natural and working landscapes, including forests, wetlands, and agricultural lands, based on best available science. The proposal shall be submitted no later than **June 30, 2021.***

EXECUTIVE ORDER 20-04: CONTENT

- Other Areas Related to ODF Business and Activities:
 - 4.C.: Cap and Reduce, stationary sources and transportation fuels
 - 5.B.: Wildfire protection plans and BMPs for electric companies, utilities, and operators
 - 8.C.: Electric vehicles and charging for state fleets and buildings
 - 11.C.: Standards for protection from wildfire smoke and excessive heat

EXECUTIVE ORDER 20-04: RESPONSE

- Response to the required report to the Governor's Office:
 - **Agency Reduction of Greenhouse Gas (GHG) Emissions**
 - **Agency Reduction of GHG in Policy**
 - **Advancing GHG emission reduction Goals**
- *Report on Proposed Actions.* The following agencies are directed to report to the Governor by May 15, 2020, on proposed actions within their statutory authority to reduce GHG emissions and mitigate climate change impacts: DEQ, DLCD, ODA, ODOE, ODFW, ODF, ODOT, OWRD, OWEB, and PUC.

EXECUTIVE ORDER 20-04: RESPONSE

- Response to the required report to the Governor's Office:
 - **Agency Reduction of Greenhouse Gas (GHG) Emissions**
 -
 -
- Expand and encourage utilization of remote meeting technology
- Reduce building energy and electrical consumption
- Utilize electric vehicles where reasonable
- Identify and facilitate additional telecommuting options

EXECUTIVE ORDER 20-04: RESPONSE

- Response to the required report to the Governor's Office:
 -
 - **Agency Reduction of GHG in Policy**
 -
- Forest Carbon Sequestration and Flux
- Wood Product Carbon Flux
- Scenario Planning and Management Projections
- Detecting Changes in Biogeography of Trees and Adaptation Planning
- Oregon Board of Forestry – FPFO Goal G
- Diversity, Equity, and Inclusion – Climate impacted communities/DEI Equity tool via Climate Adaptation Framework
- Oregon Global Warming Commission Support and Participation

EXECUTIVE ORDER 20-04: RESPONSE

- Response to the required report to the Governor's Office:
 -
 -
 - **Advancing GHG emission reduction Goals**
- Statutory Authority Review
- Systematic Statute and Rule Review
- Partner GHG and Carbon Research
- Outreach and Inclusion
- Maintaining Forestland as Forestland and Expand Forest Cover
- Afforestation and Urban Tree Canopy
- Federal Forest Restoration and Fuels Reduction
- Shared Stewardship

EXECUTIVE ORDER 20-04: RESPONSE

- What the Report was:
 - Input to the GO on what agencies believed to be within their authorities
 - Where agency goals were in relation to EO 20-04
 - An opportunity to identify where the agency would like to direct work
- The report was not:
 - Intended to be a process for public input
 - Related to agency budget development
 - Providing commitments from the agency to achieve what is in the report

HARVESTED WOOD PRODUCTS AND SAWMILL ENERGY REPORTS

- Process began with the Forest Ecosystem Carbon Report
- Working with the USFS, CA Dept. of Forestry, and WA DNR for regional perspective
- HWP Analysis looks at data from 1906 to 2017
- Sawmill Energy based on recent mill surveys



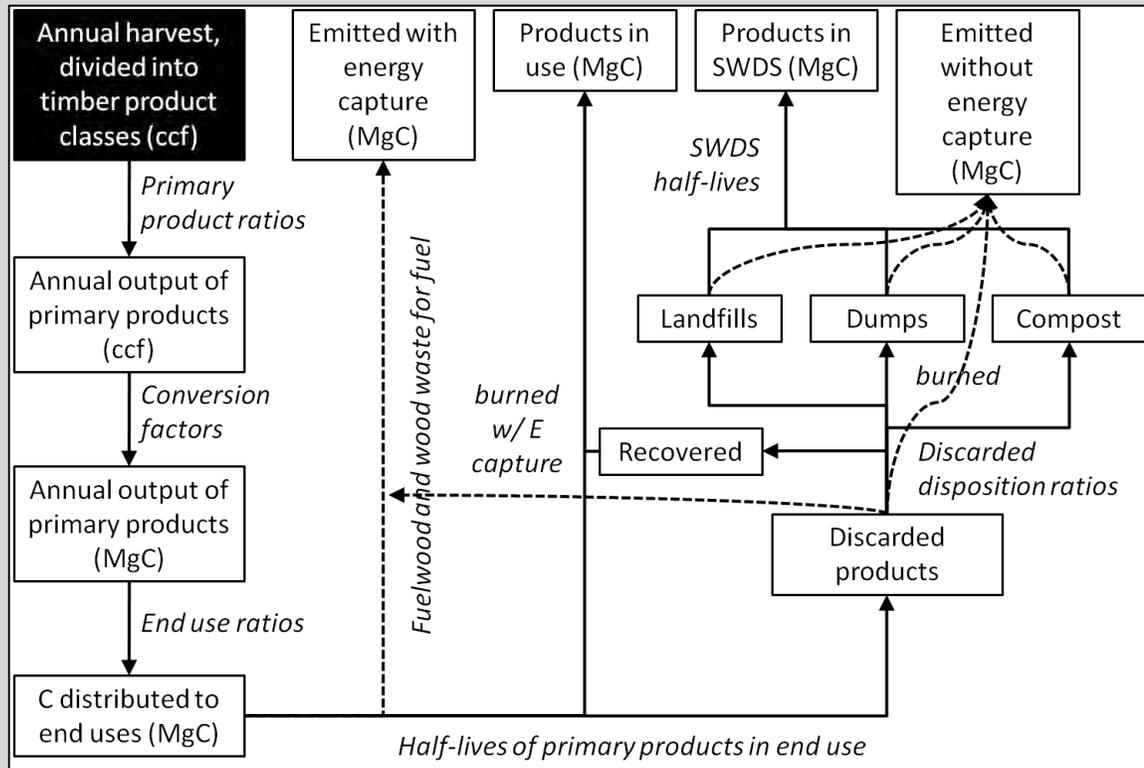
HARVESTED WOOD PRODUCTS AND SAWMILL ENERGY REPORTS

- Harvested timber
 - Board feet to cubic foot volume
 - Conversion factors decline in value each decade.
- 40 Timber products
 - sawtimber, poles, small roundwood, etc.
- 64 Primary products
 - lumber, plywood, mill residue pulp, fuel, non-structural panel, etc.
- 224 End uses
 - New residential construction (single, multi family, mobile homes), new non-residential construction, manufacturing (household furniture, other furniture, other products), shipping, etc.

HARVESTED WOOD PRODUCTS AND SAWMILL ENERGY REPORTS

THE HWP FRAMEWORK

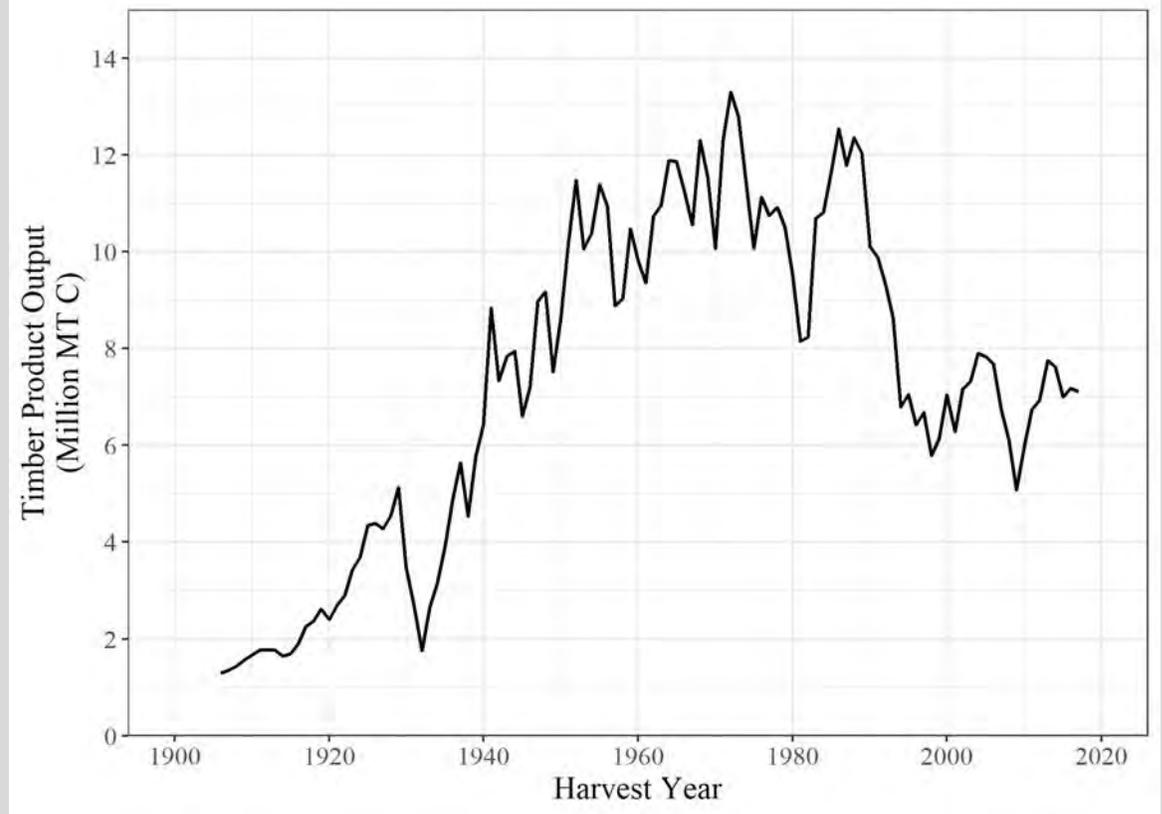
SWDS = Solid Waste Disposal Sites
 ccf = 100 cubic feet
 MgC = Megagram of Carbon = metric ton



From Stockmann et al. 2012, Carbon Balance and Management 7:1.

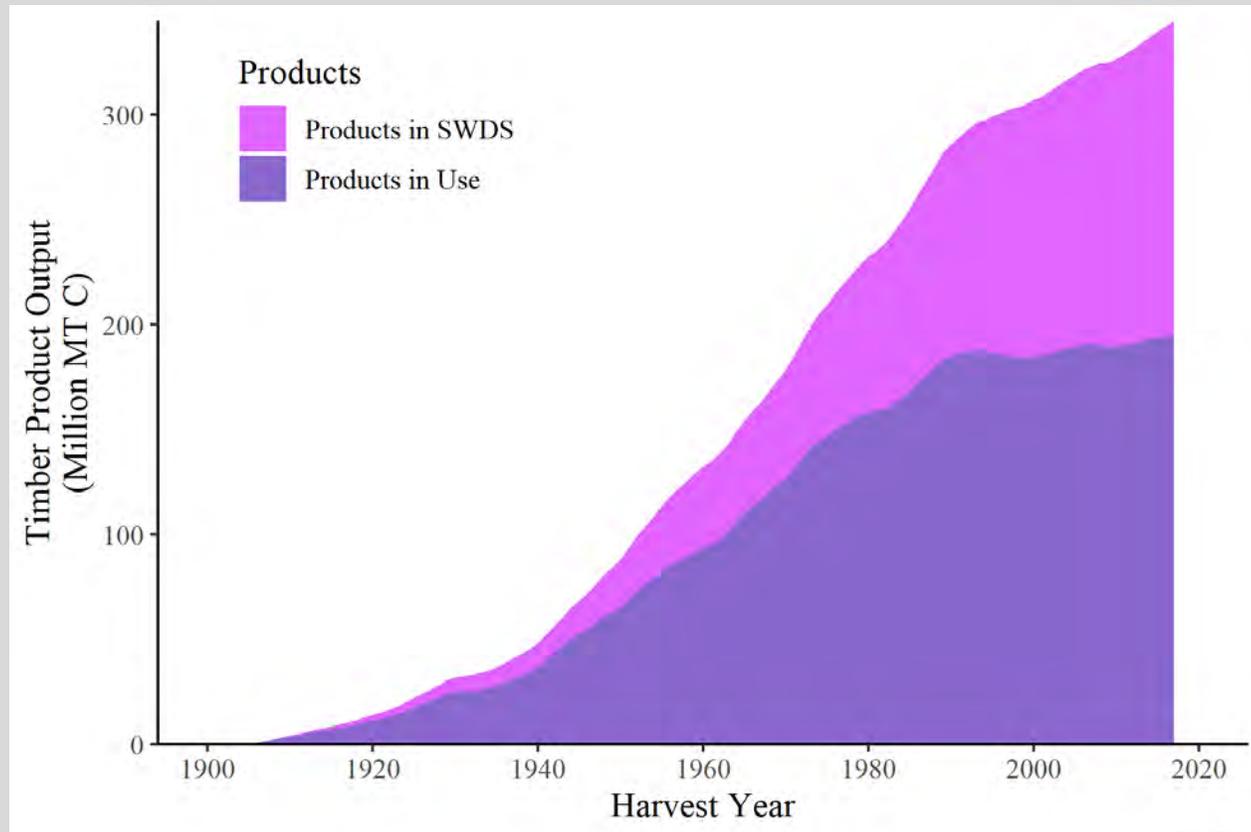
HARVESTED WOOD PRODUCTS AND SAWMILL ENERGY REPORTS

Annual timber product output in Oregon, converted to Million Metric Tons of Carbon, 1906 to 2017.



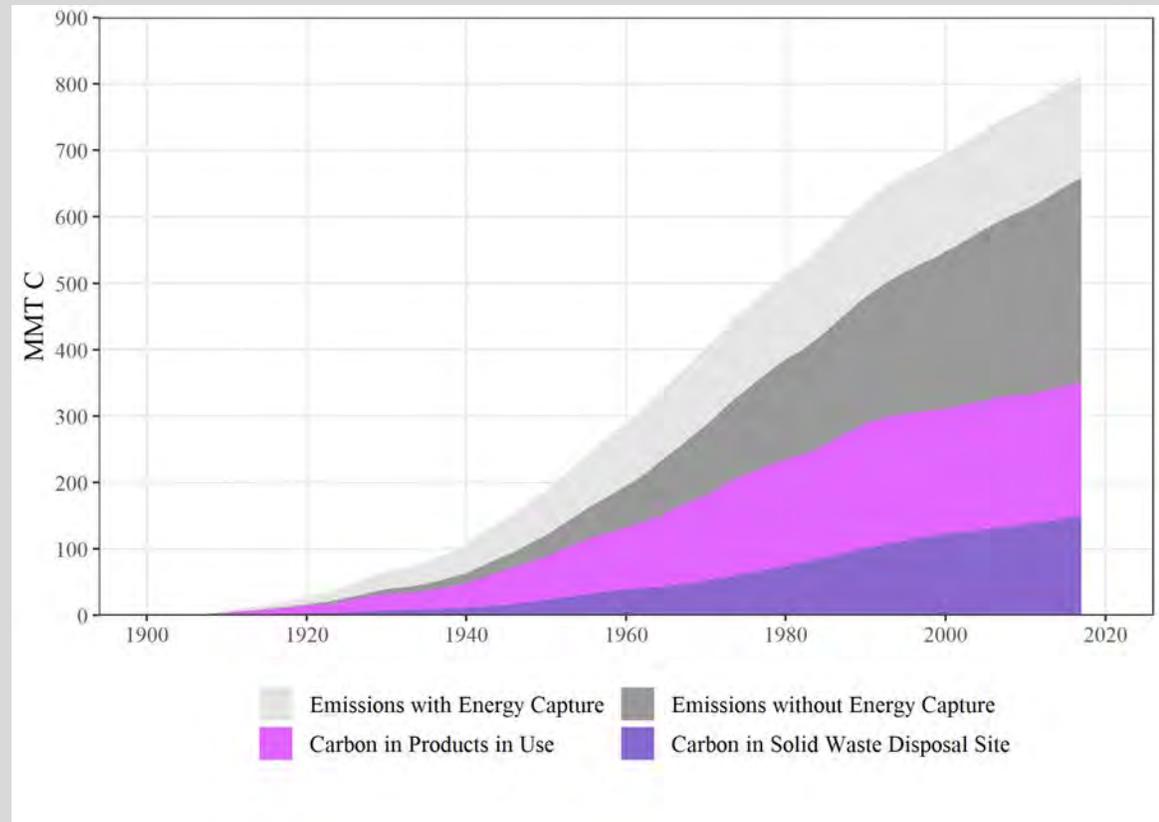
HARVESTED WOOD PRODUCTS AND SAWMILL ENERGY REPORTS

- Cumulative total carbon stored in HWP manufactured from timber harvested from Oregon forests 1906 to 2017.
- Carbon in HWP includes both products that are still in use and carbon stored at solid waste disposal sites.



HARVESTED WOOD PRODUCTS AND SAWMILL ENERGY REPORTS

- Cumulative total carbon emitted with and without energy capture and stored in HWP and SWDS.
- Emissions values shown here are converted to CO₂e by multiplying by 3.667.



HARVESTED WOOD PRODUCTS AND SAWMILL ENERGY REPORTS

- The HWP C model has been successfully reprogrammed to account for all carbon in the TPO
- Currently working with our partners on determining the correct temporal accounting of carbon allocated to landfills, dumps, and emissions from decay and burning
- Final report for Oregon should be delivered by end of August



STATEWIDE CLIMATE ADAPTATION FRAMEWORK

- Revision of 2010 initial framework
- Coordinated by DLCD
- Includes 25 state agencies
- Six themes:
 - Economy
 - Natural World
 - Built Environment
 - Public Health
 - Cultural Heritage
 - Social Systems

AGENDA ITEM 11
JULY 23-24, 2020-LCDC MEETING
ATTACHMENT A

Oregon's Climate Change Adaptation Framework Getting Ready for a Changing Climate

Oregon's climate is changing.

And it's critical the State of Oregon gets ready.

The State of Oregon is currently updating the *Oregon Climate Change Adaptation Framework*.

The Department of Land Conservation and Development has built a team of staff from 24 state agencies to update Oregon's *2010 Climate Adaptation Framework*. The 2010 Framework called on the State to research challenges, monitor the effects of climate change, and integrate adaptation and mitigation strategies into state agency work.



Building on Past Work, Learning from Peers

The team's review of progress since the 2010 Framework noted though the risks from climate disruption have been constant, the impacts from those risks (e.g. forest fires, extreme temperatures, loss of snow pack) have become more severe and frequent.

The review also found although agencies had some success acting on the recommendations in Framework, the state lacks an organizing structure to ensure consistent, strategic, and equitable action on climate.

Framework staff also reviewed adaptation plans from 17 other states, and found those efforts generally resulted in wish lists of projects not completed, except where action was required or institutionalized.

The team decided to shift the *Framework* into a multi-agency climate adaptation program to guide state agencies as each develops an adaptation action plan in its specialty areas.

Finding Climate Drivers and Risks, Identifying Responses and Agency Needs

The *2020 Framework* will describe climate change drivers, resulting risks, potential responses, and agency needs under six themes¹:

- Economy
- Natural World
- Built Environment
- Public Health
- Cultural Resources
- Social Systems

The *Framework* will help state agencies work in partnership with Tribal nations, local governments and other community partners.



¹ Adapted from the Fourth Oregon Climate Assessment Report (<http://www.occri.net/media/1095/ocarr4full.pdf>)

Implementation Strategy Leadership, Equity, Engagement, Collaboration

The Framework will include an implementation strategy aimed at state agencies. Staff are developing five key areas:

1. **A structure of leadership and support** from agency staff empowered to set direction and allocate resources
2. **Equity and inclusion guidelines** to ensure agencies are consistently following best practices
3. **Completion of a comprehensive climate change vulnerability assessment**
4. **Tools to encourage a culture of interagency collaboration** by building information sharing and coordination protocol
5. **Integration of climate change adaptation into agency programs and budgets.**

Publication by Fall 2020; Ongoing Work

Many of the Framework's climate change adaptation actions will be integrated into Oregon's next Natural Hazard Mitigation Plan to be adopted in the Fall of 2020. A complete *Framework* will be published in December 2020.

But more importantly, the *Framework* has launched state's ongoing focus on climate change adaptation. The 24-agency work group will continue to work together to identify priority climate adaptation actions and find the means to take those actions.

The *Framework* is a living document, to be updated and refined with our community partners as agencies use it to develop detailed action plans.

You can contribute to this first version; public comment events are planned for August 2020.

For More Information

Sign up for updates on DLCD's climate change work at public.govdelivery.com/accounts/ORDLDCD/subscriber/new

Christine Shirley
Climate Change Resilience Coordinator
Department of Land Conservation and Development
State of Oregon
(503) 934-0027
christine.shirley@state.or.us

Updated 07/8/2020



24 State Agencies Involved in the Framework Development

Business Oregon
Department of Administrative Services
Department of Agriculture
Department of Consumer and Business Services - Building Codes
Department of Consumer and Business Services - Insurance
Department of Environmental Quality
Department of Fish and Wildlife
Department of Geology and Mineral Industries
Department of Land Conservation and Development
Department of State Lands
Office of Emergency Management
Oregon Department of Energy
Oregon Department of Forestry
Oregon Department of Transportation
Oregon Employment Department
Oregon Health Authority
Oregon Housing and Community Services
Oregon Parks and Recreation Department
Oregon State Marine Board
Oregon State Police - State Fire Marshal
Oregon Water Resources Department
Oregon Watershed Enhancement Board
Public Utilities Commission



STATEWIDE CLIMATE ADAPTATION FRAMEWORK

- **Key implementation recommendations:**
 - **Establish a governance structure**
 - **Engage disproportionately affected frontline and marginalized communities**
 - **Produce a rigorous and comprehensive vulnerability assessment**
 - **Encourage a culture of interagency collaboration**
 - **Integrate climate change adaptation into agency work**

STATEWIDE CLIMATE ADAPTATION FRAMEWORK

- **Sub-group spin-off**
 - Governance
 - Outreach
 - Equity
 - Among others

STATEWIDE CLIMATE ADAPTATION FRAMEWORK

- **Sub-group spin-off**
 -
 -
 - Equity
 -
- Working with a DEI consultant to develop an Equity Blueprint and an Equity Lens to utilize in the CAF and in policy development and analysis
- Level Setting workshops for state agencies (May/June 2020)
- Further trainings may be available in the future

STATEWIDE CLIMATE ADAPTATION FRAMEWORK

- Next Steps:
 - Soon to be provided to agency leadership for review
 - Stakeholder outreach will begin
 - Final revision and publication
- Some parts may persist longer
 - Equity subgroup
 - Governance group and structure
 - May include a staff ad hoc group to continue cross-agency implementation

SELECT NEXT STEPS

- Near term work:
 - DOJ will provide public memo on Board's statutory authority in relation to climate change
 - Participation in work outlined in EO 20-04
 - Board to begin revision of FPFO Goal G
 - Staff will finalize the HWVP and Sawmill Energy Reports
 - CAF will be reviewed and published
- Longer term work:
 - Analysis of rules in relation to climate change and the DOJ authority
 - Climate projections and Management Scenario Research

Submitted: Tue 07/21/2020 12:25 PM

Subject line: ODF response to EO 20-04

Dear Board Members —

We read the ODF response to the Governor's Climate Action Plan and felt that the Department just isn't getting it.

Oregon is uniquely placed to contribute mightily to CO2 reduction because of our forest carbon sequestration capacity. Our State can simultaneously keep our timber production while increasing our total forest space. We can make money both selling timber and selling offsets — we just need to use good science to do so. Reforestation and afforestation should both be accelerated.

But to do this we need a big re-do on the ODF plan (which really just seems like a newsletter that could have been sent out over a year ago). We need an immediate approach that takes action to begin to remove carbon; an intermediate plan to transition us toward a long term forestry plan; and the long term approach, with scientific measurement and accountability, that provides continuity for current timberland production AND sinks carbon in major new ways to reach our emissions goals.

Development of these plans needs to involve the public and all stakeholders statewide, and decision makers need to represent all parties, not just major timber concerns. However, the immediate approach should begin while input and planning for later phases go forward.

We need your help to make this happen and are dependent on, and thankful for, your help.

Sincerely,

Barbara Baylor
Brett Baylor
808 SE Lambert St.
Portland 97202
503-730-8130
baylorb@comcast.net

Submitted: Tue 07/21/2020 5:06 PM

Subject line: Inadequate response to Executive order

To the Board of Forestry,

Oregon forests are not only a rich resource for our state, they are also some of the most significant and essential lungs on our planet.

The combined decreased CO2 captured by our diminished forests and the increased emissions from Fossil Fuels and modern agriculture INCLUDING plantation and clear cut forestry practices have helped take humanity to our critical climate situation.

Until we have decreased the CO2 we need to be moving in a much more urgent manner to manage our lands and forests in ways that will sustain our forests for the long term.

Given this critical state of our climate, ODF's initial response to the Executive order proposes no concrete actions to reduce GHG from currently allowed timber management practices!

I strongly request that the Board direct the ODF to produce a plan that conforms to the Governor's orders. One that is solidly grounded in science, including a process for carbon accounting. And one that proposes concrete strategies and goals to enhance carbon sequestration.

I also request that the ODF have opportunities for public engagement. We are all needed to support each other in accountability and transforming our forestry management to one that meets ALL needs for sustainable wood products, and a healthy, sustainable climate that will not continue to dramatically increase mega fires that cause so much loss of life and forest.

Thank you!

Harriet Cooke, MPH, MD

holisticcooke@aol.com

Submitted: Sat 07/18/2020 4:21 PM

Subject line: Governor's EO 20-04

Dear Board of Forestry,

I'm writing to express disappointment about the Department of Forestry's response to Governor Brown's EO on climate. Oregon is a great forestry state, and our forests have a very large capacity to either generate greenhouse gases through inappropriate management or to sequester carbon through better management. The report issued by Department of Forestry does not describe how the department is going to change activities to respond to this challenge. It does not invite public comment on its weak proposals. The report should discuss Best Available Science for carbon accounting and lay out specific actions for how the Governor's goals can be met.

Department of Forestry can do better than this. Please send this report back to the drawing board.

Sincerely,

Linda S. Craig
2433 NW Quimby
Portland, OR 97210
lindacraigpdx@gmail.com

Submitted: Fri 07/17/2020 3:59 PM

Subject line: ODF's initial response to Executive Order (E.O.) 20-04

To whom it may concern,

I do not understand why there is no opportunity for public comment and engagement on the forestry proposal in response to [Executive Order \(E.O.\) 20-04](#) I would please urge you to: Include a process for carbon accounting, and to propose concrete goals to enhance forest carbon sequestration. Oregon cannot afford to turn a blind eye to the pressure of Climate change; our collective future depends on a plan to include the potential of Oregon forests to help humanity survive what fossil fuel dependence is doing to our world.

Sincerely,
Susan Donohoe
Portland, OR
susanedonohoe@gmail.com

July 20, 2020

State Forester Peter Daugherty
Oregon Department of Forestry
2600 State Street
Salem, Oregon 97310



Re: 5/19/2020 “Report on Proposed Actions for Executive Order 20-04”

Dear State Forester Daugherty and members of the Board of Forestry:

We are writing on behalf of the Environmental Caucus of the Democratic Party of Oregon. Our comments come from a position of concern over climate change and the need to address it urgently.

The Climate Executive Order 20-04 is a directive to all state agencies to address climate change that we strongly support. The three agencies ODF, ODA and OWEB are “directed to propose statewide carbon sequestration goals and storage for Oregon natural and working landscapes, including forests, agricultural lands, and wetlands.” We are concerned that the Oregon Department of Forestry did not address policy concepts that would increase forest carbon storage and uptake in its May 15, 2020 report.

In the segment on “Scenario Planning and Management Projections” the ODF report cites collaboration with Pacific NW Research station of the U. S. Forest Service and other signatories of the Pacific Temperate Forest MOU to model the benefits and consequences of alternative forest management scenarios for carbon mitigation scheduled to be completed in the next few years. However, we do not have two years to wait. There is significant data on the carbon impacts of current logging management strategies.

Role of Oregon’s Forest in addressing Climate Change

Forests provide habitat, watershed protection, recreation, forest products, hunting, fishing and timber. We now know its potential ability to reduce carbon dioxide in the atmosphere, store that carbon over long periods of time and thereby slow human-induced climate change. With the science available, we can and must take action now.

The research on the ability of Oregon forests to take up carbon and store it is well-established.

- The ability to sequester carbon in Oregon’s westside forests rivals the tropics.¹
- Forests in Oregon can hold more than twice as much carbon as is currently stored.

¹ Keith H, Mackey BG, Lindenmayer DB (2009) Re-evaluation of forest biomass carbon stocks and lessons from the world’s most carbon-dense forests. Proc Natl Acad Sci USA 106:11635–11640.

- The largest 1% diameter trees hold half of all above ground carbon in forests.²
- Mixed mature forests store more carbon and sequester more over time making it important to preserve intact forests with larger diameter trees. The most effective strategy is to allow forests to grow to increase their carbon storage potential.³ This also helps preserve water quality and quantity, controls erosion, provides biodiversity and recreation.⁴
- The best method to increase carbon storage in Oregon is to increase harvest rotations to 80-120 years allowing trees to maximize carbon and produce higher quality lumber.⁵

The role of logging and other mechanisms of releasing stored carbon in Oregon has likewise been evaluated.

- GHG emissions from clearcut harvests are composed of the burning and rapid degradation of woody debris left over at the logging site (46%), landfilling of milled portions of wood (22%), and logging machinery fuel, transporting logs, mill discards and timber products (e.g., mechanization 17%).⁶ Based on these calculations, the Greenhouse Gas emissions from logging are greater than from transportation.⁷
- Most wood products end up in landfills off-gassing within a few decades. Recent research has shown that optimistically, only about 16 percent of a tree's carbon may be conserved in forest products for up to one hundred years. This is outlined in the 2018 report by the Oregon Global Warming Commission entitled, *Forest Carbon Accounting Project*.⁸
- It takes at least 100 to 350 years to restore carbon in forests degraded by clearcut logging.⁹ Tree plantations are not forests because of the short life cycle and its monocultural composition hence do little for other functions than growing timber.
- On average a wildfire in Oregon releases only 5% of the forest's stored carbon.¹⁰
- Thinning forests does not increase biomass or stored carbon in remaining forests.¹¹

² Lutz, JA, et al. 2018. Global importance of large-diameter trees. *Glob. Ecol. Biogeogr.* 27.

³ Law, Beverly, et al. Land Use Strategies to mitigate climate change in Carbon Dense Temperate Forests. PNAS, Jan 22, 2018. www.pnas.org/lookup/suppl/doi:10.1073/pnas.1720064115/-/DCSupplemental.

⁴ Moomaw, WR, et.al. 2019. Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good. *Frontiers in Forests for Global Change*. <https://doi.org/10.3389/ffgc.2019.00027>

⁵ Law, 2018.

⁶ Ibid.

⁷ <https://www.hcn.org/issues/50.11/climate-change-timber-is-oregons-biggest-carbon-polluter>

⁸ Oregon Global Warming Commission, "Forest Carbon Accounting Project", 2018

⁹ Hudiburg, TW, BE Law, DP Turner, J Campbell, D Donato, M Duane. 2009. Carbon dynamics of Oregon and Northern California forests and potential land-based carbon storage. *Ecol Applic* 19:163-180.

¹⁰ Law, B.E. and Waring, R.H., 2015. Carbon implications of current and future effects of drought, fire and management on Pacific Northwest forests. *Forest Ecology and Management*, 355, pp.4-14.

¹¹ Zhou, D, SQ Zhau, S Liu, J Oeding. 2013. A meta-analysis on the impacts of partial cutting on forest structure and carbon storage. *Biogeosciences* 10, 3691-3703. <https://www.nature.com/articles/srep03547>

- Burning wood for energy produces as much or more emissions as burning coal because so much more is needed to produce the same amount of energy.¹² Hence any development of biomass use for logging debris should be very circumscribed and not include plantation logging for biomass.

One area of improved research may be to delineate the level of carbon emissions that occur with various types of selective logging. This type of logging protects soil carbon, which holds 42-47 percent of the stored forest carbon by preventing soil drying, broadcast pesticide use, landslides, and erosion. It also preserves other standing trees, dead and downed trees and understory which are lost with clearcut harvesting. The end result is that with clear cutting, even with replanting, the “forested” area experiences a net carbon loss for over ten years following a clearcut. Selective logging, by contrast, does not have a net carbon loss and continues to sequester and store carbon. Therefore, ODF and EWEB should collect data on the effectiveness of a forest, post selective logging, in retaining stored carbon and uptaking carbon. This data can then be compared to loss of forest carbon from clearcutting and thus be used to measure and improve carbon storage with alternative logging methods.

Policy Options

Changing current use of forests by valuing the role of carbon sequestration to manage climate change is not easy. There will need to be measures that reduce subsidies for forest management activities that release significant carbon, and incentives to create carbon sinks and use of selective logging to reduce emissions. We would like to see attention paid to these potential policies (which may overlap):

1. Reporting of carbon emissions on all forest lands to the Department of Energy to be included in the statewide inventory in the same manner as emissions from agriculture. Use a method of carbon accounting that is independent, and science based.
2. Apply the Social Costs of Carbon to forest management plans on state lands.

The costs of continued greenhouse gas emissions are huge. The federal Interagency Working Group on the Social Cost of Carbon (IWG) has calculated SCC to reflect many of the impacts of climate change on health, natural resources including sea level rise, infrastructure and more. These numbers represent massive damages to health, property and our economy that will continue to rise due to delay in emissions reductions.¹³

Applying Social Costs of Carbon analyses up front in agency rules, programs, planning and budgets will drive prudent policy choices. This is especially true for evaluating the best societal uses for Oregon’s forests. The 95th percentile cost figure should be used

¹² Sterman, JD, L Siegel, JN Rooney-Varga. 2018. Does replacing coal with wood lower CO2 emissions? Dynamic life cycle analysis of wood bioenergy. *Env Res Lett* 13: 015007.

¹³ Oregon Department of Energy, *Primer on the Social Costs of Carbon*, May 2020 [SCC Primer](#)

rather than the average predicted cost. This higher figure reflects the high impact of climate change that is already occurring and better reflects true costs as the models do not include quantification of many impacts such as ocean acidification on fisheries.¹⁴ Likewise, we need to set the discount rate at 2 percent or lower given the short duration of time we have to institute reductions to avoid greater catastrophe.¹⁵

3. Evaluate the jobs, taxation and benefits of calling for a moratorium on clear cut harvesting on State land and employing only selective logging (which results in more jobs due to less mechanization).
4. Establish a forest conservation strategy that is on par with the level of carbon storage on Federal forest lands, maintain similar levels of protections and management to maintain stream buffers, reduce logging roads, ban steep slope logging, and protect areas that are older than 100 years.
5. Allow only selective logging on state lands, similar to practices in the Siuslaw National Forest, until it implements the 2021 plan to expand the ability of forests to store and take up more carbon (sequestration).

Statutory Authority

It is disappointing that the Board and ODF waited until June to turn statutory authority questions over to the Department of Justice when the Executive Order came out in March with an initial agency report due date of May 15, 2020. DEQ was able to get a DOJ opinion for a much wider scope of work before their report was produced.

The role of the Department of Forestry is to manage state lands and to oversee the forest practices of privately owned timber lands. It has developed management plans for offsets allowed for carbon trading. Hence it has the quantitative and qualitative understanding of carbon dioxide sequestration on forested lands.

Pertaining to Transparency and Public Input

The report did not establish a process for public engagement with special attention to most impacted communities such as tribes, rural areas, and those most impacted by the emergency caused by climate change.

- Ensure listening sessions provide ample time for listening.
- Develop fact sheets on the health and social benefits of intact forests, risks of not reducing GHG emissions, and cover common misconceptions regarding the timber industry, (e.g., logging job loss in the last 20 years is primarily due to mechanization and loss of county income is due to loss of the severance tax).

Engaging those with little or no internet access:

¹⁴ Paul, I et. al., Institute of Policy Integrity, The Social Cost of Greenhouse Gases and State Policy. Oct 2017. The https://policyintegrity.org/files/publications/SCC_State_Guidance.pdf

¹⁵ Prest, Brian, "Discounting 101", Resources for the Future. Jan 2020.

- In addition to holding in-person meetings as COVID19 reopening stages allow, DEQ can engage as it did before the internet through flyers, news articles, and sending fact sheets to citizens, local public offices, community centers, and libraries. (Please continue to be mindful that people may want to print documents from the internet and these should be mostly in black and white as color printing is not always available or affordable).
- ODF should record videos of in-person meetings. People with limited internet often can watch videos but cannot participate effectively in a zoom meeting.

We look forward to working with ODF, the Board of Forestry and others to improve carbon storage and uptake and thereby slow climate change. We acknowledge that attention and planning need to occur to manage job loss, job shifts and training in new areas that new policies will incur.

Respectfully submitted,

On behalf of the Environmental Caucus of the Democratic Party by,

Catherine Thomasson, MD, Vice Chair, Environmental Caucus of Democratic Party

Helen Kennedy, Treasurer, Environmental Caucus

Calla Felicity, Chair Environmental Caucus

Submitted: Mon 07/20/2020 2:44 PM

Subject line: ODF Response to E.O. 20-04

To the members of the Oregon Board of Forestry,

As a native Oregonian, I grew up with a deep appreciation of Oregon's spectacular forests and view them as one of Oregon's most important assets. As a scientist, I know that forests have a huge role to play in tackling climate change and rolling back atmospheric carbon to non-damaging, sustainable levels. However, it is extremely disappointing that ODF is essentially refusing any participation by Oregon forests in tackling climate change. The ODF response to the Governor's Executive Order on climate is wholly inadequate on multiple levels. Just some of the inadequacies include lack of concrete actions to reduce GHG emissions, no specific proposals to improve forest carbon sequestration, and no public input. This reflects not only on ODF, but also on the Board.

I request that the Board take action and direct ODF to produce a plan that is responsive to the Governor's order. In particular:

- A report that is based on the best available science
- Includes a process for end-to-end carbon accounting
- Proposes specific strategies to enhance forest carbon sequestration
- Establishes a rule-making advisory committee including representatives from impacted communities
- Presents a plan to actively encourage and accept public input

I ask, WWTMD?

Thanks.

Daniel Frye

Portland Oregon

danielfrye@gmail.com

BTW, WWTMD = What Would Tom McCall Do?

Submitted:

Subject line: Comments to the board

Dear ODF Board Members-

With all due respect, I strongly believe that Oregon Department of Forestry is years behind in its management of Oregon Forests and out of step with the needs of Oregon, the United States and the Planet. I will admit that there is a serious problem in that funding for ODF depends upon the cutting of trees. This in itself is a very serious deterrent to thinking outside the box. The planet is warming. This is a serious emergency that affects every Oregonian, all humans, plants and animals on Planet Earth, yet Oregon Dept of Forestry continues with business as usual, not apparently recognizing it's role in reducing carbon emissions and greatly increasing carbon sequestration using its unique ability to do using the forests it manages. Oregon Forests, especially the Coast Range, has potential to sequester carbon that rivals the Amazon Rainforest. When I look at the ODF web site and read about Forest Values, I see no mention at all of Oregon Forests serving the public day in day out by sequestering carbon dioxide and cooling the Planet! Get with it! This is 2020 and ODF must change and address the current needs of Oregon! At the same time that our salmon and cold water fish are dying from over heated, low oxygen waters, ODF is cutting forests on steep slopes in coastal watersheds, thereby contributing to the warming of rivers as well as landslides. The role of forests in keeping rivers cool and allowing fish to survive is apparently not a significant goal of ODF but just a requirement necessary for you to go on doing what you REALLY need to do is sell timber. Oregon is uniquely blessed with forests that ODF has converted into tree farms clearcutting by clearcutting, aerial herbicide treatment by aerial herbicide treatment. It is so heartbreaking to me to view my own Oregon Department of Forestry as a part of the problem and not the solution to so many of Oregon's climate, fish and wildlife challenges and goals. I strongly suggest that you reconstitute your Board with people with an understanding of climate change, the need to keep rivers cold and salmon alive. You apparently have members who look at forests and see nothing but board feet of lumber. I'm not saying don't log at all. I understand that Oregon State Forests need to generate income but it makes no sense to continue creating massive clearcuts on steep slopes to cut trees that are so young that they have not even reached an age where they are sequestering more carbon dioxide than they are creating. I urge the ODF to collaborate with the Governor's Climate Change Commission to totally revolutionize the way in which our forests are managed, taking into consideration the world in which we live in now. The climate is changing. We don't have much time. Oregon forests have tremendous potential to help Oregon, the US, and the world to meet the climate goals necessary to give our kids and grandkids a decent future. If you see the trees in Oregon State Forests strictly in board feet, then please resign from the Board. We need global thinkers who are willing to tackle the most pressing existential issue facing humanity using the unique resources at your disposal and do it NOW.

Jeffrey Gottfried PhD
7040 SW 84th Ave
Jeff@gottfried.net

Submitted: Wed 07/22/2020 11:57 AM

Subject line: Support reduction of timber harvest

Dear Board,

Please protect our natural resources from timber harvesting. We need these trees for our lives and to reduce the impacts of climate change. Protect them please.

Gwen Gwilym
541-228-2398
grfthome@comcast.net

Submitted: Fri 07/17/2020 8:24 PM

Subject line: Oregon Dept of Forestry report to Governor Brown

Members Oregon Board of Forestry,

I am pleased that you are going to consider the ODF response to the Governor's Executive Order,, 20-04. I found the report very disappointing.

We must stop actions which release green house gas and promote and do those actions that sequester GHG. Our NW Forests store immense amounts of GhG. Current commercial harvest of forest is a major source of GhG.

Controlling total global warming sufficient to permit life (including human life)is going to involve much effort relative to management of forest. ODF must think through the challenges and suggest workable plans to have forest management carry its share of our societal need to make great reduction in production of GhG.

The ODF report did not acknowledge this challenge.

Bill Harris
2803 NW Cumberland Rd,
Portland, OR 97210
503 228 3448
bbharris1936@gmail.com

From: [Alexander Harris](#)
To: [ODF DL Board of Forestry](#)
Cc: [Felice K](#)
Subject: OCAP Forest-Carbon Policy – Coalition Letter
Date: Thursday, July 23, 2020 5:09:18 PM
Attachments: [Forest-Carbon Policy – OGWC Letter July 2020.pdf](#)

Hello Board of Forestry,

My name is Alexander Harris and I would like to share with you a letter that was sent to the OGWC earlier today by 21 organizations from around the state.

The attached letter describes a forest-carbon policy proposal developed by a diverse coalition of climate advocacy groups and forest conservation organizations engaging in the Oregon Climate Action Plan process. The proposal calls on ODF to **maximize carbon storage in our State Forests by adopting climate-smart logging practices in addition to decoupling harvest mandates on all remaining native and old-growth forests.**

The letter provides additional detail and includes hyperlinked citations of the scientific literature that we're tracking. We would love to hear your thoughts!

Thank you for considering our perspective.

Alexander Harris
Cascadia Wildlands
Cell: 541-324-1343

CC Felice Kelly, 350 PDX

July 23, 2020

Oregon Global Warming Commission
Attn: Catherine Macdonald
550 Capitol St. NE
Salem, OR 97301

CC:
Peter Daugherty
Oregon Board of Forestry
Kristen Sheeran
Jason Miner

Re: Cost-Effective Policy Proposal to Increase Forest-Carbon Stocks

Dear Oregon Global Warming Commission,

Thank you for your continued efforts to help our state rapidly reduce greenhouse gas (GHG) emissions and adapt to the impacts of climate change. The 21 organizations signed onto this letter were encouraged by Governor Brown's Executive Order on Climate Action (EO 20-04) signed on March 10th of this year. The Executive Order recognizes that state agencies must take prompt action to avert the worst impacts of the climate crisis, and provides the Oregon Department of Forestry (ODF) with a clear mandate to increase carbon stores in Oregon's forests.

We would like to share with you a bold and visionary proposal to grow carbon stocks on state-owned public forestlands managed by ODF. The State of Oregon can maximize carbon storage in its State Forests by adopting climate-smart logging practices – such as longer harvest rotations, greater tree retention, and increased stream buffers – in addition to decoupling harvest mandates on all remaining native and old-growth forests. Such an approach will also optimize other ecosystem services that make forests, fish, wildlife, and nearby communities more resilient to the impacts of a warming planet.

Oregon's State Forests are an immensely valuable public asset, and we believe now is the time to enlist these forests in the fight against climate change. Given the current climate crisis we now face, we urge the OGWC to work with ODF and scientists at Oregon State University (OSU) to develop a set of policies that will weave climate objectives into the management paradigm of our State Forests.

Forests Are a Natural Climate Solution

The Intergovernmental Panel on Climate Change (IPCC) has repeatedly made clear that in order to avoid catastrophic climate change, it is essential that we rapidly reduce fossil fuel emissions while simultaneously growing carbon pools in the world's forested ecosystems ([IPCC 2019](#)). One analysis found that natural carbon solutions – such as improved forest management – can provide roughly one-third of the carbon reduction the world needs to meet the goals laid out in the 2015 Paris Climate Accord ([Griscom et al. 2017](#)).

One analysis published earlier this year considered various strategies to grow carbon pools on natural and working landscapes, and analyzed their associated carbon benefits if applied in Oregon. The study found that among the 10 strategies considered, *deferred timber harvest offered by far the greatest carbon benefits*. If ambitiously implemented across Oregon’s forestlands, this strategy would capture and store an additional 5.2 million metric tons of CO₂e annually – which represents over half of the carbon storage potential of all 10 strategies combined ([Graves et al. 2020](#)). Clearly, improved forest practices in Oregon can play a major role in helping the state achieve the carbon reductions outlined by EO 20-04.

Scientists around the world have found that *the most effective strategy to remove carbon from the atmosphere at a scale that can meaningfully contribute to global climate stability is to better preserve the world’s forests* ([Artaxo et al. 2018](#)). This is especially relevant to ODF, which manages hundreds of thousands of acres of forestland that have the potential to store carbon at a higher density than almost any other ecosystem on the planet ([Buotte et al. 2020](#)).

However, the industrial logging practices that ODF uses to manage our State Forests negate these carbon benefits. Countless studies from OSU researchers spanning numerous decades have found that the best way to keep forest-carbon out of the atmosphere is to keep it stored in mature forest ecosystems – not wood products ([Hudiburg et al. 2013](#); [Law et al. 2011](#); [Harmon et al. 1990](#); [Law et al. 2018](#)).

Over the past half-century, scientists have come to realize that forests are not simply collections of trees valuable primarily for the production of wood; rather, forests are complex, diverse ecosystems with a wide variety of functions and benefits. Forestry that emphasizes biodiversity, complex forest structure, climate resilience, carbon storage, and other ecosystem benefits is known as “**climate-smart forestry**.” This approach differs starkly from industrial management in many ways. Perhaps most importantly, climate-smart forest practices utilize the best available science to inform forest management decisions that enhance a wide variety of ecosystem benefits – such as watershed function, carbon storage, and wildlife habitat – in addition to advancing economic objectives.

Scientists have found that climate-smart logging practices – such as extended rotations, wider riparian buffers, and increased tree retention – can lead to dramatic increases in carbon storage.

One analysis found that forestry operations certified by the Forest Stewardship Council (FSC) in Oregon and Washington store more than 30% more carbon compared to standard forests practices – notably, this accounts for the carbon stored in forest ecosystems *and* wood products ([Diaz et al. 2018](#)). Other studies have found that extending rotations to 80-100 years (instead of 40 years) optimizes the wood-production potential of our west-side forests – leading to more average wood production per acre per year.

State Forests Are Climate Assets

Our publicly-owned forestlands can play a major role in helping Oregon meet its carbon reduction goals, while bolstering the resilience of our communities and ecosystems to the impacts of climate change. The Governor's EO calls for a dramatic reduction in GHG emissions (45% below 1990 by 2035). These reductions will only be possible through a swift transition away from fossil fuels combined with a concerted effort to increase carbon sequestration and long-term carbon storage in Oregon's carbon-rich forestland.

Earlier this week, the Governor's office clarified that ODF is meant to play a major role in helping the state meet its carbon reduction goals by increasing carbon pools in Oregon's forests. Here are a few take-aways from the July 20 letter written by Jason Miner and Kristen Sheeran (emphasis added):

- **Oregon's forest resources are one of the state's greatest assets in the fight against climate change.** Governor Brown expects (ODF) to become a regional leader in climate-smart forestry...
- (ODF) should **prioritize the goal of improving carbon sequestration and storage** and reducing greenhouse gas emissions.
- **The urgency of climate change demands a departure from business-as-usual for the Department of Forestry and all state agencies.**

This letter makes explicitly clear that ODF must advance specific policies that promote climate-smart forestry in Oregon. We believe that adopting climate-smart forest practices in our State Forests is a logical extension of this mandate, and would help establish Oregon's leadership in pursuing natural carbon solutions.

To understand the role that improved forest practices on public lands can play in reducing excess carbon levels, consider the carbon consequences of the Northwest Forest Plan (NWFP). Prior to 1994, the National Forests of Oregon and Washington were *net sources of carbon emissions*, due to management decisions that prioritized timber production over other values; however, due to the protections gained from the NWFP, these same National Forests are now *carbon sinks*. In fact, each year these carbon stocks grow by 7 million metric tons of carbon, the equivalent of 24% of all fossil fuel emissions in both states ([USFS Pacific Northwest Research Station, Watts et al. 2017](#)).

Unfortunately, ODF's current forest practices are largely negating the climate-fighting potential of our State Forests. For example, ODF's 2021 Annual Operating Plan (AOP) calls for an additional 5,932 acres of clearcuts in State Forests. Despite their mandate to meaningfully address climate

change, ODF's 2021 AOP emphasizes even-aged harvest (i.e. clearcutting), short-rotations, monoculture timber plantations, and other industrial forest practices (business as usual).

By adopting climate-smart logging practices and protecting native and old-growth forests on state lands, ODF can help Oregon's communities and ecosystems adapt to the impacts of a warming climate. Scientists predict that more precipitation will fall as rain instead of snow in the decades to come – leading to increased peak flow events and landslides, as well as prolonged droughts and water shortages.

Two scientific studies conducted in Oregon have documented a sharp decline in summer streamflow in basins subjected to industrial forest practices. Analysis of six decades of data from paired watersheds in the HJ Andrews Experimental Forest showed that basins that had been clearcut and replanted produced 50% less water during summer months than adjacent paired basins with mature forest cover ([Perry & Jones 2016](#)). Another multi-decade analysis in the Oregon Coast Range found that 40-50 year rotations of Douglas-fir plantations can produce persistent summer low-flow deficits of up to 50% when compared to adjacent basins with older trees ([Segura et al. 2020](#)).

We must reform the management of our public forestlands immediately if we hope to avert the worst climate impacts such as water shortages, floods, and landslides.

Conclusion

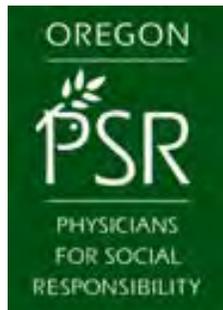
The OGWC is charged with identifying carbon mitigation strategies that are “cost-effective” and proven to “decrease in cost as their deployment becomes more widespread.” ***Establishing carbon storage as a key management objective for our State Forests is such a strategy.*** A [memo from Chair Macdonald dated July 10, 2020](#), specifies that policy recommendations developed by OGWC should consider co-benefits that may be relevant to other state goals. Improving forest practices comes with a wide variety of co-benefits that make people, plants, and animals more resilient to climate impacts in the years ahead.

ODF's most significant legal mandate for managing State Forests is to fulfill the “Greatest Permanent Value” – which includes an array of social, economic, and environmental benefits to all Oregonians. As excess GHG levels in the atmosphere raise global temperatures, Oregonians will experience major disruptions in our economy and our society at large, which will come with a tremendous price tag. Oregon's State Forests are one tool we can use to reduce atmospheric carbon dioxide; therefore, growing carbon stocks on state lands must be considered one of the greatest permanent values of these forests.

Given the current climate crisis we now face, ODF should actively identify opportunities to grow carbon pools on public lands – while promoting forest resilience to climate impacts. By shifting away from clearcut-plantation forestry and adopting the principles of “climate-smart forestry,” Oregon can demonstrate how to support rural economies while simultaneously supporting a wide variety of ecosystem services.

We look forward to working with you to develop forest management policies that will truly realize the Greatest Permanent Value of our State Forests in the face of climate disruption by implementing climate-smart forestry. In the coming weeks, we will follow up on this letter with more detailed policy recommendations.

Sincerely,



South Umpqua Rural Community Partnership



Chart from Graves et al. 2020: Potential greenhouse gas reductions from Natural Climate Solutions in Oregon

Table S3. Estimated annual reductions in MMTCO₂e for each NCS activity under three different implementation scenarios in years 2035 and 2050. Upper and lower bounds of 90% confidence interval are shown in parentheses.

NCS Activity		Scenario/Year					
		Limited		Moderate		Ambitious	
		2035	2050	2035	2050	2035	2050
Avoided Conversion	Forest avoided conversion	-0.05 (-0.04, -0.05)	-0.05 (-0.04, -0.06)	-0.24 (-0.20, -0.27)	-0.26 (-0.22, -0.29)	-0.48 (-0.40, -0.55)	-0.52 (-0.44, -0.58)
	Grassland avoided conversion	-0.006 (-0.005, -0.007)	-0.01 (-0.005, -0.007)	-0.04 (-0.03, -0.05)	-0.06 (-0.05, -0.07)	-0.06 (-0.05, -0.07)	-0.06 (-0.05, -0.07)
	Sagebrush-steppe pathways	-0.01 (-0.005, -0.02)	-0.02 (-0.01, -0.04)	-0.07 (-0.02, -0.13)	-0.19 (-0.04, -0.34)	-0.20 (-0.05, -0.34)	-0.35 (-0.08, -0.60)
Land Management	Deferred timber harvest	-2.31 (-2.08, -2.54)	-2.40 (-2.13, -2.66)	-3.36 (-3.04, -3.68)	-3.45 (-3.11, -3.81)	-5.03 (-4.53, -5.52)	-5.20 (-4.64, -5.75)
	Cover Crops	-0.003 (-0.002, -0.005)	-0.003 (-0.002, -0.005)	-0.13 (-0.07, -0.18)	-0.24 (-0.14, -0.33)	-0.54 (-0.33, -0.78)	-1.06 (-0.65, -1.50)
	No-Till	-0.01 (-0.004, -0.016)	-0.01 (-0.004, -0.016)	-0.13 (-0.06, -0.20)	-0.13 (-0.06, -0.20)	-0.09 (-0.04, -0.14)	-0.17 (-0.07, -0.27)
	Nutrient management	-0.07 (-0.04, -0.10)	-0.07 (-0.04, -0.10)	-0.10 (-0.06, -0.13)	-0.10 (-0.06, -0.14)	-0.16 (-0.09, -0.22)	-0.16 (-0.09, -0.22)
Restoration	Post-wildfire replanting (Federal Land)	-0.07 (-0.04, -0.10)	-0.15 (-0.12, -0.19)	-0.12 (-0.06, -0.17)	-0.24 (-0.19, -0.31)	-0.22 (-0.09, -0.34)	-0.45 (-0.32, -0.58)
	Riparian Reforestation	-0.14 (-0.13, -0.15)	-0.21 (-0.20, -0.22)	-0.31 (-0.29, -0.33)	-0.83 (-0.78, -0.88)	-1.47 (-1.39, -1.56)	-1.86 (-1.76, -1.95)
	Tidal Wetland restoration	-0.005 (-0.001, -0.008)	-0.01 (-0.004, -0.02)	-0.01 (-0.003, -0.02)	-0.02 (-0.01, -0.03)	-0.01 (-0.003, -0.02)	-0.03 (-0.01, -0.05)
Overall annual reductions		-2.67 (-2.34, -3.01)	-2.92 (-2.54, -3.31)	-4.45 (-3.75, -5.16)	-5.45 (-4.55, -6.38)	-8.15 (-6.79, -9.50)	-9.74 (-7.91, -11.5)

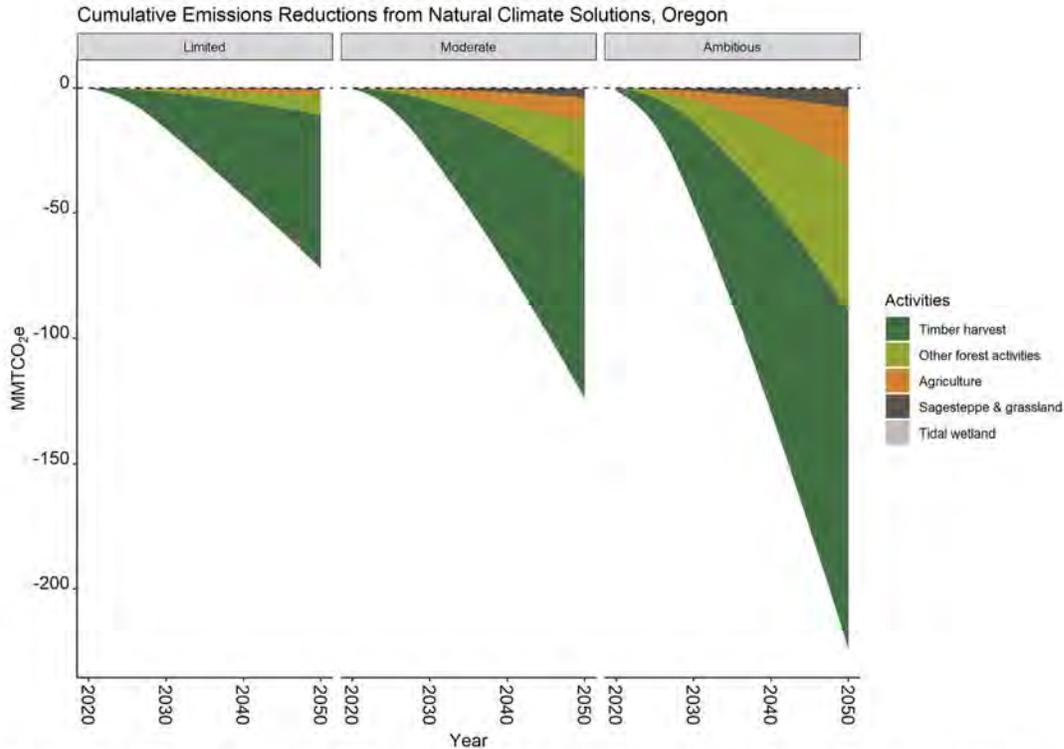


Fig 4. Cumulative GHG emission reductions from NCS activities in Oregon under three implementation scenarios. Results illustrate the large contribution from deferred timber harvest (dark green) as compared to other forest-based activities (light green), agricultural activities (orange), sagebrush-steppe and grassland (brown), and tidal wetlands (grey).

<https://doi.org/10.1371/journal.pone.0230424.g004>

Submitted: Sun 07/19/2020 8:42 AM

Subject line: ODF and the governor's executive order

Dear Members of the Board of Forestry,

What an important role you play here in Oregon. You are the ultimate overseers of our state's majesty and magic and money - and the biggest weapon we have in the fight against climate change - our trees. Our forests are our treasure, and you as a board hold the stewards of this treasure accountable.

It is time for you to act.

The Oregon Department of Forestry's response to the Governor's executive order on climate change is not only inadequate, it's offensive. The department did not offer any concrete actions in their plan to reduce greenhouse gas emissions. The department did not offer any concrete actions to use our forests to improve carbon sequestration. And the department did not even ask for, or consider, public input.

That is a stunning failure - and an indefensible response to climate change - the biggest threat to Oregon, America, and the world.

Please hold the department accountable by asking for a report with concrete goals, evidence-based assessments, and public input. I am watching you. And my child - all of our children - are depending on you to act.

With gratitude for your service,

Wendy Lawton

780 West Pond Drive

Fairview, OR 97024

wendylawton7@gmail.com



The League of Women Voters of Oregon is a 100-year-old grassroots nonpartisan political organization that encourages informed and active participation in government. We envision informed Oregonians participating in a fully accessible, responsive, and transparent government to achieve the common good. LWVOR Legislative Action is based on advocacy positions formed through studies and member consensus. The League never supports or opposes any candidate or political party.

July 25, 2020

To: Board of Forestry, Tom Imeson, Chair
Email: BoardofForestry@oregon.gov

Re: Agenda Item 9 - ODF Response to EO 20-04 – Comments

The League of Women Voters of Oregon believes that climate change is a serious threat facing our planet and supports climate goals and policies that are consistent with the best available climate science that will ensure a stable climate system for future generations. The League also supports the state's 19 land use planning goals that promote both conservation and development of land as a natural resource. The Oregon Dept. of Forestry (ODF)'s charge is to manage state forestland to achieve the greatest permanent value (GPV) for the citizens of the state. Its responsibilities touch on six of these land use goals:

- Goal 4 Forest Lands**
- Goal 5 Natural Resources, Scenic and Historic Areas, and Open Spaces**
- Goal 6 Air, Water and Land Resources Quality**
- Goal 7 Areas Subject to Natural Hazards**
- Goal 8 Recreational Needs**
- Goal 9 Economic Development**

These goals require a balance among multiple and often competing resource needs. All of these resource goals are in jeopardy, however, if the climate emergency we are facing now is not addressed to limit and reduce greenhouse gas emissions. Our forests will be subject to severe drought, pests and diseases, diminished air, soil and water quality, and will be more at risk from frequent and more intensive wildfires and other hazards from rising temperatures due to climate change. The cost for the social impacts caused by climate disaster will be astronomical.

In light of the growing global climate crisis, perhaps Oregon has a duty to modify the Forestry Goal to also manage Oregon's forestland to maximize carbon sequestration that will be of benefit to the entire planet. As the first page of the Oregon Global Warming Commission's 2018 Forest Carbon Accounting Project Report states: "Oregon forests hold globally significant carbon stores in forests that... rival tropical rain forests for carbon density and quantity of stores."

Since the tipping point before irreversible damage to the global climate is less than 10 years away according to the [most recent studies](#), it is urgent that we not waste another year in gathering more and more research. The facts are already in, as this report made clear in 2018 and has only gathered more supporting data since then. "If Oregon wishes to realize increased carbon uptake and sequestration in its forests as a key part of global forest carbon sequestration strategies, it will have to develop goals, and ways and means for achieving those goals... and consider how forest management practices should interact with Oregon's carbon reduction goals to achieve the fullest possible contribution to global climate outcomes."

Governor Brown's March Executive Order 20-04 directed 16 state agencies to submit their plans by May 15th to reduce its GHG emissions by

- at least 45 percent below 1990 emissions levels by 2035; and
- at least 80 percent below 1990 emissions levels by 2050.

ODF's response outlined the steps that the department is now taking to minimize emissions, but it has provided no plans based on the science it has already received for how it would go about reducing emissions through carbon sequestration to achieve these goals. What are the specific concepts for meeting these targets in 15 years, 30 years?

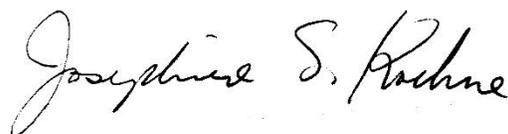
LWVOR acknowledges the difficulty ODF faces to meet these goals through carbon sequestration since it competes with the necessity of generating its own revenue through timber sales on state lands to fund its own department operations and to keep up its revenue payments to the counties. ODF is also under the additional cost burden posed by Covid, more frequent and intense wildfires and a lawsuit. The easiest, most cost-efficient way to harvest timber is clearcutting, but the science says clearcutting increases carbon dioxide to the atmosphere. The science is clear that older, mature trees 80, 100 and more years sequester significantly more carbon than 40-year old trees. Longer rotations and variable density thinning with light impact machinery is the way to reduce CO2e. But funding for department operations is an issue that must be solved. The Legislature, the Board of Forestry and Oregon citizens need to address this catch-22 situation so that global climate is not impacted by inaction and disfunction. Too much is at stake. A new funding mechanism for the department must be part of the conversation.

We urge ODF and the OGWC to make their priorities very clear about what must be done to increase carbon sequestration to reduce CO2 emissions, and suggest the changes to taxing timber and the rules and incentives needed that will result in the best possible outcomes for increasing sequestration, and clearly identify the law changes, including revisions to the Forest Practices Act that must be made to meet these targets. Requesting nine FTEs in a POP is not a plan—as suggested by your 2021-23 budget request. The business case needs to be made to fund the needed measures now, or pay the consequences in the near future. And it is up to us and the legislature to make this happen, but your leadership is needed now to start the ball rolling, not June 30th.

We appreciate the opportunity to submit our comments and hope they will be helpful.



Rebecca Gladstone
LWVOR President



Josie Koehne
LWVOR Forestry Portfolio

Cc: Oregon Global Warming Commission (Oregon.GWC@Oregon.gov); Peter Dougherty, State Forester (Peter.daugherty@oregon.gov); Liz F. Dent, State Forest Division Chief (Liz.F.Dent@oregon.gov); Justin Butteris, ODF Policy Analyst (Justin.Butteris@oregon.gov)

Submitted: Mon 07/20/2020 3:10 PM

Subject line: EO 20-04

Dear Board of Forestry,

It is only recently that I have felt compelled to write letters to State agencies like yours. I am beside myself with worry that if we don't improve our forestry practices soon, my nieces and nephews (and yours) will suffer the consequences.

The ODF's plan to implement The governors executive order EO 20-04 is inadequate. The report should include:

1. Concrete goals to enhance carbon forest sequestration.
2. Include a process for carbon accounting
3. The report/plan should be based on the best available science
4. Specific strategies for public engagement
5. Establish a diverse rulemaking making advisory committee including Experts and representatives from impacted communities.

For too long private companies have been making the decisions and putting profit over the welfare of our planet and our people.

I know these changes are hard to make and may be costly but we have been avoiding the problem of climate change for too long And we must have the courage to take strong action now.

Sincerely,
Rebecca Maloney 97206
cedarnd@gmail.com

Submitted: Fri 07/17/2020 11:31 AM

Subject line: ODF Implementation of Governor Brown's EO 20-04

Board of Forestry,

I am a member of the Steering Committee of the Metro Climate Action Team (MCAT), which is based in Portland. In 2020, the Team is carefully monitoring implementation of Governor Brown's EO 20-04.

I understand that the Board will be meeting on Wednesday, July 22, 2020, and that one of the topics will be "an update on ODF's response" to Governor Brown's request for ODF to submit a plan regarding ODF plans to implement EO 20--04."

The initial response of ODF to the Governor's request for ODF to submit a plan for implementation of EO 20-04 was, in the eyes of MCAT, woefully inadequate! To rectify that, I urge you, the Board of Forestry, to demand that ODF make the following adjustments in their plan update:

1. Propose concrete actions to reduce GHG emissions.
2. Propose concrete actions to improve carbon sequestration.
3. Request and accept public input.
4. Ground the plan in best available science.
5. Present specific strategies for public engagement.
6. Include a process for carbon accounting.
7. Establish a diverse rule-making advisory committee that includes experts and representatives from impacted communities.

The Governor's EO 20-04 is a clarion call for all relevant state departments and agencies to recognize and act upon the fact that we all must step up our game SUBSTANTIALY if we are to successfully respond to the relentless and rising challenges of a rapidly degrading climate.

Thanks!

Mark McLeod
Member
Steering Committee
Metro Climate Action Team (MCAT)
2602 SE 28th Pl.
Portland, OR 97202
510-757-4954 (text)
SustainableMcLeod@gmail.com

Submitted: Sat 07/18/2020 9:31 PM

Subject line: Plan to effect the Governor's Executive Order 20-04

To Whom It May Concern:

I am seventy now, and I've spent my entire life in Oregon. From the time I was eleven years old, I began to appreciate how important healthy forests are to me - and to the populations of Oregon. In advance of your meeting on Wednesday, July 23, please note these comments about your initial response to the E.O. 20-04. First, concrete actions to improve forest sequestration are missing. Second, I see no request for public input. Third, also missing are solid actions to reduce greenhouse gas emissions or to achieve any of the goals set forth by the E.O. In short, your response is woefully inadequate for the needs of the people of this state to achieve any kind of progress toward combatting climate change.

Please see to it that you create a report that complies with the Governor's Order, and do it this summer. It must include the following, based on the best available science:

1. concrete goals to enhance forest carbon sequestration;
2. specific strategies for public input;
3. a process for carbon accounting; and
4. an advisory committee set up for rule-making that is diverse and includes both experts and representatives from impacted communities.

I look forward to seeing your progress on the above points that are imperative for the health of our forests and the subsequent health of the people of Oregon and our economy.

Most sincerely yours,

Victoria L Meier
West Linn, OR
meier235@gmail.com



August 5, 2020

Oregon Board of Forestry
Attn: Chair Tom Imeson
2600 State Street
Salem, Oregon 97310

CC: Oregon Global Warming Commission
Kristen Sheeran
Jason Miner

RE: State forestland management policy and carbon sequestration

Dear Oregon Board of Forestry,

On behalf of the Oregon Forest & Industries Council (“OFIC”) and the private forestland owners and forest product manufacturers that provide over 60,000 Oregonians with family-wage jobs that we represent, this letter is being submitted in response to a letter dated July 23, 2020 that was sent to the Oregon Global Warming Commission (the “Commission”) as well as the Board of Forestry (the “Board”) by 20 environmental nongovernmental organizations (“ENGOS”) advocating for the adoption of “climate-smart logging practices” on state forestlands. Additionally, this letter is intended as a preliminary response to comments made by certain members of the Board at its July 22 meeting that we perceive as evincing a burgeoning policy directive regarding management of state forests aimed at the extension of rotation ages and larger set-asides in order to increase carbon storage on state forestlands.

At the outset, we want to be absolutely clear: we agree with the signatories to the July 23 letter that working forestlands (whether public or private) have a key part to play in any climate change mitigation strategy employed at a local, state, national, or global level. We have extolled the ability of Oregon’s forests to capture over half of the state’s annual human-caused carbon emissions in the past,¹ and we will continue to advocate for acknowledgement of the contributions of the state’s forest sector in any climate policy adopted by the state.

What is often overlooked when forests are discussed as a tool in the fight against climate change, however, is the carbon storage potential of forest products and the regrowth capacity of harvested lands. The harvest of timber from working forestlands does not mark the end of the climate mitigation potential of that land or the products derived from it, and recent attempts to quantify the impact of timber harvest on carbon emissions have utterly failed to account for the storage of carbon in wood products, the substitution benefit of forest-derived building materials and byproducts compared to other construction media, ongoing carbon sequestration on reforested acres, and the amount of leakage that would result if Oregon’s harvest levels and resultant timber supply to the state’s mills were to decline.

¹ See, Oregon Global Warming Commission 2018 Forest Carbon Accounting Project Report. Available at: <https://static1.squarespace.com/static/59c554e0f09ca40655ea6eb0/t/5c094beaaa4a99fa6ad4dcde/1544113138067/2018-OGWC-Forest-Carbon-Accounting-Report.pdf>.

And make no mistake, if the Board were to adopt a management policy that extended rotations or took additional state forest acres out of production, the supply of timber to the state's milling infrastructure would necessarily decline.² Many of our members rely on state timber harvests to keep their mills running at capacity and would not have access to a viable substitute supply if harvest volumes on state land were to diminish, even if long term timber supply were to rebound.³ The Board has been directed by law to adopt policies that will result in the management of state forests for "greatest permanent value."⁴ Though comparative valuation of differing management policies and priorities is difficult, the adverse effects on rural communities that would result from a further decrease in manufacturing capacity cannot be overlooked or trivialized. It is no exaggeration to say that Oregon's forest products industry is the lifeblood of many of these communities, and mill closures or cutbacks will directly harm those who rely on the industry and their posterity. This is not fear-mongering or catastrophizing – the state's experience in the mid 90's when federal harvests declined and mills were forced to close as a result has more than proven the point.⁵ Harvest reductions on state lands threaten similar impacts to northwest Oregon communities.

What is more, maintaining harvests at current levels is not inimical to the promotion of the other values and benefits provided by the state's forests, including climate benefits. While one could argue that extending rotation periods to correspond to culmination of mean annual increment may result in marginally more carbon *stored* in the forest, the carbon savings are illusory. A policy to extend rotation ages by necessity results in a decrease in harvest volumes while average forest stand ages increase. For this period of time, builders would be forced to either find alternative sources of wood (nearly always at a carbon premium) or to use more carbon-intensive alternatives such as steel and concrete. As discussed above, this period of time will also drive mill closures and a decrease in milling capacity that history proves will never return. Therefore, even if longer rotations increased long-term forest fiber supply, by the time harvest volumes increased, there would not be sufficient milling capacity remaining to process the wood. The result would be an aging forest, increasingly prone to catastrophic wildfire, and more carbon intensive building practices. Not only does a policy of extended rotation ages threaten rural communities with mill closures, but it also threatens to compromise the carbon *sequestration* capacity of the forest (as opposed to its *storage* capacity).⁶ We are not alone in saying that "active forest management with high harvest levels and efficient forest product utilization will provide more climate benefit, compared to reducing harvest and storing more carbon in the forest."⁷

² See, Diaz, David, et al. "Tradeoffs in Timber, Carbon, and Cash Flow under Alternative Management Systems for Douglas-Fir in the Pacific Northwest." *Forests*, vol. 9, issue. 8, 2018. MDPI, <https://www.mdpi.com/1999-4907/9/8/447/htm#B11-forests-09-00447>.

³ *Id.*

⁴ ORS 530.050.

⁵ See, Eichman, Henry, et al. "Local Employment Growth, Migration, and Public Land Policy: Evidence from the Northwest Forest Plan." *Journal of Agricultural and Resource Economics*, vol. 35, no. 2, 2010, pp. 316–333. JSTOR, www.jstor.org/stable/41960520. Accessed 2 July 2020, (finding that "significant and robust negative effects of the NWFP policy on employment growth after 1994...were strong and offset only slightly by positive migration-driven effects").

⁶ See, Gray, A. N., T. R. Whittier, and M. E. Harmon. "Carbon stocks and accumulation rates in Pacific Northwest forests: role of stand age, plant community, and productivity." *Ecosphere* 7(1):e01224, 2016.

⁷ Gustavsson, Lief, et al. "Climate change effects of forestry and substitution of carbon-intensive materials and fossil fuels." *Renewable and Sustainable Energy Reviews*. Volume 67, pp. 612-624, 2017. Available at, <https://www.sciencedirect.com/science/article/abs/pii/S1364032116305500>.

Which brings us back to our initial point of agreement with the signatories to the July 23 letter. Yes, the state's forest resources are tremendously important in the fight against climate change, but that fact does not mandate a reduction in harvest levels on state forests. Increasing rotation periods may provide a marginal increase in carbon storage in unharvested stands, but this would also, when considering downstream effects, likely result in an overall increase of global carbon emissions. It would also result in suppression of fiber supply to the state's mills and the further erosion of an industry that rural Oregon communities rely upon. For these reasons, we believe that it is inescapably clear that adoption of "climate-smart logging practices" – as that term is defined in the letter – would constitute an imprudent policy decision and would actually fail to promote the "greatest permanent value" of the state's forestlands, , whether measured in terms of carbon mitigation or the prosperity of rural communities. Therefore, we urge the Board to reject this policy.

Sincerely,



Tyler Ernst
Policy Counsel, Manufacturing & Resources
Oregon Forest & Industries Council
O: (503) 586-1245 | C: (517) 898-0557 | tyler@ofic.com



**OREGON
WILD**

Protecting Oregon's wildlands, wildlife, and waters since 1974.

www.oregonwild.org

FROM: Oregon Wild

TO:

Tom Imeson, Chair, Oregon Board of Forestry, BoardofForestry@oregon.gov
Peter Daugherty, State Forester, Oregon Department of Forestry, Peter.DAUGHERTY@oregon.gov,
Jason Miner, Natural Resources Policy Director, Office of Governor Kate Brown,
Jason.Miner@oregon.gov
Kristen Sheeran, Director, Oregon Carbon Policy Office, Kristen.Sheeran@oregon.gov

DATE: July 14, 2020

SUBJECT: Inadequacy of ODF's proposed actions to implement Executive Order on climate change.

As you know, Executive Order NO. 20-04, Directing State Agencies To Take Actions To Reduce And Regulate Greenhouse Gas Emissions, directs that:

...all agencies with jurisdiction over natural and working landscapes in Oregon will need to prepare and plan for the impacts of climate change and take actions to encourage carbon sequestration and storage...

https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf

However, the Oregon Department of Forestry's (ODF's) current proposed actions fall far short of meeting this directive. To be blunt, ODF was tasked with coming up with a plan to increase carbon capture and storage within the state while reducing emissions, and instead ignored the elephant in the room (how the state manages forests) in order to focus on largely superficial staff actions that fail to take climate change and the agencies' responsibilities seriously.

E.O. 20-04 requires the Oregon Department of Forestry to "report to the Governor by May 15, 2020, on proposed actions within their statutory authority to reduce GHG emissions and mitigate climate change impacts" and:

...this Executive Order establishes science-based GHG emissions reduction goals, and calls for the State of Oregon to reduce its GHG emissions (1) at least 45 percent below 1990 emissions levels by 2035; and (2) at least 80 percent below 1990 emissions levels by 2050.

...

...the state commissions and state agencies listed in paragraph 1 are directed to take the

Portland
5825 N. Greeley Ave.
Portland, Oregon 97217
tel: 503.283.6343

Eugene
P.O. Box 11648
Eugene, Oregon 97440
tel: 541.344.0675

Bend
16 NW Kansas Ave.
Bend, Oregon 97701
tel: 541.382.2616

following actions:

A. GHG Reduction Goals. Agencies shall exercise any and all authority and discretion vested in them by law to help facilitate Oregon's achievement of the GHG emissions reduction goals set forth in paragraph 2 of this Executive Order.

B. Expedited Agency Processes. To the full extent allowed by law, agencies shall prioritize and expedite any processes and procedures, including but not limited to rulemaking processes and agency dockets, that could accelerate reductions in GHG emissions.

C. Agency Decisions. To the full extent allowed by law, agencies shall consider and integrate climate change, climate change impacts, and the state's GHG emissions reduction goals into their planning, budgets, investments, and policy making decisions. While carrying out that directive, agencies are directed to:

(1) Prioritize actions that reduce GHG emissions in a cost-effective manner;

https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf

Dishearteningly, ODF proposes very few concrete actions and instead outlines study after study to further delay changes in forest management that past scientific study has already supported as needed to maximize our forests' contribution in the fight against climate change. The agency's proposed actions are encouraging staff telecommuting, turning the office lights off when not in use, and considering the purchase of electric vehicles. These obvious, surface steps fail to take the direction given to the agency seriously.

Improved forest conservation is the biggest single step Oregon can take to reduce greenhouse gas emissions, capture and store carbon, and combat climate change. It is unacceptable for the agency in charge of forest management in Oregon to hide behind further study when developing a plan to implement an executive order that specifically directed it to *"take actions to encourage carbon sequestration and storage."*

ODF should take its responsibilities to the people of Oregon seriously and scrap the current proposed actions. Instead, ODF leaders and the Board should familiarize themselves with the current best available science on forest management practices and carbon sequestration, and then go back to the drawing board and develop a package of policy proposals that meaningfully adhere to the direction that state land management agencies *"take actions to encourage carbon sequestration and storage."*

A good start would be to review the article *Land use strategies to mitigate climate change in carbon dense temperate forests* published in the Proceedings of the National Academy of Sciences (PNAS April 3, 2018 115 (14) 3663-3668; first published March 19, 2018 <https://doi.org/10.1073/pnas.1720064115>) and the State of Oregon's own Global Warming Commission report. The information contained within these scientific documents should be used to help inform specific actions on ODF-managed lands to increase carbon sequestration and storage, such as a shift to longer logging rotations, thinning instead of clearcutting, and the establishment of climate and conservation reserves.

In addition, the agency should also develop a range of specific improvements to the Oregon Forest Practices Act, or suggest policy overhauls to related mechanisms such as forest land taxes, that can

promote more climate-friendly private lands logging practices and support landowners who would prefer to allow forests to grow older and store more carbon vs. current model of intensive clearcutting.

Currently, ODF's list of proposed actions are not really actions at all. Instead the agency has put forward its intent to continue to delay and study carbon storage and emissions in the forest sector, even while there is existing robust science from Oregon State University and elsewhere pointing the way toward actions that can help fight climate change.

The intention to request legal guidance from the Department of Justice (DOJ) is also troubling considering that ODF leadership should already have an understanding of the agency's governing statutes, most of which have been on the books for decades. It is worth noting that members of the Board of Forestry highlighted their own frustration with this DOJ request at a recent board meeting, citing that agency leadership has been claiming to seek DOJ guidance for over a year. Given the severity and urgency of the climate crisis facing Oregon, and the world, we strongly urge the board and the agency stop delaying.

One bright spot in the proposed actions document is ODF's highlighting of the importance of prescribed fire as a means of restoring federal lands that have suffered from decades of abusive logging practices. In Western Oregon, the Northwest Forest Plan has served to protect carbon rich old-growth stands while allowing previously logged forests to recover and capture carbon, offsetting millions of tons of Oregon industrial emissions. In the drier of Eastern and Southern Oregon, logging, grazing, and fire suppression has removed older, more fire resistant trees and replaced them with denser, younger stands. Harmonizing carbon sequestration, climate resilience, and ecological health in those forests requires a careful mix of prescribed fire, thinning near homes and communities, and protection of old and large trees.

Unfortunately, this bright spot does not outweigh the shortcomings in ODF's current list of proposed climate actions. This document damages the agency's credibility with the public, and fails to take its responsibility to the people of Oregon seriously. Please take the executive order guidance to "*take actions to encourage carbon sequestration and storage*" to heart by scrapping the current list of proposed actions and starting over with specific policy initiatives that actually result in forests in Oregon being allowed to grow so that they can capture and store more carbon, and be part of a climate change solution.

Sincerely,

A handwritten signature in black ink, appearing to read 'Steve Pedery', written in a cursive style.

Steve Pedery, Conservation Director
Oregon Wild

Submitted: Wed 07/22/2020 9:22 AM

Subject line: EO 20-04

Copied: Board of Forestry

Dear Forester Daugherty,

I am writing to express my deep concern over your initial report on the climate Executive Order (20-04). The report does not include any concrete steps that the Oregon Department of Forestry (ODF) will take to help avoid the worst climate impacts. Industrial forestry in Oregon, which your agency is obligated to regulate, has been the largest contributor to greenhouse gas emissions of any sector in the state. Please go back to the drawing board and produce concrete climate solutions by working with independent scientists.

The Executive Order is clear that your agency is charged with identifying ways in which you can contribute to Greenhouse Gas emissions (GHG) reduction goals. Your initial report fails to do so and instead relies mostly on symbolic actions that will have no meaningful effect on reducing emissions or reforming forestry practices by allowing ODF to continue business as usual. Please recommend science-based changes that will help increase carbon storage such as reducing clearcutting, lengthening the rotation time between harvest activities to allow trees to store more carbon, reducing road building, and promoting an incentive system for private forest owners to store more carbon in their forests. Moreover, your initial report lacks any timeline for a transparent process for public engagement. That stands in stark contrast to many of the other state agencies that are holding an open process for the public to engage ahead of their final reports in 2021. Please allow Oregonians a chance to engage in the creation of your report.

We need ODF to step up and help become part of the solution and not just contribute to the problem. Currently, industrial forestry is the largest contributor to climate pollution in the state. ODF has an important role in helping remedy climate change. I look forward to working with the agency on this effort.

Sincerely,

Dylan Plummer

he/him/his

Grassroots Organizer

Cascadia Wildlands

541.531.1858

CascWild.org

PO Box 10455 Eugene, OR 97440

Cascadia Wildlands defends and restores Cascadia's wild ecosystems in the forests, in the courts, and in the streets. We envision vast old-growth forests, rivers full of wild salmon, wolves howling in the backcountry, a stable climate, and vibrant communities sustained by the unique landscapes of the Cascadia bioregion. [Join our movement today.](#)

Submitted: Mon 07/20/2020 8:54 PM

Subject line: My Response to ODF's Failure to Address the Climate Crisis

Dear Board of Forestry,

I read ODF's response to Governor Brown's EO on the climate and was extremely disappointed. My take on what was sent to the Governor was that ODF plans to simply move forward with a business as usual approach. As a state we must do all we can to mitigate the climate crisis and a business as usual approach fails to recognize the seriousness of the climate chaos that we are facing and the need for urgent action. ODF's response failed to propose substantive, concrete ways to help Oregon reduce GHG emissions. ODF has this extraordinary opportunity to contribute in a very meaningful way to helping our state achieve its notable GHG reduction goals. Our state forests, if managed in a climate smart fashion can become huge carbon sinks - but this will require a real shift in current practices. Private industrial lands, if managed in a more climate support fashion, could also contribute in a significant way to helping us meet our GHG reduction goals. This will require changes, among other initiatives, to the OFPA. Fundamentally the state will need to find ways to incentivize longer rotations. The research on this is clear - yes, we can do other things to promote carbon capture on our natural and working lands but the research has made crystal clear that by far the biggest bang for our buck for significantly increasing carbon storage will come from longer rotations.

I ask you as Board members to make sure ODF does respond to the Governor's EO in a meaningful way. This means several things: ensuring an effective approach to carbon accounting, using the best available science (and we are blessed with much of that nearby at OSU), and proposing concrete goals for achieving significant carbon storage in our state and industrial lands. Lastly, ODF needs to spell out how it will engage the public in a real and meaningful way to ensure that what they do is transparent and that they will be accountable to us, the citizens of this state, who, by a large majority, want to see meaningful action to address the climate crisis.

Thank you for your attention,

Rand Schenck
2947 NE 31st Ave
Portland, Or 97212
503-347-5526
randschenck@msn.com

July 21, 2020

Peter Daugherty
State Forester
Oregon Department of Forestry
2600 State Street
Salem, Oregon 97310

RE: ODF preliminary report on Oregon Climate Action Plan (EO 20-04) implementation

Dear Mr. Daugherty,

We are writing to share our concerns with the Oregon Department of Forestry's (ODF's) preliminary report on proposed actions within the agency's statutory authority to reduce greenhouse gas emissions and mitigate climate change impacts in response to Gov. Brown's Oregon Climate Action Plan (Executive Order No. 20-04).¹ We greatly appreciate the opportunity to comment on the report, which unfortunately fails to fulfill the directives laid out in the Governor's order.

Our most pressing concern with ODF's preliminary report is that it does not set agency-wide goals or actions to achieve the greenhouse gas emissions and climate change mitigation goals called for in the EO. ODF simply provides a record of current activities, claiming that the agency is already doing everything necessary and that it should be trusted. The result is a report lacking substance that does not set the agency up for success in working with the Oregon Global Warming Commission (OGWC) to achieve the goals of the Executive Order. We recommend that ODF produce a report that 1) is based on the best science, 2) includes a process for carbon accounting, 3) presents specific strategies for public engagement, 4) proposes concrete goals to enhance carbon storage in Oregon's forests, and 5) establishes a rulemaking advisory committee that is diverse and includes experts and representatives from tribes and other marginalized and impacted communities.

Reducing Emissions from Agency Staff Actions is Insufficient: While we appreciate ODF's efforts to reduce the carbon footprint of agency staff, the goals provided in the preliminary report are inadequate and do not completely address the expectations or objectives of the Governor's order. The section "Agency Reduction of Greenhouse Gas (GHG) Emissions" states that ODF has begun evaluating, and will continue to evaluate actions, towards reducing GHG emissions in a cost-effective manner, including:

- "Expand and encourage utilization of remote meeting technology to reduce vehicle travel to and from the numerous meetings agency staff and associated committees are regularly involved.
- "Reduce building energy and electrical consumption through technological and personal action (e.g. power sensors, shut off lights and computers off when not needed).
- "Utilize electric vehicles where reasonable as fleet replacements arise. Identify and facilitate additional telecommuting options where appropriate."

While we applaud ODF for recognizing that these actions will help reduce agency greenhouse gas emissions, if achieved, they will result in marginal reductions at best. Further, these basic efforts should already be the practice of any energy-conscious organization, especially a state agency. It is disappointing that it has taken an Executive Order from the Governor to prompt ODF to begin evaluating the adoption of these practices. Beyond the section on agency greenhouse gas emissions reductions, the report neither offers clearly defined goals nor actions for achieving them.

ODF Has the Statutory Authority to Take Action: It is particularly disturbing that ODF reports under “Statutory Authority Review” that it seeks Department of Justice clarification of Board authority to set climate change policy and take climate change into account in development of new rules or revisions of existing ones. ODF’s very mission⁷ is “To serve the people of Oregon by protecting, managing, and promoting stewardship of Oregon’s forests to enhance environmental, economic, and community sustainability.” Meanwhile, under “Forest Carbon Offsets” in this EO response, the agency acknowledges that it has the statutory authority to establish a program of carbon offsets. The only purpose of a carbon offset program is to reduce greenhouse gas emissions and mitigate climate change. Thus, ODF accepts in this report that it has the authority to adopt climate change policy and take climate change into account in development of new rules or revisions of existing ones. Seeking DOJ advice on ODF authority to address climate change is either redundant or a delay tactic.

ODF must not only recognize the objectives of the EO, but provide a plan for achieving those goals. That plan should include:

- Specific actions that ODF will undertake, including a projected timeline for those actions.
- An explicit period and mechanism for allowing and incorporating public and expert testimony and comment.

Recommendations: Given the initial ODF report, here are our specific suggestions for the agency to meet the mandate of the EO:

ODF Needs a Plan Based on the Best Available Science: We note that while ODF is awaiting the results of further study on Forest Carbon Sequestration and Flux, the Oregon Global Warming Commission’s 2018 Forest Carbon Accounting Report² proposed actions that could be taken to increase carbon storage in Oregon’s forests: “reforestation, afforestation, longer harvest rotation periods (to 80 years) on private forestlands and an additional 50 percent reduction in harvest on public (federal and state) lands.” That report even identifies the Net Ecosystem Carbon Balance that would be achieved by such actions. Meanwhile, in the arena of Wood Products Carbon Flux, this issue has been studied as long ago as 2006^{3,4} with Wilderness Society summaries published in 2007⁵ and 2009⁶ identifying the carbon percentage stored in timber products as only 15% of that present in the logged tree. There is no viable reason to delay action when adequate study has been undertaken already and results reported. It is disturbing to see ODF take the approach of awaiting further study without identifying why previous studies are inadequate.

ODF Needs a Plan that Adopts Independent Carbon Accounting: ODF needs to adopt a process of carbon accounting that will provide data on how much carbon is currently stored in Oregon’s forests, how much is influenced by logging practices, and what practices will best maximize long-term carbon storage. Lifecycle analysis of carbon and other greenhouse gas emissions that result from forest management will inform what measures ODF can take to work with other agencies and stakeholders to combat climate change.

ODF Needs a Public Engagement Strategy Regarding Decision-making: There is no clear plan to solicit public participation in the process of rule-making. Without a plan for including public input or testimony the plan is lacking one of the most critical components of state agency rule-making. Other agencies have included extensive strategies for robust public engagement in their initial reports. By forgoing comments and testimony from the public and experts ODF cannot make informed decisions about what is best for Oregon communities or for our forests.

ODF Needs to Propose Goals to Enhance Carbon Storage in Oregon’s Forests: Roughly half of Oregon is forested; ODF has statutory authority over nearly one third of that landscape totaling approximately 10 million acres. The globally significant carbon storage capacity of these forests is outlined in the 2018 Oregon Global Warming Forest Carbon Accounting Report². The EO¹ directs ODF, in coordination with OGWC, Oregon Department of Agriculture, and Oregon Watershed Enhancement Board to, “...*submit a proposal to the Governor for consideration of the adoption of state goals for carbon sequestration and storage by Oregon’s natural and working landscapes, including forests, wetlands, and agricultural lands, based on the best available science.*”¹ Thus, ODF has a responsibility to propose forestry goals that would enhance forest carbon storage. The initial report fails to propose any policy recommendations or forestry practices that would help the state of Oregon meet its GHG emission reduction goals.

ODF Needs to Establish a Rulemaking Advisory Committee (RAC):

- The RAC should be similar to RACs established by other state agencies.
- ODF should appoint a diverse combination of public interest, industry, tribal, and rural representatives to the committee.
 - The established RAC should:
 - Include as many or more public interest representatives as industry representatives. Representatives of the environment, public health, and environmental justice have important voices to bring to the table on issues that impact our forests.
 - Appoint a demographically (age, race, gender, etc...) and geographically diverse RAC. Diverse perspectives can help make the design of the program stronger.
 - Ensure expertise in climate science and climate change mitigation are represented on the RAC. Decisions to address climate change must be informed by science.

We urge ODF to consider and incorporate the above recommendations as it works to implement the directives of Executive Order 20-04 and help our state reach the greenhouse gas emissions reduction targets in that order. Thank you again for the opportunity to

comment on the preliminary report. We look forward to participating in the discussion of policy considerations ahead.

Sincerely,

350 Eugene
350 Salem Oregon
350.org Washington County
350deschutes
350PDX
Beyond Toxics
Cascadia Wildlands
Clackamas Climate Action Coalition
Climate Conversations
Climate Solutions
Coast Range Association
Douglas County Global Warming Commission
Engineers for a Sustainable Future
Indivisible, Southern Oregon
Klamath-Siskiyou Wildlands Center
OLCV Metro Climate Action Team (MCAT)
OneSmallThing PDX
Oregon Environmental Council
Oregon Physicians for Social Responsibility
Our Climate
Pacific Forest Trust
Renew Oregon
Residential Energy and Water Intelligence (Res-Intel)
Rural Oregon Climate Political Action Committee (ROCPAC)
South Umpqua Rural Community Partnership
Southern Oregon Climate Action Now
Southwestern Chapter of The Climate Reality Project
Western Environmental Law Center
WildEarth Guardians

- 1- Executive Order 20-04
https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf
- 2 - Oregon Global Warming Forest Carbon Accounting Report 2018
<https://static1.squarespace.com/static/59c554e0f09ca40655ea6eb0/t/5c094beaaa4a99fa6ad4dcde/1544113138067/2018-OGWC-Forest-Carbon-Accounting-Report.pdf>
- 3 - Smith, J.E., Heath, L.S., Skog, K.E. and Birdsey, R.A. 2006. Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States. Gen. Tech. Rep. NE-243. Newtown Sq., PA. USDA Forest Service, Northeastern Research Station. 216 p.

- 4 - Gower ST, McKeon-Reudifer A, Bradley M, Refkin DJ, Tollefson T, Souba FJ, Taup A, Embury-Williams L, Schiavone S, WeinBauer J, Hanetos AC, Jarvis R 2006 Following the paper trail: the impact of magazine and dimension lumber production on greenhouse gas emissions: a case study. The H. John Heinz II Center for Science, Economics, and the Environment, Washington DC
- 5- Ingerson, Ann L. 2007. U.S. Forest Carbon and Climate Change. Washington, D.C.:The Wilderness Society. https://www.nrcm.org/wp-content/uploads/2013/10/TWS_US-Forest-Carbon-and-Climate-Change_2007.pdf
- 6- Ingerson, A. 2009 Wood Products and Carbon Storage: Can Increased Production Help Solve the Climate Crisis? Washington, D.C.: The Wilderness Society. <https://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/ThreatsForestHealth/Climate/CI-Ingerson-TWS2009.pdf>
- 7- Oregon Department of Forestry Mission <https://www.oregon.gov/odf/aboutodf/Pages/default.aspx#:~:text=Mission,%2C%20economic%2C%20and%20community%20sustainability.>

CC: Kate Brown, Governor of Oregon; Cathy MacDonald, Chair Oregon Global Warming Commission; Kristen Scheeren, Energy and Climate Change Policy Advisor to Governor Brown; Jason Miner, Natural Resources Policy Director for Governor Brown

Submitted: Tue 07/21/2020 10:26 AM

Subject line: ODF Response to Governor Brown's Executive Order 20-04

Dear Peter Daugherty and the Staff of ODF

I grew up in the Pacific Northwest and cherish our forests. As a child I was in awe of the big trees. My family would hold hands and try to circle them so I guess I've been a tree hugger from an early age. I also remember the big log trucks, often able to hold only one or two of the big trees, and the smell of fresh cut wood. I know it's a contradiction and one your agency deals with all the time. How do we keep old growth and still log and produce lumber? This is a challenge and one we need ODF to master because our current challenge is more than habitat and lumber - it's survival of the trees themselves and of our way of life.

Governor Brown's EO 20-04 to reduce carbon asks state agencies to come up with plans to reach a 45% reduction below 1990 levels by 2035. This is essentially cutting current emissions in half by 2035. Our forests are a key to this process yet the ODF plan outlines business as usual. It is time for more creativity and time to harness the wondrous carbon sequestration of which our forests are uniquely capable. ODF has contributed to the studies of carbon storage and sequestration and this is a good thing. ODF has worked with the forest industry to balance habitat preservation and harvests. And now it must do even more.

You know the changes to the industry better than I. I love the old photos of the loggers chopping and sawing by hand - it's the stuff of legends. I'm even more impressed after running a chainsaw to help a friend on her small woodland harvest. Now we have replaced most loggers with heavy equipment that can clip, tip, and strip the branches off a tree in one operation. This is a revolutionary change that still rocks our culture as loggers cling to their brave work ethic and the industry looks for greater profits through technology. The sad fact, supported by your own research, is we need another revolution in forest management.

Climate change is here and real and causing havoc with our forests. We need to reduce total carbon and our forests are the only economical, proven way to do this. I ask that you take a closer look at the science and that you consider the value of the timber on state and private lands as including the sequestered carbon (somewhere between \$15 and \$150/ton) as well as the board feet of lumber. The details to strike a balance are complex, the adjustment will be as difficult as the last revolution in timber and more challenging because it must happen more quickly.

Please take another pass at your plan and be specific about how to:

- include public input from all stakeholder communities in addition to the timber industry
- use the best available science to increase forest carbon sequestration
- set some measurable goals to reduce the emissions not just within your agency but within the industry.

Our forests are still Oregon's biggest asset, just not in the way they have been. I'm not saying we should never cut another tree. I am saying we need to value our trees at more than what the wood brings on the global market for lumber or chips.

Jane Stackhouse

503.284.1049

jane@janestackhouse.com