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Draft Environmental Impact Statement for the Western Oregon State Forests Habitat Conservation Plan

Forest Trust Land Advisory Committee Meeting

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Topics Covered

Background

NEPA/ESA Processes

Draft EIS

- Scoping
- Purpose and Need
- Alternatives
- Modeling
- Effects



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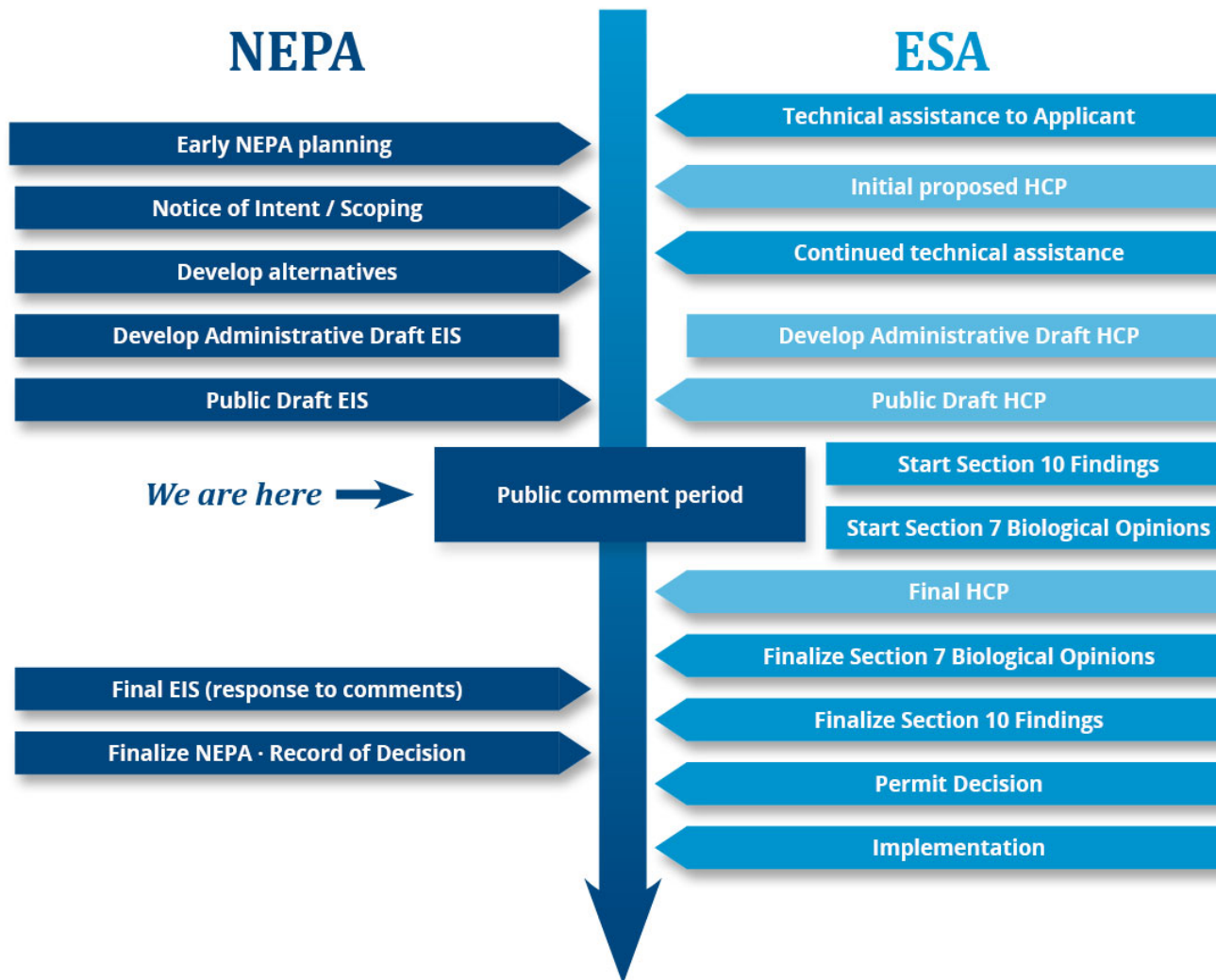
Background

- NOAA Fisheries and the U.S. Fish and Wildlife Service are considering issuing permits authorizing incidental take of listed species that could occur from ODF's forest and recreation management activities in Western Oregon
- The HCP, a requirement of the permit application process, is ODF's plan to avoid, minimize, and mitigate for take
- The proposed issuance of an ITP is considered a federal action under the National Environmental Policy Act (NEPA). NOAA Fisheries is the lead federal agency preparing the EIS, and FWS is a cooperating agency



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NEPA and ESA Processes



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What must the EIS address?

- Input from public, tribes, agencies and stakeholders
- Purpose and need for action
- Reasonable range of alternatives
- Effects of the proposed action and alternatives on the human environment



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Scoping

- NOAA Fisheries published the Notice of Intent on March 8, 2021, to formally initiate the scoping period
- Public comment period was from March 8 to April 21, 2021
- Comments were considered in development of alternatives and in analysis of effects in the Draft EIS
- Scoping report is included as Appendix 1-C of Draft EIS



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Purpose and Need

- The purpose of the federal action, issuance of incidental take permits to ODF, is to protect the covered species and their habitat while allowing ODF to manage the permit area in compliance with the Endangered Species Act.
- The need for the federal action is to respond to ODF's request for incidental take permits for the covered species and covered activities as described in the HCP.



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EIS Alternatives

- Reasonable range of alternatives
- Alternatives screening process
 - Draft EIS Appendix 2-A, Alternatives Screening
 - FWS and ODF input
 - NOAA Fisheries' decision



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EIS Alternatives

- 17 alternatives screened
- 5 alternatives analyzed in detail
 - Alternative 1: No Action
 - Alternative 2: Proposed Action (HCP)
 - Alternative 3: Increased Conservation
 - Alternative 4: Reduced Permit Term
 - Alternative 5: Increased Harvest



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Alternative 1: No Action

- The Services would not issue ITPs
- ODF would continue to implement its forest and recreation management activities consistent with existing laws and plans
- Impractical over the long-term
- Required under NEPA



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Alternative 2: Proposed Action (HCP)

- Issuance of permits authorizing incidental take of covered species from the covered activities in the permit area for a 70-year permit term
- 17 covered species
- Covered activities include:
 - Timber harvest
 - Reforestation and young stand management
 - Road system management
 - Recreation facilities and infrastructure
 - Conservation strategy implementation



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Alternative 2: Proposed Action (HCP)

- Conservation strategy
 - Riparian conservation areas (RCAs)
 - Equipment restriction zones (ERZs)
 - Stream enhancement and fish passage barrier removal projects
 - Habitat conservation areas (HCAs)
 - Upland habitat management standards
 - Seasonal operational restrictions
 - Species-specific actions
- Monitoring and adaptive management program
 - Compliance monitoring
 - Effectiveness monitoring
 - Adaptive management process



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Alternative 3: Increased Conservation

Same as the proposed action with the following modifications:

- Riparian conservation areas (RCAs) expanded from 35 feet to 50 feet above the process protection zone on:
 - Small perennial non-fish-bearing streams
 - Seasonal non-fish-bearing streams that have potential to deliver wood to fish-bearing streams (potential debris flow tracks and high-energy streams)
- Expands landslide-related leave tree requirements to apply to medium hazard landslide sites likely to deliver to fish-bearing streams
- Additional requirements for risk inventory and evaluation of roads and motorized trails



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Alternative 4: Reduced Permit Term

Same as the proposed action with the following modifications:

- 50-year permit term



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Alternative 5: Increased Timber Harvest

Same as the proposed action with the following modifications:

- Overall acreage of habitat conservation area (HCAs) reduced by approximately 15,500 acres
- Approximately 6,000 additional acres of Swiss needle cast stands available for harvest



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EIS Resources Analyzed

The Draft EIS analyzes potential impacts of the proposed action and alternatives on 12 resources:

- Geology and soils
- Water resources
- Vegetation
- Fish and wildlife
- Air quality
- Aesthetics and visual resources
- Recreation
- Cultural resources
- Tribal resources
- Socioeconomics
- Environmental justice
- Greenhouse gas emissions and carbon storage

The EIS also describes the effects of reasonably foreseeable environmental trends and planned actions



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Overview of Effects

Same *types* of effects under all alternatives

- Harvest of forest stands (primarily clearcutting) has a variety of effects on the natural environment, including:
 - Removal, modification, fragmentation of terrestrial species habitat
 - Increased landslide potential
 - Degradation of aquatic species habitat
 - Reduced carbon storage
- Reforestation offsets some of these effects over time
- Development of facilities removes trees and other vegetation



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Overview of Effects

- Harvest and construction activities as well as facility use and maintenance would involve operation of vehicles and heavy machinery
 - Cause disturbance to species and habitat
 - Emit pollutants, including greenhouse gases
- Management of state lands for forestry provides carbon storage



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Forest Management Model

- Same *types* of effects under all alternatives
- Differences in timing, magnitude, location of effects driven by differences in how activities are implemented
- Constraints on harvest are a primary driver
- EIS analyses use forest management model



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Forest Management Model

- Forest model inputs:
 - ODF's stand-level inventory
 - Regulatory and operational constraints
 - Management prescriptions
 - Financial considerations
- Forest model outputs:
 - Timber harvest volumes and acreages
 - Revenues and costs
 - Forest stand attributes (age, stand type) and distribution
 - Carbon storage potential
- Forest model outputs used as inputs for:
 - New road construction and use projections
 - Covered species habitat models
 - Economic analysis



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Forest Management Model

- Results are not harvest targets
- Results are not precise predictions
- Disturbance events
- Differences in model certainty



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Forest Management Model

Modeled Average Annual Harvest Volume

No Action	Proposed Action	Alternative 3	Alternative 5
175 million board feet	226 million board feet	225 million board feet	234 million board feet

Modeled Average Annual Clearcut Harvest Area

No Action	Proposed Action	Alternative 3	Alternative 5
4,217 acres	4,665 acres	4,657 acres	4,888 acres



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Select Impact Analysis Results

- Forest Structure
- Greenhouse Gas Emissions and Carbon Storage
- Covered Salmonids
- Covered Terrestrial Species
- Socioeconomics
- Environmental Justice



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Modeled Changes in Forest Structure

- Under all alternatives:
 - Increase in average tree age and trunk diameter
 - Decrease mid-seral stands (30-79 years)
 - Increase in late-seral (80-174 years)
 - Increase in old growth stands (over 175 years)
- Proposed Action compared to No Action
 - Mid-seral stands decrease less
 - Late-seral stands increase less



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Greenhouse Gas Emissions and Carbon Sequestration

Under all alternatives:

- Covered activities emit greenhouse gases
- Forests, vegetation, soils sequester and store carbon
- Carbon sequestered far exceeds emissions



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Covered Salmonids—Effects of All Alternatives

Changes in habitat quantity and quality related to:

- Wood recruitment potential
- Stream temperature
- Sedimentation
- Hydrology and channel condition



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Covered Salmonids—Proposed Action

- Model results indicate greater harvest and related activity
- Better minimization and mitigation
 - Wider riparian buffers and additional restrictions
 - Stream enhancement
 - Fish passage barrier removal
 - Monitoring and adaptive management



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Covered Terrestrial Species—No Action

- Dependent on species surveys
- Less harvest certainty
- Increased habitat fragmentation
- No long-term habitat conservation



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Covered Terrestrial Species—Proposed Action

- Increased harvest certainty
- Harvest outside of conservation areas
- Greater modeled harvest and related activity
- Increased habitat conservation and connectivity
 - Establish habitat conservation areas
 - Managing for species conservation
 - Fund and implement strategic efforts
 - Monitor and adaptively manage



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Covered Terrestrial Species—Disturbance

Effects of differences in management response

- Salvage harvest
- Locations of protected areas



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Socioeconomics—Methodology

- Model volume to mills
 - Forest management model
 - ODF log flow data
- Jobs and labor income
 - IMPLAN
- Spatial analysis to distribute timber revenues
- Key-informant interviews
- Qualitative analysis of non-timber forest products and ecosystem services



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Socioeconomics—Effects of All Alternatives

Permit area forests would continue to generate value for Western Oregon communities:

- Local jobs and labor income
- Revenue for state agencies, county governments, and taxing districts
- Recreation opportunities
- Valuable goods and ecosystem services



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Socioeconomics – Comparison of Effects

Modeled timber harvest is higher under proposed action than no action, which results in:

- More timber revenue and direct jobs over permit term, variation over time and location
- More total employment and labor income in Western Oregon during the period modeled (2023-2032)
- More revenue to local governments and schools, variation over time and location

The supply and value of ecosystem services under the alternatives would vary locally and over time based on differences in harvest and resulting forest structure



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Socioeconomics – Comparison of Effects

Average annual harvest and direct employment (harvest and milling) by county within the permit area over the permit term (includes BOFL and CSFL)

County	Average Annual Harvest (2023–2092) (MBF)	% Difference in Harvest Relative to NAA	Average Annual Employment (2023–2092)
Benton	5,382	58%	37
Clackamas	2,583	34%	12
Clatsop	52,945	9%	102
Columbia	5,532	59%	65
Coos	2,520	-8%	10
Curry	0	-100%	0
Douglas	2,136	16%	9
Jackson	0	-100%	0
Josephine	457	-16%	1
Lane	11,043	27%	75
Lincoln	13,765	33%	22
Linn	9,579	20%	45
Marion	6,212	-17%	10
Multnomah	No ODF-managed lands or log processing locations		
Polk	4,184	58%	8
Tillamook	86,587	45%	197
Washington	22,786	54%	101
Yamhill	69	31%	94
Total	225,781	29%	786



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Socioeconomics – Comparison of Effects

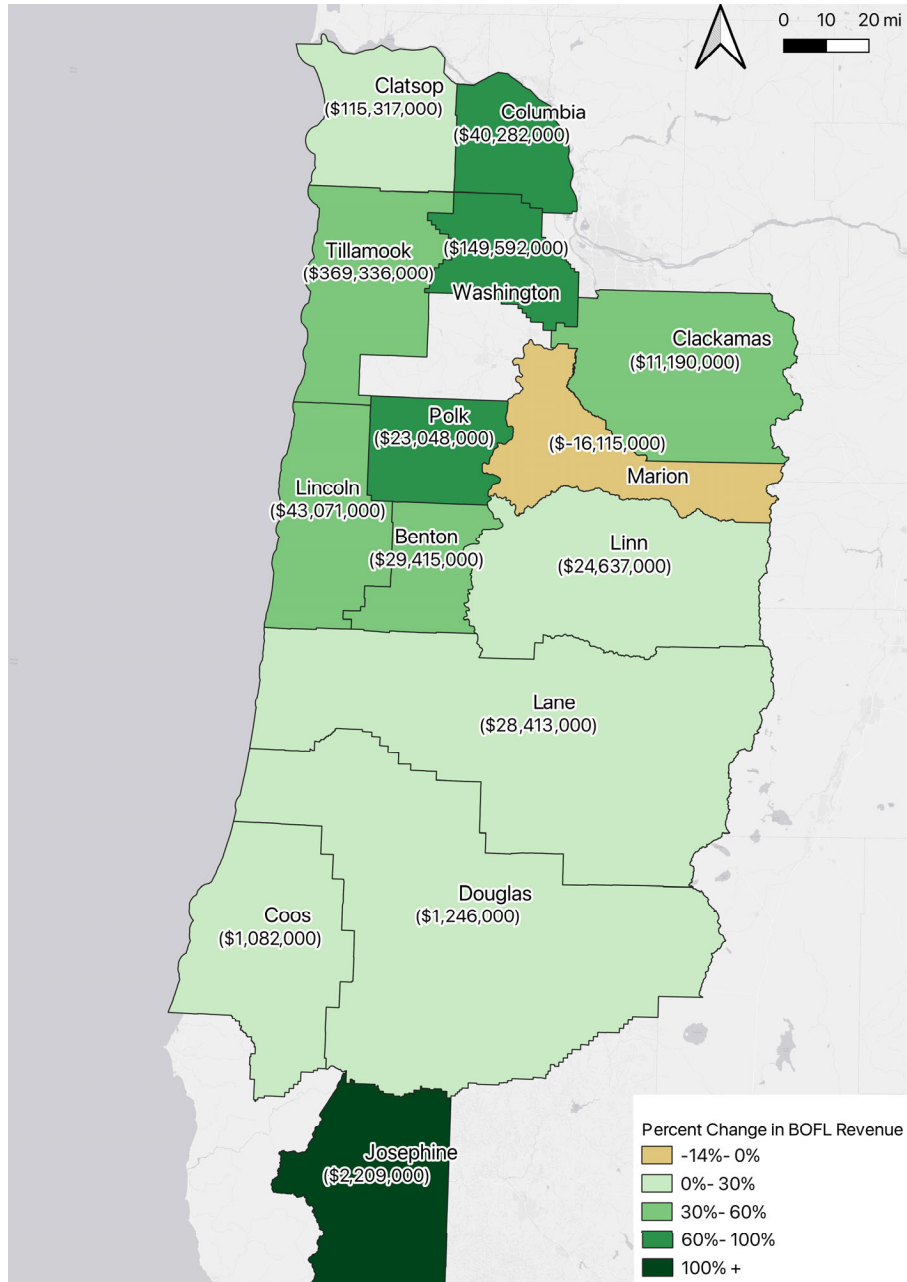
Modeled Annual Average Effect in Western Oregon (2023-2032)

Totals	No Action	Proposed Action	Alternative 3	Alternative 5
Total Jobs	2,757	3,230	3,199	3,315
Labor Income	\$170 million	\$201 million	\$199 million	\$207 million



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Socioeconomics – Comparison of Effects



BOFL Revenue to Counties –
Percent change from No
Action to Proposed Action
over permit term



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Socioeconomics – Comparison of Effects

- Most taxing districts would receive the same amount or more BOFL revenues under the proposed action than the no action
- Increase in local BOFL revenue for most school districts would increase amount of state revenue available for all school districts under the proposed action
- 4 school districts that have historically received higher timber sale BOFL revenues than equalization funding would receive higher revenues under the proposed action than the no action



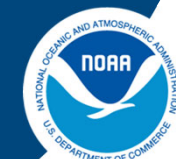
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Socioeconomics – Comparison of Effects

Taxing districts that experience greater than 10% decline in BOFL revenue over permit term

County	Districts	Total Payment under No Action	Total Payment under Proposed Action	% Change relative to No Action
Clatsop	Cannon Beach RFPD	\$920	\$830	-10%
Clatsop	Clatskanie School District 6J	\$5,297,147	\$2,293,717	-57%
Clatsop	Elsie Vine Maple RFPD	\$1,670,364	\$1,279,407	-23%
Clatsop	Lewis and Clark RFPD	\$17,315	\$13,975	-19%
Clatsop	Westport Wauna RFPD	\$232,851	\$0	-100%
Coos	Lakeside RFPD	\$34	\$5	-84%
Coos	North Bay RFPD	\$13,840	\$0	-100%
Coos	North Bend School 13	\$2,370,257	\$1,649,950	-30%
Lane	Swishhome Deadwood RFPD	\$2,124,344	\$1,811,493	-15%
Linn	Gates RFD	\$116,558	\$96,985	-17%
Marion	Chemeketa Community College	\$6,121,534	\$5,337,577	-13%
Marion	Gates FD	\$170,817	\$101,553	-41%
Marion	Linn-Benton-Lincoln ESD	\$1,068,522	\$728,541	-32%
Marion	Marion 4-H Ext	\$345,420	\$301,184	-13%
Marion	Marion County	\$20,899,294	\$18,222,818	-13%
Marion	Marion Soil and Water	\$345,420	\$301,184	-13%
Marion	Regional Library	\$565,107	\$492,737	-13%
Marion	Santiam Canyon SD	\$24,670,975	\$16,821,187	-32%
Marion	Stayton FD	\$416	\$233	-44%

RFPD=Rural Fire Protection District; FD=Fire District; SD=School District;
ESD=Education Service District



Environmental Justice—Effects of All Alternatives

Permit area forests would continue to generate value for low-income, minority, and tribal communities in Western Oregon:

- Employment and labor income
- Government revenue used for public infrastructure and services
- Ecosystem services and resources used for subsistence and cultural significance



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Environmental Justice—Comparison of Effects

- Reductions during certain time periods in government revenue for some EJ communities could have adverse effects
- If changes in supply and value of ecosystem services with subsistence and cultural importance result in higher travel costs or lower value to tribes and EJ communities, adverse effects could occur



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Alternative 3: Increased Conservation

- Impacts similar to proposed action, but expanded riparian protections and more stringent road repair and vacating measures would:
 - Further improve riparian health
 - Further reduce adverse effects on water quality and habitat for fish and stream-dependent species
 - Potentially reduce public access for recreation and other uses



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Alternative 4: Reduced Permit Term

- Impacts same as proposed action through year 50



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Alternative 5: Increased Timber Harvest

- Impacts similar to proposed action but increased timber harvest would
 - Increase the potential for adverse effects on water resources and habitat for fish and stream-dependent species
 - Decrease modeled habitat for covered terrestrial species over the permit term
 - Further increase timber revenue and related economic effects



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Next Steps

- Public review and comment period ends June 1, 2022
- NOAA Fisheries will consider all comments received in preparing the Final EIS
- NOAA Fisheries and FWS will each issue a Record of Decision



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Thank you