The Northwest Forest Plan: 30 years of social and economic change in rural forest-based communities (1994–2024)

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How to use this document

In this report, we present social and economic monitoring results for eight rural, forest-based communities within the NWFP area. Chapter 1 presents background and methods for the NWFP 30-year social and economic monitoring. Chapter 2 presents a synthesis of case study results and comparison of the communities. Chapters 3 through 10 present results from individual case studies. Individual case study chapters each address the overarching monitoring question by presenting: (1) the historical trajectory and current state of social and economic well-being in the case study communities, and (2) the 2024 status and trends of the relationship between communities and federal forest management. Case study chapter organization follows the format below:

- ***Introduction and approach***
- ***Study area and geography***
  - Shared sense of place
  - Points of interest
- ***A summary of local impacts of the NWFP***
- ***Pre-NWFP history***
  - Settlement
  - Post-World War II timber industry
- ***The study area after the NWFP***
  - Employment and industry
  - Demographic and community changes
  - Housing and development
  - Community services
  - Other community issues
- ***Community relationship with the Forest Service***
- ***Community relationship with national forest lands***
- ***Wildfire and other forest disturbances***
- ***Community futures***
- ***Conclusions and case study highlights***

Chapters may be read as stand-alone documents or as one volume.

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Citations for individual chapters are found at the bottom of the first page of each chapter.

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Chapter 1: Background and Approach

Northern Spotted Owl, U.S. Fish & Wildlife Service

Michael R. Coughlan, Heidi Huber-Stearns, Stephanie Schneider

Introduction

The Northwest Forest Plan (NWFP), signed in 1994, provides management guidance for over 24 million acres in 17 national forests and 5 U.S. Department of Interior Bureau of Land Management (BLM) units in Washington, Oregon, and California (USDA Forest Service & DOI Bureau of Land Management, 1994). The NWFP shifted federal forest management priorities from sustained-yield timber production to species-level to ecosystem-level conservation while accounting for and attempting to mitigate anticipated negative social and economic impacts of mature forest conservation (Johnson et al., 2023). Beginning at the 10-year mark and every five years following that, the USDA Forest Service (Forest Service), initiated social and economic monitoring to assess the continued impacts of the NWFP on local communities within the plan boundaries. These monitoring requirements were part of the NWFP Record of Decision, framed as a question: "Are local communities and economies experiencing positive or negative changes that may be associated with federal forest management?" (Charnley et al., 2006; USDA Forest Service & DOI Bureau of Land Management, 1994).

For the fifth NWFP monitoring effort (marking 30 years since the adoption of the NWFP), the Forest Service Pacific Northwest Region contracted the Ecosystem Workforce Program (EWP) at the University of Oregon to conduct eight case studies of social and economic changes experienced by NWFP-area rural communities over the 30 years in which the plan has been implemented. While the NWFP 15- and 20-year monitoring efforts presented analyses of secondary social and economic data at the county level only (Grinspoon & Phillips, 2011; Grinspoon et al., 2015), this 30-year monitoring effort follows the model of the 10- and 25-year monitoring efforts (Charnley et al., 2006; Grinspoon et al., 2025), by conducting multiple qualitative case studies at the local community-level.

The 25-year social and economic monitoring selected 10 rural forest-based communities from California (n=2), Oregon (n=4), and Washington (n=4) (Coughlan et al., 2021; Coughlan et al., 2025). Analysis of community attributes placed each community into one of three social and economic groups: (1) amenity driven, (2) production driven, and (3) isolated and declining (Coughlan et. al, 2021). Amenity driven communities have natural or cultural amenities that attract economic activity through tourism and recreation, second/vacation home ownership, and gentrification involving remote workers and retirees. In the 25-year study, only one community was amenity driven. Production driven communities retained significant elements of the timber industry with varying degrees of other economic support such as

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other industry, tourism and recreation, retirement destinations, or serving as bedroom communities to nearby metropolitan areas. Seven of the 25-year communities fit into this group. Isolated and declining communities were the most distant from metropolitan areas and major transportation arteries. They had lost many services as well as major industries, including timber harvesting and processing businesses. Two of the 25-year communities fit into this group. While the one amenity driven community had arguably recovered from or moved beyond the post-NWFP social and economic shock, the other communities had not. Below we detail case study methods for the 30-year monitoring and provide an overview of case study selection and interview recruitment results.

Approach

We organized the 30-year community case studies around national forest ranger districts distributed relatively evenly across the NWFP area. We defined the local "community" for each ranger district as a group of people variously connected to each other by their residence, employment, or other vested political or economic interest in a specific geographic place hosting a Forest Service Ranger Station. Thus, each of our case study communities represents a "community of place" (Charnley et al. 2006, 2018; Machlis & Force, 1988).

This approach builds on sampling procedures from the NWFP 25-year social and economic monitoring (Coughlan et al., 2025). The 25-year effort used school districts to define each community of place. For the 30-year monitoring, we modified this approach slightly by using US Census County Subdivisions (CCDs) to delineate study area spatial boundaries to more reliably assess demographic changes. This sampling procedure identified study areas comprised of one (or two adjacent) US Census County subdivisions (CCDs) located within the NWFP area that fit the following criteria (Figure 1.1):

1. Sample communities were "forest-based": the CCD's land base is comprised of at least 30 percent federal forest lands (i.e. national forest or BLM lands).

2. Rural: less than 15,000 residents.

3. Sample communities hosted a Forest Service ranger station.

4. Forest Service's national priority landscapes for wildfire risk reduction (priority landscapes): Four CCDs within, two CCDs adjacent to, two CCDs neither within nor adjacent to priority landscapes.

5. Not included in the 25-year NWFP social and economic monitoring.

6. "Gateway" communities: CCD contains or is adjacent to areas or geographic features with high potential for nature-based recreation and tourism.

Rural, forest-based

We classified potential study areas as "forest-based" where national forest comprised at least 30 percent of the land base or where the CCD was relatively circumscribed by national forest lands and the coastline. We classified potential study areas as "rural" if the 2020 United States Census population was less than 15,000 individuals (Kurtz 2010).

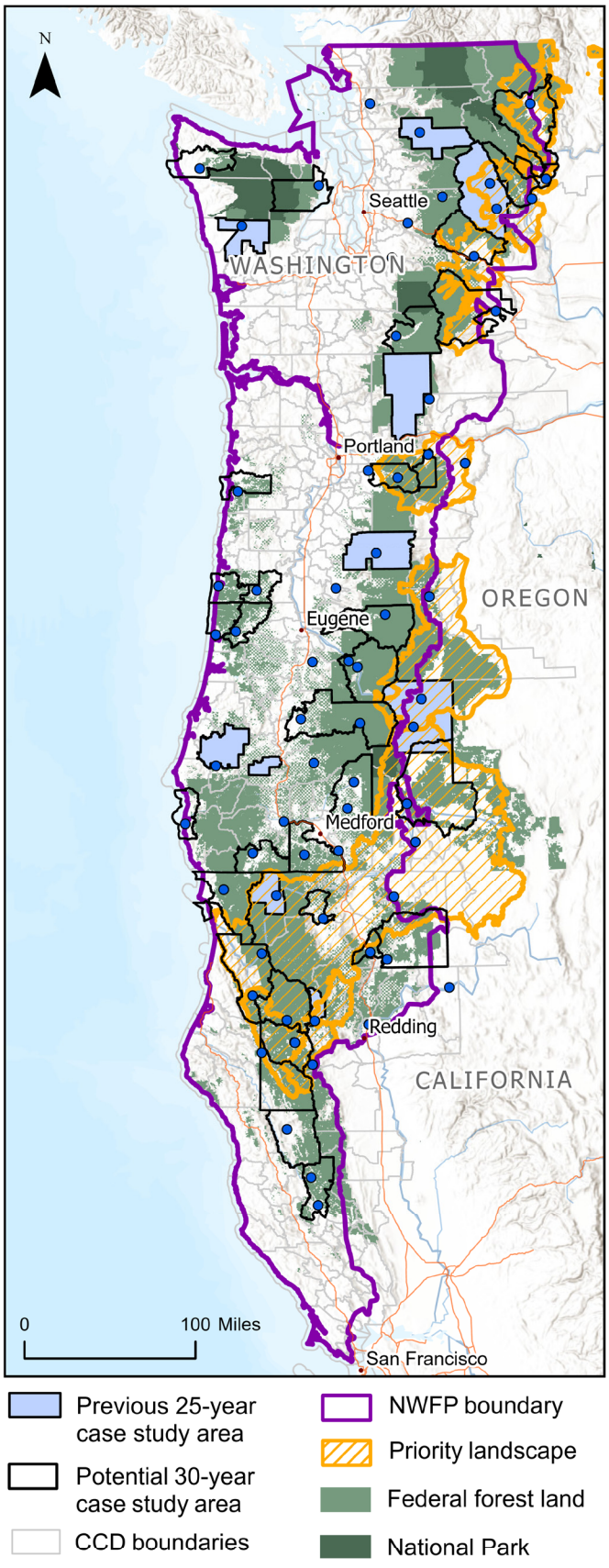

Figure 1.1. *Map of potential case study areas.*

Gateway communities

Economies involving natural and cultural amenities offer alternatives to production-based economies for rural, forest-based communities (Winkler et al., 2007). Results from the NWFP 25-year monitoring suggested that few of the communities selected as case studies had high potential for developing natural amenity-based economies, although some communities did have moderate success capitalizing on lake or river-based recreation and scenery (Coughlan et al., 2021). To understand if and how NWFP communities developed amenity-based economies, we specifically identified formerly timber dependent "gateway" communities as case studies for the 30-year social and economic monitoring effort. Gateway communities are communities that are located on a main route to a popularly recognized natural feature or area with high tourism value or interest such as an iconic mountain, scenic coastline, or geological feature (McMahon 1999). These natural features are also often designated as National Parks, wilderness, or recreation areas, providing them with additional recognition. We considered that gateway communities have higher potential for developing economic activity related to nature-based recreation and tourism (Stoker et al. 2021; Hjerpe et al. 2022). Identifying rural, formerly timber dependent gateway communities allowed us to focus this round of monitoring on the trajectories and future potentials of places with natural resource amenities beyond timber. This multi-part sampling approach also provides a diverse and more complete set of community experiences to draw from for continued monitoring.

Other Forest Service policies

Lastly, to understand the potentially uneven impacts of more recent Forest Service policies, we designed the sample frame to include four case studies that fell within the Forest Service's priority landscapes, two case studies that were adjacent to priority landscapes, and two case studies that were neither within nor adjacent to priority landscapes.

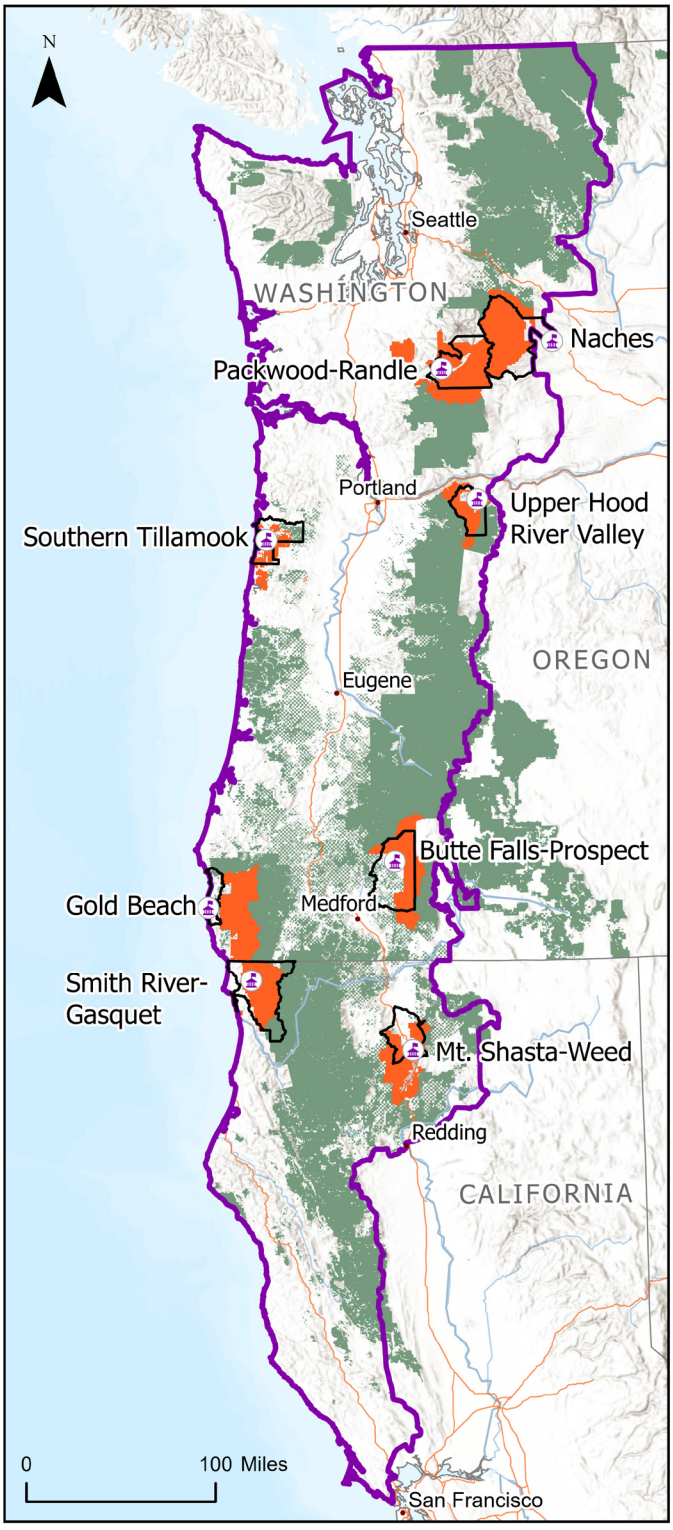

Figure 1.2. *Map of all case study areas*

Case study selection

To select case study communities, we identified 373 CCDs within the NWFP. Of those CCDs, 89 contained greater than 30 percent federal forest lands or were circumscribed by public lands (including national forest) and the coastline. Eighty-one of those CCDs had fewer than 15,000 residents as of the 2020 decennial census. Of those 81 CCDs, 42 CCDs contained a Forest Service ranger station (there are a total 67 ranger districts within the NWFP). Of this selection of 42 CCDs, nine were eliminated from the sample because all or part of the CCD was included in the NWFP 25-year social and economic monitoring. This left us with 33 CCDs from which we selected 8 potential gateway communities, relatively evenly distributed throughout the NWFP area, and meeting our criteria with respect to the priority landscapes.

This selection process resulted in two communities in Washington, four communities in Oregon, and two communities in California (Table 1.1, Figure 1.2). We then iteratively modified the study area geographies to better represent local community contexts in the following ways:

1. Although the Parkdale CCD met all sampling criteria, we felt that it was historically tied to the community of Dee. Therefore, the Upper Hood River Valley case study combined Parkdale and Dee CCDs. Both CCDs have greater than 30 percent federal forestlands.

2. The Hebo CCD included Pacific City, but excluded adjacent areas that are clearly geographically and socially connected to Pacific City. Therefore, for the Southern Tillamook study area, we combined the Hebo and Neskowin CCDs. Both CCDs have greater than 30 percent federal forestlands.

3. To achieve a more geographically representative sample, we added the Gold Beach CCD. This CCD does not contain >30 federal forestlands since adjacent national forest is

included in the Brookings CCD. However, Gold Beach is circumscribed by national forestlands and in this way is most similar to other CCDs that contain greater than 30 percent federal forestlands. We opted not to combine Gold Beach with Brookings since this would have resulted in a total population exceeding our 15,000 person threshold.

4. Although the Mt. Shasta CCD met all criteria for a study area, we added Weed CCD to the study area at the request of the Forest Service who were interested in learning more about that community. Mt. Shasta and Weed have historic, forest-industry-related ties and present an interesting case given their divergent trajectories.

Two case studies, Butte Falls-Prospect and Gold Beach shared the same national forest even though the former is located in the Southern Cascades and the latter is located on the coast.

Table 1.1. *Case Studies, National Forest, and Local Ranger District (2024).*

Case study	CCDs	Ranger District name	National Forest	Priority landscape
Packwood-Randle	Big Bottom	Cowlitz Valley	Gifford Pinchot	No
Naches	Northwestern Yakima	Naches	Okanogan-Wenatchee	Yes
Upper Hood River Valley	Dee, Parkdale	Hood River*	Mt. Hood	Yes
Southern Tillamook	Beaver, Neskowin	Hebo	Siuslaw	No
Butte Falls-Prospect	Butte Falls-Prospect	High Cascades	Rogue River-Siskiyou	No
Gold Beach	Gold Beach	Gold Beach	Rogue River-Siskiyou	No
Mt. Shasta-Weed	Mt. Shasta, Weed	Mount Shasta**	Shasta-Trinity	Yes
Smith River-Gasquet	Smith River-Gasquet	Gasquet	Six Rivers	No

**Hood River Ranger District is currently managed jointly with the Barlow Ranger District.*

***Mount Shasta Ranger District is managed with the McCloud Ranger District as the Shasta-McCloud Management Unit*

Natural amenities identified in the sampling process included two national parks, one jointly managed state and national park, coastal state parks, a national recreation area, a federal wildlife refuge, and federally designated wilderness areas managed by the Forest Service (Table 1.2). Three communities included iconic Pacific coastline as a natural amenity: Smith River-Gasquet, Gold Beach, and Southern Tillamook. The Smith River-Gasquet case study additionally has a unit of the Redwood National and State Park and the Smith River Recreation area. Five of the communities were gateways to iconic, volcanic landscapes along the crest of the Cascade Mountains: Mount Shasta-Weed is a gateway to the stratovolcano, Mount Shasta; Butte Falls-Prospect is a gateway to Crater Lake National Park; Upper Hood River Valley is a gateway to stratovolcano Mount Hood; and Packwood-Randle and Naches case studies are the east and west gateways (respectively) to stratovolcano Mount Rainier.

Table 1.2. *Summary of the most significant natural amenity attraction in each case study.*

Case study	Natural Amenity	Management	Annual Visitation (2024)
Packwood-Randle	Mount Rainier National Park	National Park Service	1,620,006
Naches	Mount Rainier National Park	National Park Service	1,620,006
Upper Hood River Valley	Mount Hood Wilderness	Forest Service	3,004,000
Southern Tillamook	Oregon Coast state parks	Oregon State Parks; Forest Service	32,500,000* all coastal state parks
Butte Falls-Prospect	Crater Lake National Park	National Park Service	504,942
Gold Beach	Oregon Coast, state parks; wildlife refuge	Oregon State Parks; US Fish and Wildlife	32,500,000* all coastal state parks; *wildlife refuge visitation data not found*
Mt. Shasta-Weed	Mount Shasta Wilderness	Forest Service	1,499,000
Smith River-Gasquet	Redwood National and State Park; Smith River National Recreation Area	National Park Service; California Park Service; Forest Service	622,883; *Smith River National Recreation Data not found*

Data collection and analysis

For each case study, we conducted semi-structured interviews with community members, Forest Service employees, and people employed in the local timber industry. Our objective was to interview 15 to 20 people per case study including at least four Forest Service interviewees and at least one interviewee actively engaged in the local timber industry. Interviewees in each case study were selected for their knowledge and experience with local community issues, natural resource management, or timber industry using a combination of snowball sampling and purposive sampling strategies. In addition to local Forest Service staff, community interviewees typically included elected officials, natural resource managers, local school administrators, leaders in non-profit organizations or efforts, forest collaborative members, local business owners, and timber industry business owners or management-level employees. All community member interviewees either resided in or worked within the study area.

Interviewee sampling

We recruited a total of 170 interviewees (Table 1.3). Interviewees included 118 “community members”, 40 “Forest Service employees”, and 12 “forest industry employees.”

Table 1.3. *Case Study interviewees including community members (residing or working within the study area), Forest Service employees (employed at the Ranger District or National Forest level), and Forest industry employees (actively employed by the timber industry).*

Case study	Community Members	Forest Service Employees	Forest Industry Employees
Packwood-Randle	14	4	1
Naches	19	6	1
Upper Hood River Valley	17	5	1
Southern Tillamook	14	5	2
Butte Falls-Prospect	16	5	2
Gold Beach	11	4	1
Mt. Shasta-Weed	14	6	2
Smith River-Gasquet	13	5	2
Total	**118**	**40**	**12**

Interviews lasted between 60 and 90 minutes and followed a scripted protocol (see Appendix A). We asked interviewees about changes experienced by the community since the implementation of the NWFP. Topical areas included the following domains: employment, housing, services, social life, demography, overall community well-being, the relationship between the community and the Forest Service, and local land use and management policies. During the winter and spring of 2024, we conducted initial scoping interviews with Forest Service staff remotely via video conference. We then spent a minimum of five days in each case study community conducting in-person interviews, frequenting local businesses, and taking notes and photographs of the study area. A total of sixteen non-agency interviews were conducted remotely if interviewees were unable to schedule an in-person interview during the study area visit.

Interviews were digitally audio recorded and transcribed using AI transcription software (Otter.ai). Transcripts were thoroughly reviewed and cleaned by research technicians who referenced the audio recordings. We thematically coded each interview using a deductive coding scheme based on thematic question groups used in the interview protocol. We then thematically coded interview content in Dedoose for emergent themes based on a grounded theory approach (Dedoose, 2025; Strauss & Corbin, 1994). Quotes used in this report were selected from the interviews to succinctly represent emergent themes as well as to inclusively represent interviewee experiences.

Community history and secondary data

We conducted literature review and archival research on community history with a specific emphasis on topics addressed in community interviews as well as contemporary changes in industry, tourism, and wildfire management (see Appendix B for additional information). Community histories, which included the local history of the timber industry and other industries, provide context for how communities were variously impacted by the NWFP. In addition, community histories reveal the extent of community isolation and connection to regional centers, key factors for understanding social and economic changes since the implementation of the NWFP.

Secondary data sources on forest products included USDA Forest Service Timber Information Manager (TIM) data on Forest Service timber sales, USDA Forest Service Cut and Sold reports on timber and special (non-timber) forest products, BLM timber harvest data, and demographic data collected by the US Census Bureau (USDA Forest Service, 2023, 2025; US DOI Bureau of Land Management 2025, 2026; U.S. Census Bureau, 2000a, 2000b, 2010a, 2010b, 2012, 2020a, 2020b, 2022). Data from Forest Service TIM, Cut and Sold reports, and BLM timber harvests were cleaned and summarized using Tidyr library in R Studio (Wickham et al., 2026). Additional details available in Appendix B.

Geospatial data included in maps, as well as additional secondary data sources and methods, are detailed in Appendix C. Land management calculations for each case study were based on BLM land management data (U.S. DOI Bureau of Land Management, n.d.) and statistically summarized using ArcGIS Pro 3.3.2 summarize within function. We inventoried contemporary services for each case study by exporting case study boundaries from ArcGIS into a KMZ layer. The KMZ layer was then imported into Google My Maps (https://www.google.com/maps). With the case study boundaries visible, we used the Google search function to evaluate the locations of relevant community amenities within each case study area.

To search the map, the following methods were used:

1. Zoomed view extent to case study boundary on Google My Maps.

2. Identified services using the following common search terms, i.e. “supermarket,” “grocery store,” “health clinic,” “hospital.”

Analysis of US Census data tracked changes in CCD population estimates from the 2000 decennial Census, 2008-2012 American Community Survey (ACS) 5-year estimates, and 2018-2022 5-year estimates. This allowed us to examine approximately 20 years of change for the period beginning six years after the implementation of the NWFP through 2020 (4 years before the NWFP 30-year mark). We present results on total population, population age cohorts, and low-income populations in the following chapters. Participation in the civilian labor force (unemployed population) and workforce non-participation unrelated to unemployment are reported in Appendix D.

The following chapters offer a synthesis of key findings from the 30-year social and economic monitoring of the NWFP area (Chapter 2) followed by an in-depth analysis of each case study area (Chapters 3-10).

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Cut-over area in Gifford Pinchot National Forest, Randle District, 1956

For full report, visit:
https://hdl.handle.net/1794/31412

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We extend our thanks and appreciation to interviewees who shared their experiences with us.



Chapter 2: Cross-Case Synthesis

Riffle Lake View, Gifford Pinchot National Forest, National Archives Catalog

Michael R. Coughlan, Stephanie Schneider, Heidi Huber-Stearns, James Johnson, Mark D.O. Adams

Northwest Forest Plan (NWFP) facts

Year Implemented: 1994

NWFP area: 58,184,084 acres (~24 million acres of federal lands)

Management: 17 National Forests, 5 BLM units

US Census County subdivisions with 30% or more national forest: 91

30-year monitoring case study states: Washington (2), Oregon (4), California (2)

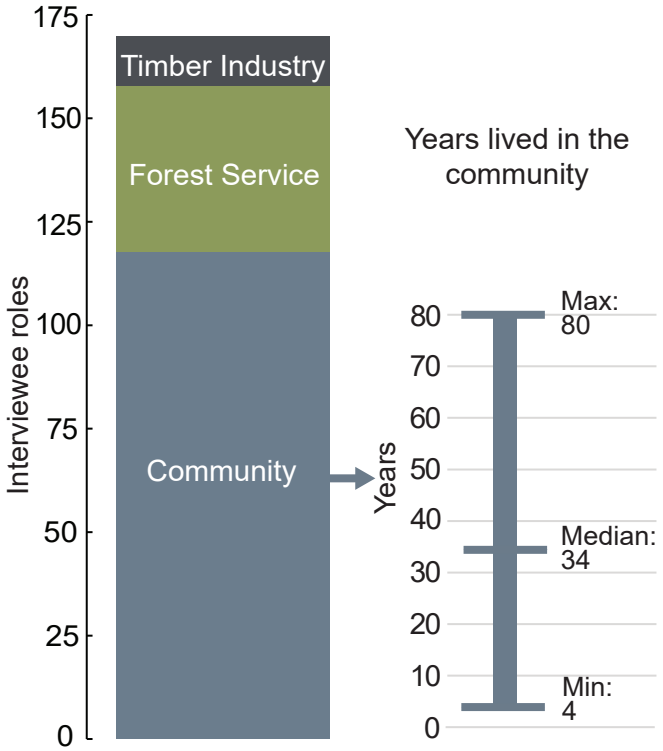
Case Study Populations (2020):

- Packwood-Randle, WA (2,348)
- Naches, WA (8,586)
- Upper Hood River Valley, OR (3,276)
- Southern Tillamook, OR (5,893)
- Butte Falls-Prospect, OR (2,631)
- Gold Beach, OR (5,881)
- Mt. Shasta-Weed, CA (14,479)
- Smith River-Gasquet, CA (3,239)

Introduction and approach

The Northwest Forest Plan (NWFP), signed in 1994, provides management guidance for over 24 million acres in 17 national forests and 5 U.S. Department of Interior Bureau of Land Management (BLM) units lands in Washington, Oregon, and California (USDA Forest Service and DOI Bureau of Land Management, 1994). We conducted social and economic monitoring of eight rural communities within the NWFP area. We used a case study approach involving qualitative analysis of interviews, literature review, and descriptive summaries of selected secondary data. Case study areas were purposively selected U.S. Census County Subdivisions (CCDs) within the NWFP area that (1) were associated with specific Forest Service Ranger Districts and hosted a ranger station, (2) were comprised of at least 30 percent federal forestlands, and (3) had fewer than 15,000 people (as of 2020).

Coughlan, M., Schneider, S., Huber-Stearns, H., Johnston, J., & Adams, M.D.O. (2025). Chapter 2: Cross-Case Synthesis. In M. Coughlan, H. Huber-Stearns, & S. Schneider (Eds.). *The Northwest Forest Plan: 30 years of social and economic change in rural forest-based communities (1994–2024)*. (Working Paper No. 125). Ecosystem Workforce Program, Institute for Resilient Organizations, Communities, and Environments, University of Oregon. https://hdl.handle.net/1794/31412



We interviewed a total of 170 community members, Forest Service employees, and timber industry employees (Figure 2.1). All interviewees worked in, resided in, or had social or economic ties to each study area. Interviews focused on identifying changes experienced by the communities since the implementation of the NWFP. Quotes in these reports are from interviews conducted January 2024 to January 2025.

Each case study can be read as a standalone report. This chapter presents a synthesis of results from social and economic monitoring of impacts over 30 years of the NWFP on eight systematically selected rural, forest-based communities within the Plan boundaries. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses. Subsequent chapters (3-10) present detailed profiles of each community case study. Please reference individual case study chapters for case-specific facts, references cited, and example quotes from interviewees.

Figure 2.1. *Graph of interviewees by role and number of years lived in the community. Our sample included 118 community members, 40 Forest Service employees, and 12 timber industry representatives. Community interviewees lived in the study area for a minimum of 4 years, a maximum of 80 years, and a median of 34 years.*



Hebo Ranger District, Southern Tillamook

Study areas and geography

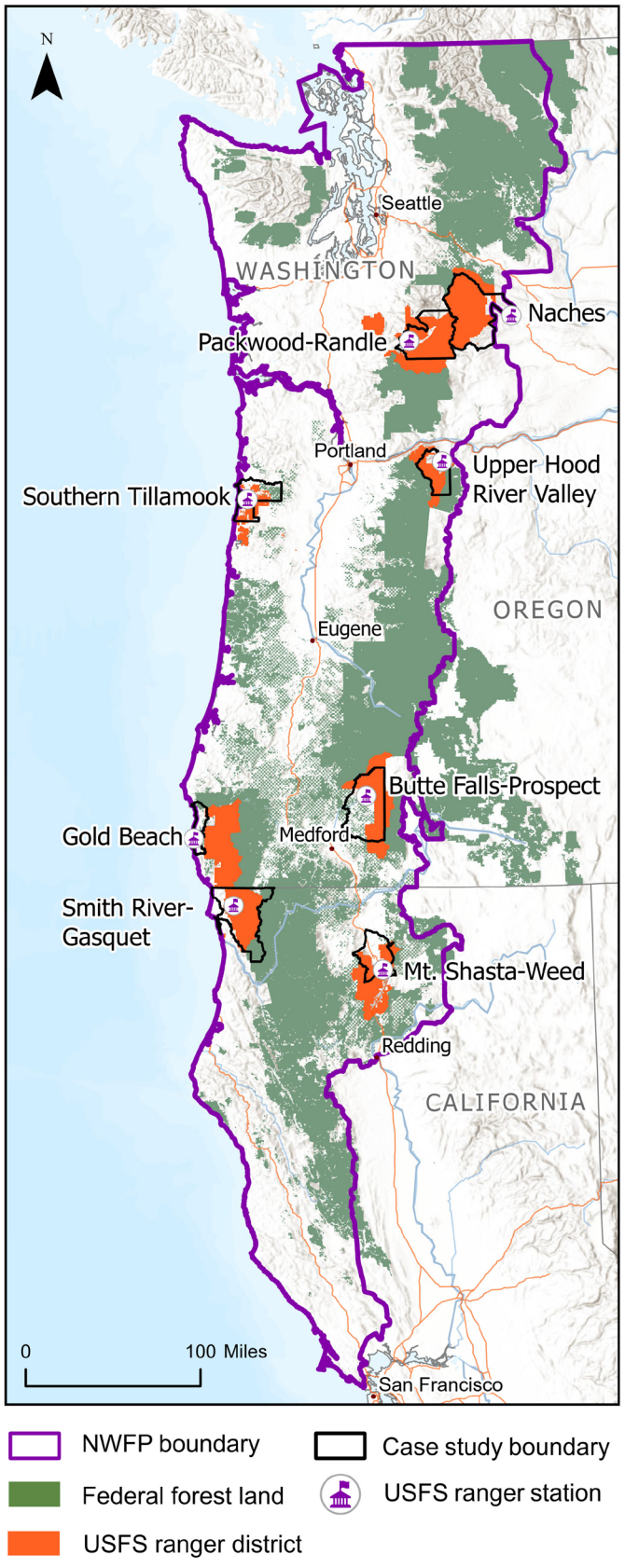


Figure 2.2. *Map of all study areas.*

Our goal in selecting case study areas was to collect data in communities that were well distributed throughout the NWFP area and that were representative of the range of variability in geography (coastal, inland, eastside, westside, coast ranges, northern and southern Cascades, etc.), community characteristics (near to major population centers, far from major population centers, very small, medium sized, etc.) and forest types (moist and highly productive, dry interior, mixed conifer, etc.) (Figure 2.2). Study areas were variously included within (n=4), adjacent to (n=2), or neither within nor adjacent to (n=2) Forest Service designated national priority landscapes. Previous monitoring focused primarily on communities with a historically high degree of dependence on the timber industry and relatively few economic alternatives. For the 30-year monitoring, we selected communities with high potential to serve as "gateway" service centers for significant natural amenity attractions. Some of these natural amenities are managed by the Forest Service; others are adjacent to national forests (see Chapter 1, Table 1.2).

Three communities included iconic Pacific coastline as a natural amenity: Smith River-Gasquet, Gold Beach, and Southern Tillamook. The Smith River-Gasquet case study additionally has a unit of the Redwood National and State Parks and the Smith River Recreation area. Five of the communities were gateways to iconic, volcanic landscapes along the crest of the Cascade Mountains: Mount Shasta-Weed is a gateway to Mount Shasta; Butte Falls-Prospect is a gateway to Crater Lake National Park; Upper Hood River Valley is a gateway to Mount Hood; and Packwood-Randle and Naches case studies are the east and west gateways (respectively) to Mount Rainier. See individual case study chapters for additional details about these natural amenities.

Impacts of the NWFP to rural forest communities

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitats by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. Impacts on the management of federal forests began as early as 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest. In 1990, the northern spotted owl was listed as endangered under the U.S. Endangered Species Act. Lawsuits and appeals continued over the following years. To resolve this conflict, the federal government adopted the Northwest Forest Plan (NWFP) in 1994 which supersedes and underpins management plans on individual federal forest units within the range of the spotted owl (Hungerford, 1994). The Plan significantly changed management on federal forests in western Oregon, western Washington, and northwestern California by limiting timber harvest on late successional forests and variously restricting management interventions across different land use allocations (Thomas et al., 2006).

Although the NWFP was designed as a compromise that would help ensure a stable supply of timber from national forests while protecting old growth forests, initial declines in timber harvests were steep on national forests across the Plan area (Figure 2.3). Annual timber harvest volume for the NWFP area national forests fell from 5,654 million board feet (mmbf) in 1988 to 830 mmbf in 1995, a decline of nearly 85 percent (USDA Forest Service, 2025).[1] Timber harvest continued to fall over the next decade, reaching 269 mmbf in 2002 before recovering to an annual mean of 502 mmbf between 2003 and 2023. The shift away from timber production transformed the Forest Service in multiple and complex ways including staffing capacity and composition, planning processes, and management priorities. It also transformed public perceptions of the Forest Service and the role the agency played in local communities.

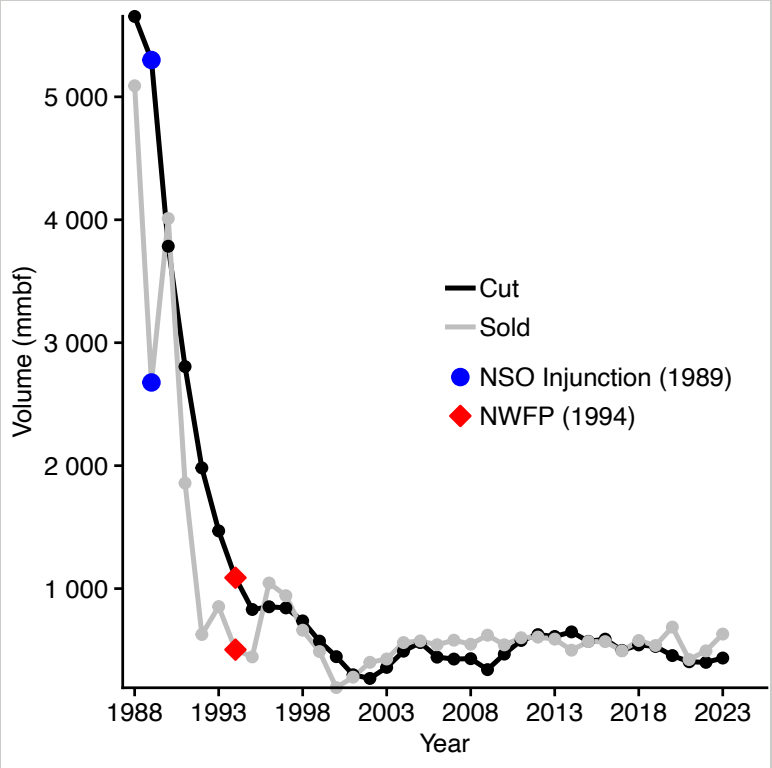


Figure 2.3. *Timber harvest and sales ("cut" and "sold" volume in million board feet) for the 17 national forests within the NWFP area, federal fiscal years 1988 through 2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the NWFP are indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

Interviewees in four study areas felt that the NWFP had negatively impacted their community: Packwood-Randle, Naches, Butte Falls-Prospect and Gold Beach. Interviewees in those case studies directly attributed the NWFP to local job losses. Other impacts reported by interviewees

1. Harvest volumes reported in federal fiscal years

included population decline or aging, declining school enrollment and consolidation, closures and consolidations of local forest service offices, and declines in Forest Service staffing.

Communities where interviewees thought the NWFP had less of a social or economic impact to their community included Upper Hood River Valley, Southern Tillamook, Mt. Shasta-Weed, and Smith River-Gasquet community case studies. These communities experienced declines in federal timber harvests, but most interviewees did not directly link them to the NWFP. Interviewees in Upper Hood River Valley described how NWFP-related declines in timber harvest impacted local mills. However, they felt the community's diversified economy, including local fruit orchards, had buffered it from significant economic disruption. In Mt. Shasta-Weed, interviewees suggested that in Mt. Shasta city, the importance of wood processing had declined in the late 1980s before the implementation of the NWFP. In that community, tourism and recreation had replaced wood processing in economic importance. Conversely, interviewees noted that Weed continued to depend on the timber industry, but local mills sourced timber from private forest lands. Southern Tillamook interviewees felt that economic impacts from reduced federal timber harvests were buffered by harvests from the Tillamook State Forest as timber on that forest reached maturity just as the NWFP was being implemented. Lastly, Smith River-Gasquet did not see as many negative social and economic impacts from the NWFP because the area's designation as a National Park (1960) and wild and scenic National Recreation Area (1990) had already limited logging on federal lands.

Pre-NWFP history

This section presents a synthesis of material cited in the "Pre-NWFP history" section in each of the case study chapters (Chapters 3 – 10). Please refer to those chapters for full citations and additional details.

Settlement

Indigenous populations were violently displaced by Euro-American settlement in the mid- to late-1800s in all study areas. This displacement also disrupted continuity and intensity of Indigenous forest stewardship practices that had help shaped local forest ecology. The Euro-American settlement economies that followed Indigenous dispossession centered on resource extraction including agriculture, logging, fishing, and mining. Forest clearing for agriculture occurred at lower elevations across the region. Dairying and fishing were important economic activities for the three coastal study areas. Mining for gold and, later, other minerals was most significant in the southern study areas: Smith River-Gasquet, Gold Beach, Butte Falls-Prospect, and Mt. Shasta-Weed. Seasonal grazing and burning associated with cattle and sheep ranching were common at higher elevations in many study areas, but these activities were most important in the Naches and Butte Falls-Prospect study areas.

The mid to late 1800s also saw the development of natural amenity-based tourism in Gasquet (Smith River), Mount Shasta (Mt. Shasta-Weed), Crater Lake National Park and the Rogue River gorge (Butte Falls-Prospect), and Mt. Rainier National Park (Packwood-Randle). Natural springs (hot and cold), fishing, hunting, and hiking were popular among visitors traveling from developing urban centers.

Early timber industry

The onset of industrial logging and processing varied across study areas in relation to transportation

connectivity and terrain ruggedness (Table 2.1). From the 1850s through the 1880s, small-scale sawmills and horse logging were common in all study areas. Economic and ecological impacts of early forest industries often varied in relation to mining activity. The earliest industrial-scale logging within the NWFP 30-year study areas occurred in the 1870s in Smith River with the harvest and export of redwoods. The operation relied on steam-powered machinery and the construction of logging railroads. Logs were transported by rail from logging camps to mills on the coast and processed lumber was shipped to markets in San Francisco and beyond by steam powered cargo ships. By the 1890s, similar steam-power reliant logging railroad and cargo ship operations arrived in Southern Tillamook, with processed timber shipped to markets in California. The arrival of the Southern Pacific Railroad in Mt. Shasta-Weed study area in the late 1880s facilitated development of the timber industry. By the 1890s, logging railroads were shipping sugar and ponderosa pine logs to mills strategically placed along the main railroad at Mt. Shasta and Weed. Box shooks and lumber were shipped from railheads at these mills to markets in California, Oregon, and beyond.

Table 2.1. *Evolution of logging and wood processing across study areas.*

Case study	Onset of industrial logging	Extraction technologies	Early processing species	Pre-WWII products	Post-WWII species	Post-WWII products
Smith River-Gasquet	1870s	Railroad, steam cargo ships	Redwood, Sitka spruce	Boxes, Lumber	Doug fir, Redwood	Plywood, lumber
Mt. Shasta-Weed	1890s	Railroad	Pine	Boxes	Pine, Doug fir	Plywood, lumber
Southern Tillamook	1890s	Railroad, steam cargo ships	Doug fir, Sitka spruce	Lumber	Doug fir, western hemlock, spruce	Plywood, lumber
Upper Hood River Valley	1900s	Railroad	Doug fir	Lumber	Doug fir	Lumber, hardboard
Butte Falls-Prospect	1900s (Butte Falls), 1930s (Prospect)	Railroad (Butte Falls), Trucks (Prospect)	Pine	Shakes	Doug fir, Pine	Plywood, fiberboard, pulp, paper
Naches	1920s	Trucks	Pine	Fruit boxes	Pine, Doug fir	Lumber
Packwood-Randle	1930s	Small scale river log drives, truck logging	Multiple	Lumber, Shingles	Doug fir, Cedar	Shingles, lumber, plywood
Gold Beach	1930s	Trucks, diesel cargo ships	Doug fir, Cedar	Shakes, lumber	Doug fir	Plywood, veneer, lumber

United States federal forest management developed in concert with industrial timber harvesting activity. As public lands became increasingly regulated and management cultures professionalized, private industry gained control of high-quality timberlands in the PNW through wagon road and railroad land grants, land exchanges, and both legal and fraudulent land claims. These private industrial forests were easily accessed from early transportation routes (large rivers and railroads) which typically ran through lowlands with gentle terrain making them suitable for railroad logging. By contrast, the National Forest System evolved from the more remote and often rugged and mountainous public lands that remained unclaimed.

In the early 1900s, timber companies were constructing spur railroads to connect more remote sawmills in the Upper Hood River Valley and in Butte Falls (Butte Falls-Prospect case study). These operations also employed logging railroads to reach harvest units on national forest lands. During this same decade, Weed (in Mt. Shasta-Weed), Dee (in Upper Hood River Valley), and Brookings (just south of Gold Beach) were founded as company towns where the local timber company owned worker housing, stores, banks, and other amenities.

During the first World War (1914-1918), newly developing airplane technologies initiated a war-effort demand for Sitka spruce. Timber operations in the three coastal study areas (Southern Tillamook, Gold Beach, and Smith River-Gasquet) targeted their logging and processing efforts on spruce. As the war ended, the timber industry transitioned back to other species.

By the 1920s-1930s, new road construction reached the more isolated areas in the region. These roads facilitated log extraction and shipping with internal combustion engine tractors and trucks. Truck logging opened new opportunities for industrial-scale harvesting and processing operations in national forests across the study area and served as the initial wave of industrial timber harvesting in the remaining study areas: Packwood-Randle, Naches, and Gold Beach.

Post-World War II timber industry

After World War II, timber harvesting and processing intensified in response to a post-war housing boom. Internal combustion engine technologies such as chainsaws and more powerful tractors and trucks improved logging efficiency, facilitated new management possibilities, and transformed the social organization of the timber industry. Small, family owned, logging operations (“Gypo” loggers) began to dominate timber harvests on public lands. Demand for building materials sparked innovation in the wood products industry including the manufacture of veneer- and particle-based products. International timber corporations, regional conglomerates, and a few large family-held corporations built hardboard and plywood processing plants in every study area.

As timber supplies from private lands contracted, the Forest Service increased the timber sale volume on national forests to meet growing demand. Between the mid-1950s to mid-1960s, communities in each of the study areas evolved into versions of the classic Pacific Northwest timber town organized around independent logging businesses, one or more mills or wood processing facilities, and a well-staffed Forest Service office responsible for managing the public timberlands. One exception to this model was the unincorporated community of Prospect (in the Butte Falls-Prospect study area) where processing facilities had all relocated closer to transportation networks and workforce in Medford and surrounding area by the 1960s. Nonetheless, many independent logging companies remained based there for the next two decades.

As timber markets fluctuated, corporations merged and consolidated their operations, wood processing plant closures, both temporary and permanent, and associated periods of unemployment variously impacted each of the study areas from the 1960s through the early 1990s. For example, Boise Cascade pulled out of Naches in 1965, closing its mill and terminating more than 100 local jobs. Plant closures were associated with decline in local wood processing employment as early as the 1970s in Smith River, Gold Beach, and Southern Tillamook. The fall out of the early 1980s economic recession saw additional bankruptcies and acquisitions leading to plant closures and layoffs in Upper Hood River Valley (Champion Lumber), Butte Falls-Prospect (MedCo), Gold Beach (U.S. Plywood-Champion), and Mt. Shasta Weed (International Paper). In Packwood-Randle, the Mount Adams Veneer Company closed in the late 1980s.

Nonetheless, even as processing declined and facilities were consolidated to more centralized metropolitan areas, harvest volumes from national forests across the NWFP region remained high into the late 1980s. By 1990, case study communities (except Naches) were in counties that retained an extremely high to high relative dependence on federal forests in comparison to all counties in the NWFP area (Adams, 2025). Only Naches, which is in metropolitan Yakima County, was in a county where the wood products industry was on par with mean dependence for the NWFP area.

NWFP communities after the Plan

This section presents a synthesis of material cited in the "[Case study] after the NWFP" section in each of the case study chapters (Chapters 3 – 10). Please refer to those chapters for full citations and additional details.

Employment and industry

Wood processing persisted post-NWFP in all case study areas except Butte Falls-Prospect where a hostile takeover ended in the liquidation of the local timber company (MedCo) by 1992. Mills closed successively, starting with mills in Upper Hood River Valley (1995) and ending with the closure of Roseburg Forest Product's Weed Veneer plant in 2025 (Figure 2.4). The causes of these closures were diverse. However, as mentioned above, interviewees directly implicated the NWFP as a cause of mill closure in Packwood-Randle and Naches. Ten timber processing facilities closed since 1992 in the case study areas.

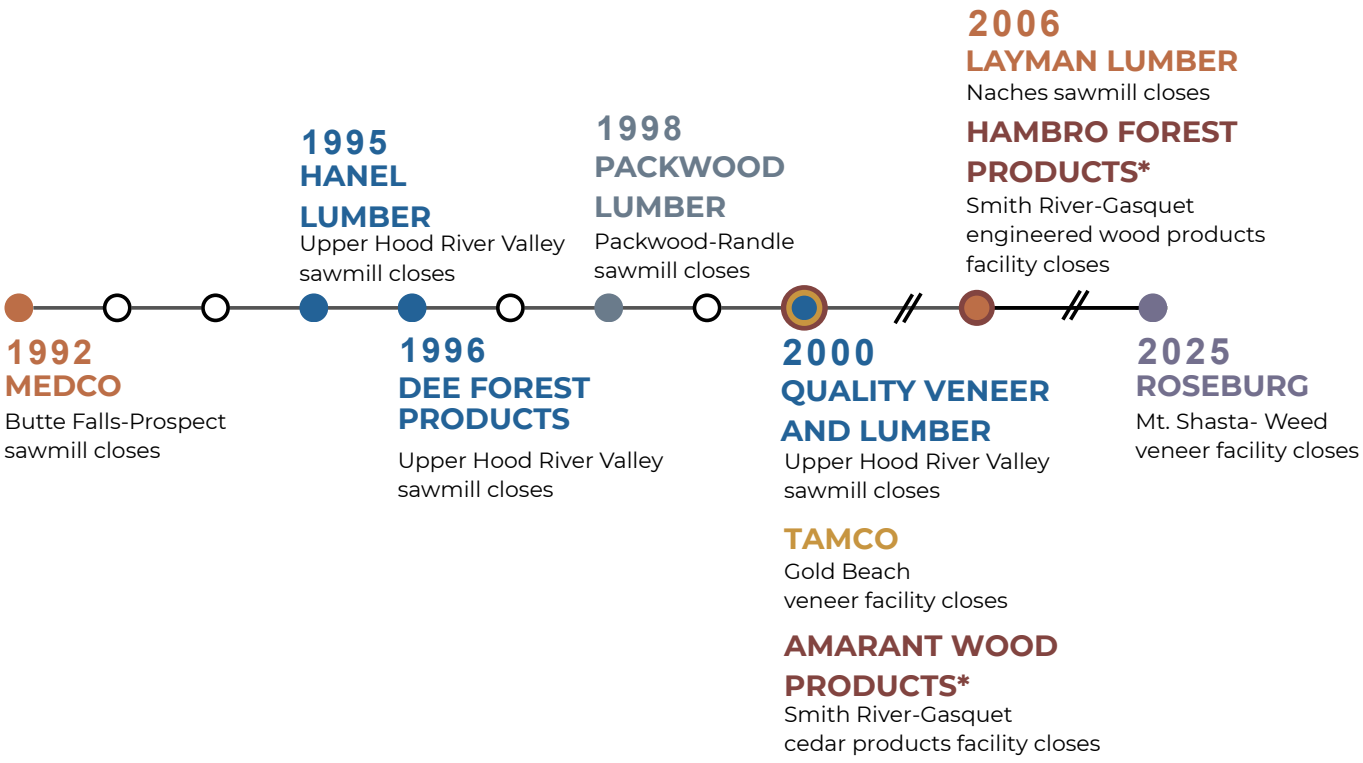


Figure 2.4. *Timeline of mill closures by case study. *Includes mills within 2 miles of the study area boundary.*

As of 2024, mills remained open in Mt. Shasta-Weed (Roseburg Veneer, Weed), Packwood-Randle (Hampton Lumber, Randle), Upper Hood River Valley (Mt. Hood Forest Products, Hood River), and Southern Tillamook (Stimpson Lumber, Tillamook).[2] By the end of 2025, for reasons unrelated to national forest policies,

2. We limited this analysis to mills within two miles of the various study areas

Roseburg closed its Weed facility. Indeed, over the last decade, none of the remaining mills have relied very heavily on federal timber supply. For example, between 2013 and 2023, Hampton Tree Farms (the forest management component of Hampton Lumber) purchased only 33 mmbf of timber from the Cowlitz Ranger District, a fraction of the volume it processed. Mt. Hood Forest Products in the Upper Hood River Valley did not purchase any timber directly from the Forest Service during that time period. Interviewees in that community noted that county managed forest added to the local timber supply. Stimpson Lumber in Southern Tillamook purchased a very small amount of timber from the Hebo Ranger District (less than 110 thousand board feet), while Hampton Lumber, which operates two additional mills within 10 miles of the study area, purchased 9 mmbf.

Even in case study communities that had operating wood processing facilities in 2024, interviewees were unsure about the importance of wood processing to community well-being. As documented in the 25-year community case studies (Coughlan et al., 2025), it is increasingly common for mill workers to commute from nearby, often less rural, communities. For example, before the closure of Roseburg's Weed Veneer, one interviewee in Mt. Shasta-Weed noted that, *"I'm not even sure how many of the current employees who still remain at Roseburg Plywood are from Weed. My guess is maybe a third or more are from outlying towns: Mount Shasta, Gazelle, Grenada, Yreka maybe."* Lack of affordable housing (discussed below) in the rural case study communities may be one factor contributing to this issue.

Communities that experience shocks related to abrupt interruptions in resource supplies must reorganize their economies or face significant declines in social and economic well-being (Morzillo et al., 2015). In theory, communities in the NWFP area with industries other than wood products would be insulated from the shock represented by the early 1990s decline in federal timber supply. Interviewees in the Naches and Upper Hood River Valley noted that fruit orchards helped buffer forestry-related employment losses in those study areas. Interviewees from the Southern Tillamook study area suggested that their community did not experience significant impacts from the NWFP. As noted above, this lack of impacts may relate to supply from the Tillamook State Forest. However, this study area also has a more diverse economy, including a robust, nationally branded dairy industry and its proximity to the Portland metropolitan area provides a large pool of potential tourists and second home owners.

Some study areas attracted new sources of employment just as the NWFP was implemented. For example, the Pelican Bay Prison opened in Smith River offering new employment opportunities as mills closed. In Mt. Shasta-Weed and in Butte Falls-Prospect, commercial spring water bottling represents one newer source of economic activity for the respective study areas. Although wood processing has left the Naches study area, interviewees suggested that many people in the community make a short commute to work in nearby Yakima.

Since the implementation of the NWFP, natural amenity-based economies such as tourism, recreation, vacation second homes, and retirement significantly expanded in six of the case study areas, though its impacts were uneven. In Packwood-Randle, vacation homes and short-term rentals, recreation (i.e. downhill skiing), and tourism associated with Mt. Rainier National Park has most significantly impacted Packwood rather than Randle. In Mt. Shasta-Weed, the city of Mt. Shasta has capitalized on its legacy of "spiritual tourism" while Weed remained industrial. In Southern Tillamook, vacation rentals and tourism have expanded in Pacific City and Neskowin while social and economic well-being in Hebo continues to decline. In Smith River-Gasquet, the development of tourist infrastructure has stagnated, perhaps due to constraints on use of public lands and its relative isolation from metropolitan areas. Efforts to promote and further develop tourism (i.e., development of new ski facilities) in the Upper Hood River Valley have met with local resistance.

Demographic and community changes

We conducted quantitative analysis of demographic changes within community case studies using data estimated for the US Census County Subdivisions (CCDs) that we chose as study area boundaries (see Chapter 1, table 1.1). We compared CCD data from the 2000 Census with data from the 2010 and 2020 decennial Census (for total population and population by age) and from the American Community Survey estimates for 2008-2012 and 2018-2022 (all other indicators). Our analysis covers a 20-year period falling in the middle of the 30-year implementation of the NWFP (1994 to 2024). Below, we summarize 1) total population, 2) age of community members, and 3) low-income population. We compared these results to total changes for all CCDs within the NWFP area where at least 30 percent of the CCD land base is federal forest lands. Thus, changes within the case studies are compared to other similarly "forest-based" communities in the NWFP area. We also report location quotients (see explanation below) for low-income populations. Participation in the civilian labor force (unemployed population) and workforce non-participation unrelated to unemployment are reported in Appendix D.

Total Population

Total population (Table 2.3) declined in two of the eight case studies: Packwood-Randle and Smith River-Gasquet. Butte Falls-Prospect population remained static and population in the other five cases increased modestly. Population loss in Packwood-Randle was especially striking—this community's population declined by nearly 30 percent between 2000 and 2020. Population increased by around 25 percent in the two coastal Oregon cases (Southern Tillamook and Gold Beach) over the 20-year period examined, and from 7 to 15 percent (less than 0.7 percent annually) in the other three locations.

Population under age 18

The number of children in a community is an important indicator of future population growth and associated development, particularly in communities that do not reliably attract in-migrants. In a demographically stable community, individuals that "age out" of the child cohort would be cyclically replaced by similar numbers of new births or in-migrating children, and the total number of children would be relatively stable over time. Much of the decrease in child populations typically occurs as a simple result of aging: a 9-year-old in 2010 is 19, not a child, in 2020. However, in all eight case study areas there were fewer children in 2020 than in 2000, indicating that the combination of aging-out and out-migration exceeded new births and in-migration (see Appendix D, Table D.1). If such a pattern is sustained through multiple decades (as is observed in both California cases), a community's long-term prospects for a viable future labor force and the formation of new households are not promising.

Population aged 25-44

The cohort of young adults between 25 and 44 represents community members in the beginning or middle portion of a career and often forming households or raising children. Sustaining a consistent population in this cohort is key to future economic stability: it implies both a population that will still be active in the labor force between two and four decades in the future; and that will potentially also add children to the population to replace those that "age-out" of childhood.

The age 25-44 population decreased between 2000 and 2020 in all eight case study areas (see Appendix D, Table D.2), though in the Upper Hood River Valley the decrease was minimal. The proportional decreases tend to directly reflect observations in the under 18 population: the largest decreases occurred in

Packwood-Randle (-34 percent) and Smith River-Gasquet (-22.5 percent). Decreases in Naches, Butte Falls-Prospect, Mt. Shasta-Weed, and Gold Beach were similar to the trend in the 79 combined CCDs. The outlier in this cohort is Southern Tillamook, which recorded 110 (+11 percent) more individuals in this cohort in 2020 than in 2000. There are no cases where the 2020 population aged 25-44 was smaller than the 2010 population, suggesting stabilization of this cohort.

Table 2.3. *Total population estimates for case studies for the years 2000, 2010, and 2020. Shading indicates population declined or remained static.*

Case study*	2000	2010	2020	Percent change (2000-2020)
Packwood-Randle (Big Bottom, WA)	3,328	2,882	2,348	-29%
Naches (Northwest Yakima, WA)	8,029	7,968	8,586	7%
Upper Hood River Valley (Dee & Parkdale, OR)	2,852	2,865	3,276	15%
Southern Tillamook (Beaver, Neskowin OR)	4,831	4,769	5,893	22%
Butte Falls-Prosepct, OR	2,629	2,654	2,631	0%
Gold Beach, OR	4,686	5,219	5,881	26%
Mt. Shasta-Weed (Mt. Shasta, Weed, CA)	13,362	13,635	14,479	8%
Smith River- Gasquet, CA	3,754	3,321	3,239	-14%
Case study totals	**43,471**	**43,304**	**46,333**	**7%**

**CCD noted where name differs from case study name.*

Population aged 65 and older

A disproportionately large older population is not necessarily correlated with community-level economic difficulties, since some communities are able to attract affluent retirees that bring considerable social capital with them to their retirement destination. Such a population is, however, correlated with a labor force that is smaller than the community population size would otherwise indicate. When in-migrants do not factor prominently in a community's population profile, its cohort of older adults will be comprised mostly or entirely of people that have lived in the community for decades, possibly since youth. In such cases, the remaining labor pool may have a limited skill palette, associated with a local economy from prior decades when its older population was still locally employed. Where high location quotients for people over 65, low-income, and workforce non-participation align, and in-migration is low or non-existent, communities face high hurdles to future economic development and population stability.

All eight case studies exhibit a tendency for steady proportional increase of the over 65 population (see Appendix D, Table D.3), a trend that typifies most everywhere in rural America since the 1980s. The lowest

rate of increase (50 percent) is, perhaps surprisingly, found in Packwood-Randle. This suggests that it has an unusually large component of older adults leaving the community (through either death or out-migration) compared to the other cases (see total population Table 2.3, in which Packwood-Randle has the largest proportional loss of population of all the cases). Two case study areas, Naches and Butte Falls-Prospect, experienced a doubling of the over 65 population between 2000 and 2020, far surpassing the rate of increase other NWFP CCDs with greater than 30 percent federal forestlands. The remaining cases are similar, with a 60 to 70 percent increase over the 20-year period.

Low-income populations

Low-income is defined as household with total income that is less than two times the applicable poverty threshold for the number of people in their household. For example, in 2023, the poverty threshold for a four-person household in the contiguous United States was roughly $32,000. A household with total income of $60,000 and four members is thus defined as low-income, and the four household members are added to the estimate of low-income individuals.

The absolute number of low-income individuals has declined since 2000 in the Packwood-Randle and Smith River-Gasquet study areas. It has stayed about the same in Butte Falls-Prospect. Due to estimate uncertainty, it is difficult to identify a clear trend in the other five cases. However, further insights can be gained by examining low-income population location quotients (Table 2.4). A location quotient compares the proportion of population that is low-income in a case study to the same proportion in the entire NWFP social and economic monitoring area population.

In 2000, following the first six years of the NWFP, three case studies stand out as having high concentrations of low-income populations in comparison to other CCDs with greater than 30 percent federal forest lands: Packwood-Randle, Upper Hood River Valley, and Smith River-Gasquet. Low-income location quotients for 2020 dramatically declined in two of the eight case study communities relative to 2000: Packwood-Randle and Smith River-Gasquet. This means that these two study areas have become more similar to the total NWFP population (which includes the PNW's major metropolitan areas - see note in Appendix D). After 2000, low-income individuals became more highly concentrated in Naches and Southern Tillamook relative to the rest of the NWFP area. The other four cases show only slight changes in their concentration of low-income populations between 2000 and 2020.

Table 2.4. *Low-income population location quotient (estimates). See Appendix D, Table D.6 for upper and lower boundaries.*

Case study*	2000	2008-2012	2018-2022
Packwood-Randle (Big Bottom, WA)	1.623	1.294	1.165
Naches (Northwest Yakima, WA)	1.019	1.106	1.174
Upper Hood River Valley (Dee & Parkdale, OR)	1.500	1.052	1.705
Southern Tillamook (Beaver, Neskowin OR)	1.072	1.252	1.361
Butte Falls-Prosepct, OR	1.353	1.092	1.330

Gold Beach, OR	1.327	1.169	1.373
Mt. Shasta-Weed (Mt. Shasta, Weed, CA)	1.414	1.174	1.326
Smith River-Gasquet, CA	1.707	1.226	1.195
Case study mean	1.377	1.17	1.33
NWFP CCDs that are >30% Federal Forest Land**	1.332	1.243	1.340

**CCD noted where name differs from case study name.*
***CCDs meeting the sampling criteria: federal forests lands comprise 30 percent of the land base.*

Green shading: significant decrease in LQ since the prior period, indicating that low-income population was less concentrated in the community than it had been, making its proportion of low-income population either more similar to (if the prior period LQ was well above 1), or, less similar to (if the current period LQ is well below 1) than the NWFP monitoring region's proportion.

Orange shading: significant increase in LQ since the prior period, with the exact opposite interpretation as above.

New residents

In terms of newer residents, at least half of the interviewees in five of the case studies (Packwood-Randle, Southern Tillamook, Butte Falls-Prospect, Gold Beach, and Mt. Shasta-Weed) noted that retirees were moving to their communities. Agreement was especially high in Gold Beach where 89 percent reported that new residents were retirees. Approximately 30 percent of interviewees in Packwood-Randle, Southern Tillamook, and Mt. Shasta-Weed also suggested that newer residents were also "wealthy". In the Upper Hood River Valley case study, 67 percent of interviewees suggested that new residents were "wealthy." Interviewees in Naches and Smith River-Gasquet did not agree on who their new residents were.

Housing and development

Across every study area except Butte Falls Prospect, a majority of interviewees noted that both availability and affordability of housing in their communities had decreased over the last 30 years. Some interviewees in Butte Falls-Prospect suggested that these changes merely matched national trends, or that housing was more affordable in their community than the nearby city of Medford. Another issue for Butte Falls-Prospect was the poor quality of homes or aging homes that were poorly maintained.

Similarly, interviewees in every case study except Butte Falls-Prospect noted that one issue impacting the local housing market was the proliferation of vacation homes and short-term rentals. The proliferation of vacation homes and short-term rentals was especially notable in Packwood-Randle and Southern Tillamook (Table 2.5). Table 2.5 shows housing data from the 2020 US Census H1 table (Occupancy Status). The vacant housing unit estimate includes all houses that were not primary residences (e.g. actual vacant houses, vacation homes, short-term rentals). According to these data, fewer than half of the houses in Packwood-Randle were primary residences. In 2024, we inventoried a total of 312 homes (i.e. 12 percent of all housing) that were available for short-term rental in the Packwood-Randle study area. Given that interviewees suggested that housing was in short supply, it seems most likely that a large proportion of the remaining vacant houses (42 percent of all housing) in that study area were vacation homes. Following similar logic, approximately 8 percent of housing units in Southern Tillamook were short-term rentals

leaving just under 40 percent of housing as vacation homes. Similarly, vacation homes and short-term rentals comprised approximately 21 percent of housing units in the other two coastal areas: Gold Beach and Smith River-Gasquet.

Table 2.5. *Total housing units, vacant units, and short-term rentals by case study. Data from the 2020 US Census Bureau table H1 (U.S. Census Bureau, n.d.).*

Case study	Total housing units	Vacant units	Percent vacant	Short-term rentals	Percent short-term rental
Packwood-Randle	2,562 +/-247	1,381 +/-226	54%	312	12%
Naches	4,085 +/-258	746 +/-164	18%	51	1%
Upper Hood River Valley	1,420 +/-279	217 +/-163	15%	3	<1%
Southern Tillamook	4,502 +/-440	2,101 +/-488	47%	357	8%
Butte Falls-Prosepct	1,222 +/-134	66 +/-42	5%	19	2%
Gold Beach	3,300 +/-246	681 +/-258	21%	265	8%
Mt. Shasta-Weed	8,001 +/-562	1,213 +/-376	15%	199	2%
Smith River-Gasquet	1,965 +/-198	406 +/-175	21%	41	2%
Case study mean	**3,382**	**851**	**25%**	**156**	**5%**

Lack of housing for workers was also a common problem cited by at least some interviewees in all case studies (except Mt. Shasta-Weed). In Smith River-Gasquet, three interviewees cited lack of housing for workers as a major barrier to economic development in their community.

Development in many of the study areas is also constrained by other factors. For example, the high proportion of public limits development in nearly all study areas. Constraints imposed on rural development by public land ownership has been controversial for more than 100 years. There was significant public debate over designation of federal forests and access to those forests during the late 19th and early 20th century. With the termination of homesteading programs, national forest boundaries stabilized. However, conflict continues around “special” economic uses of public lands. For example, efforts to develop and expand ski areas on national forest lands have been controversial in Upper Hood River Valley and Mt. Shasta-Weed. Coastal study areas such as Gold Beach and Southern Tillamook are constrained by public lands located along the coastline, i.e. some of the most desirable building areas.

Further, limitations of the existing waste-water treatment infrastructure constrains development in Packwood-Randle and in Upper Hood River Valley. Packwood-Randle and Naches face significant issues with flooding. Wildfires have destroyed approximately 300 homes in Weed (Mt. Shasta-Weed) in recent years and interviewees mentioned that victims of those fires have faced difficulty rebuilding due to lack of insurance and the constraints and disincentives of rebuilding on small lots (a historical legacy of company worker housing). Interviewees in that study area also cited the construction industry’s lack of capacity to meet new demand.

Community services

Services and changes to services through time varied across the eight case studies. Interviewees across six of the case studies thought that both the quantity and quality of services had declined over the last 30 years. In the Upper Hood River Valley study area, interviewees suggested that services had increased. In Gold Beach, interviewees were divided as to the status of their services. One interviewee in Gold Beach suggested that more recent business closures might be tied to the arrival of a hypermarket-superstore (Fred Meyer) in nearby Brookings.

In 2024, Packwood-Randle, Southern Tillamook, Gold Beach, and Mt. Shasta-Weed each had full-service supermarkets. The Mt. Shasta-Weed study area had four full-service supermarkets, yet interviewees nevertheless discussed making trips to Redding, California and Medford, Oregon to shop. The Upper Hood River Valley, Smith River-Gasquet, Naches, and Butte Falls study areas lack a supermarket. The Upper Hood River Valley has long been dependent on Hood River for services such as a supermarket. In Smith River-Gasquet, the local supermarket had recently closed, but residents also discussed the importance of nearby Crescent City for services. Naches is adjacent to metropolitan Yakima, so their commute for services is not long. Conversely, residents of Butte Falls-Prospect must drive at least 25 miles to Shady Cove or Eagle Point for groceries. One interviewee from Butte Falls-Prospect suggested that the study area formerly had two grocery stores.

All of the study areas except Smith River-Gasquet have a local health clinic. Gold Beach and Mt. Shasta have their own small hospitals. Residents of Smith River-Gasquet must drive to Crescent City, California or Brookings, Oregon to access a hospital. Similarly, residents in Southern Tillamook must commute to Tillamook or Lincoln City for a hospital, Upper Hood River Valley residents access hospital services in Hood River, and residents of Naches access hospital services in Yakima. Packwood-Randle and Butte Falls-Prospect are the most isolated with respect to hospital services where residents must drive between 30 and 45 miles to a hospital.

Community governance

Case studies included both incorporated “cities,” “towns,” and unincorporated settlements. The former have local municipal governments that operate under the home rule authority, by which the state delegates power to local entities. In the Naches study area, the town of Naches is incorporated. In Gold Beach, the City of Gold Beach is incorporated and is the county seat. In Butte Falls-Prospect, the City of Butte Falls is incorporated; Prospect is not. In Mt. Shasta-Weed, both Mt. Shasta City and Weed are incorporated. Four of the study areas were characterized by unincorporated settlements: Packwood-Randle, Upper Hood River Valley, Southern Tillamook, and Smith River-Gasquet. These communities are relatively disadvantaged in comparison to incorporated communities due to their reliance on county-level governance. For example, in Packwood-Randle, interviewees suggested that residents felt disconnected from the county government. They further suggested that their community lacked coordination that formal incorporation might provide. The disadvantages of unincorporated communities are perhaps most obvious within the Butte Falls-Prospect study area. In that study area, the municipal government in Butte Falls played an active role in preparing the community for transitions it would face as local industry closed and the Forest Service transitioned its operations to Prospect. Prospect, on the other hand, has had to rely on “engaged volunteers” to keep basic services such as law enforcement and emergency response in operation.

Community relationship with the Forest Service

Interviewees across case study communities expressed a wide range of perspectives about their community's relationship with the Forest Service. Although the interviewees were not wholly negative about the relationship, many interviewees expressed a division amongst community members about their opinion of the Forest Service. In some communities, interviewees suggested that the personality of the district ranger was an important factor. In other communities, long-standing controversies still remained fresh in local memory.

Managing for wildfire resilience was seen as a high priority for the Forest Service by more than 70 percent of interviewees in the following case studies: Gold Beach (91 percent), Mt. Hood (79 percent), Mt. Shasta (78 percent), High Cascades (73 percent).

Incorporating science into planning processes was seen as the highest priority for the Forest Service for Southern Tillamook interviewees (82 percent) and as the second most important priority for Mt. Hood interviewees (72 percent).

Community relationship with national forest lands

Each community valued different things about their forest lands. We asked interviewees to rank the following uses of their national forest lands in terms of high, medium, or low, importance: hunting, nature/aesthetics, non-timber forest products, recreation, timber, tourism, and water. Community members in Naches (91%), Butte Falls-Prospect (86%), and Gold Beach (90%) valued hunting and fishing as highest level of importance. In Packwood-Randle, most interviewees (75%) ranked non-timber forest products as high importance. One hundred percent of interviewees in the Upper Hood River Valley and 73 percent of Smith River-Gasquet interviewees valued nature/aesthetics as high importance. Tourism was the most important use of forest service lands identified by Southern Tillamook residents (90%). Ninety percent of interviewees in Mt. Shasta ranked water as high importance.

These interviewee rankings were supported by case study quantitative data. For example, the relatively high valuation of non-timber forest products in Packwood-Randle is reflected in the incredibly high number of sales and harvest volumes of mushrooms, salal, bear grass, pine cones, and limbs and boughs on the Gifford Pinchot National Forest. The importance of tourism for Southern Tillamook is reflected in that community's percentage of vacation homes. Similarly, the importance of nature/aesthetics in the Upper Hood River Valley is reflected in interviewee explanations about that community's resistance to development.

Most interviewees across case studies ranked timber from national forests as low importance. Packwood-Randle was the only community where more than half (67 percent) of interviewees thought timber was highly important. Indeed, out of all the case study ranger districts over the 2013-2023 period, the Forest Service harvested the highest volume of timber (187 mmbf) from the Cowlitz Ranger District in Packwood-Randle (Table 2.6, Figure 2.5). Local businesses in Packwood-Randle also captured higher timber volumes than local businesses in other case studies, though most timber harvest went to businesses along the I-5 corridor with median travel distances of 65 miles. Smith River-Gasquet had the lowest harvest volumes (12 mmbf) and the highest median travel distances (164 miles) to businesses purchasing timber. Eighty-

two percent of interviewees ranked timber from the national forest as low to moderate importance to the community.

Table 2.6. *Total timber sale volume from case study ranger districts, 2013-2023. Data from USDA Forest Service Timber Information Manager (TIM).*

Case study	Ranger district name	Total sale volume mbf	Local sale volume mbf	Service bid value	Percent stewardship	Median distance to purchaser (miles)
Packwood-Randle	Cowliz Valley	187,725	8,101	$582,378	6%	65
Naches	Naches	94,661	288	$1,185,327	20%	72
Upper Hood River Valley	Hood River*	53,205	1,690	$778,287	38%	49
Southern Tillamook	Hebo	133,209	17	$2,278,512	26%	75
Butte Falls-Prosepct	High Cascades	98,777	2,757	$373,386	8%	58
Gold Beach	Gold Beach	46,845	-	$0	0%	64
Mt. Shasta-Weed	Mount Shasta**	25,653	-	$367,787	10%	84
Smith River-Gasquet	Gasquet	12,388	-	$1,876,010	14%	164

**These two ranger districts are functionally managed together as both Hood River and Barlow. In this report, we refer to them collectively as "Hood River."*
*** The Shasta District is part of the Shasta-McCloud management unit (SMMU), which comprises two ranger districts—Shasta and McCloud—with a shared district ranger. We include both districts in our analysis.*

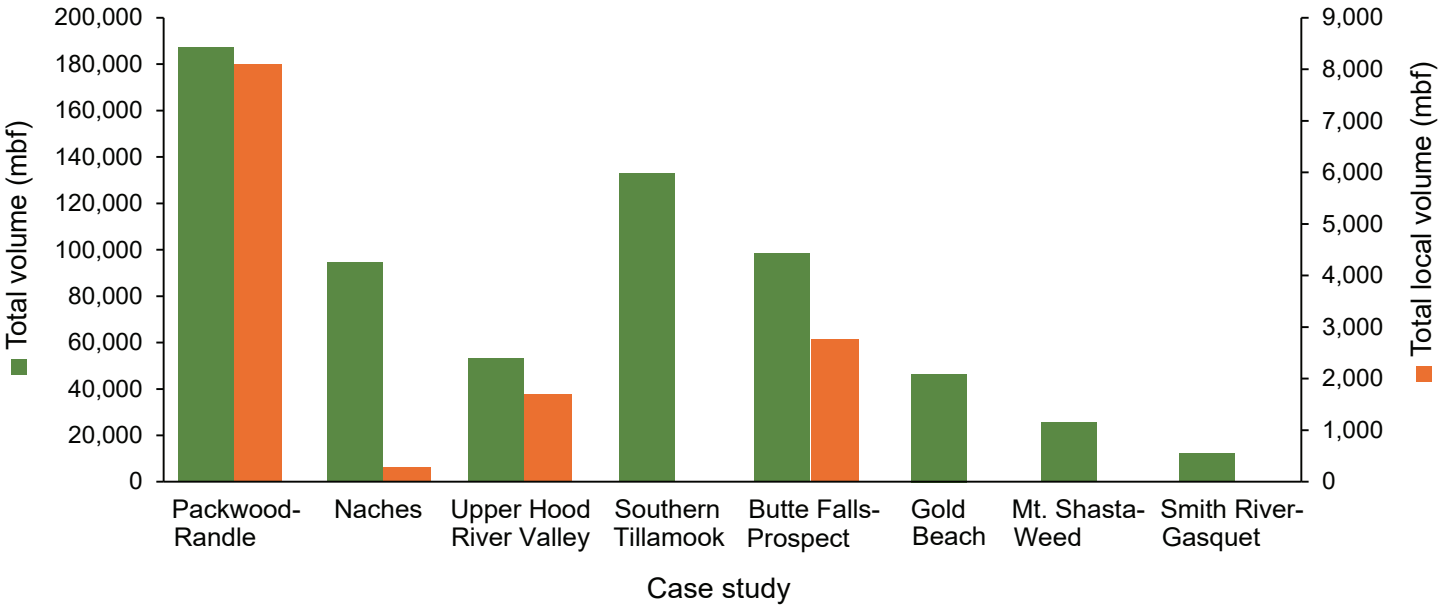


Figure 2.5. *Bar graph of total timber sale volume and total local sale volume from the 30-year monitoring case study ranger districts, 2013-2023. Data from USDA Forest Service Timber Information Manager (TIM).*

Wildfire

Wildfires have been a growing concern in the NWFP area. For example, Gold Beach experienced the Biscuit Fire in 2002, the largest fire recorded in Oregon's history. The fire is considered by some to mark a turning point in how the Forest Service manages wildfire and post-wildfire recovery in the Pacific Northwest (Bormann and Stankey, 2009). Between 1994 and 2018, wildfires burned approximately 1,498,117 acres (an average of 59,925 per year) in the eight study areas. From 2019 to 2024 burned area increased to 105,770 per year on average, for a total of 634,621 acres. It is unsurprising that wildfire mitigation is now one of the top management concerns for the eight case study communities. Indeed, four of the study areas experienced their largest fires since 2019. The Southern Tillamook case study[3] has not recorded any fires since the implementation of the NWFP. However, the 2020 Echo Mountain Complex occurred less than five miles from the case study's southern boundary. This fire forced evacuations in Lincoln City, Oregon and destroyed 288 homes and 339 structures.

Table 2.7. *Five largest wildfires in case study ranger districts. Largest fire highlighted. All fire years and acreage from the State of Washington Geospatial Open Portal (Washington DNR, 2025), ODF ArcGIS Hub (NIFC & INR, 2025), and State of California Open Data Portal (CAL FIRE, 2026).*

Case study name	Ranger District	Fire
Packwood-Randle	Cowlitz Valley	Goat Rocks (2022, 6,196 acres) Clear Fork (2018, 74 acres) South Point (2012, 337 acres) Lost Lake (2003, 265 acres) Panther Fire (2003, 44 acres)
Naches	Naches	Retreat (2024, 45,593 acres) Schneider Springs (2021, 107,336 acres) Evans Canyon (2020, 75,682 acres) Norse Peak (2017, 52,062 acres) Boulder Creek (2010, 101,001 acres)
Upper Hood River Valley	Hood River	Whisky Creek (2024, 3,240 acres) Eagle Creek Fire (2017, 48,227 acres) Blackburn (2013, 11,183 acres) Dollar Lake (2011, 6,304 acres) Gnarl Ridge (2008, 3,240 acres)
Southern Tillamook*	Hebo	2020 Echo Mountain Complex (2020, 2,2522 acres)
Butte Falls-Prosepct	High Cascades	South Obenchain (2020, 32,589 acres) Miles (2018, 39,335 acres) Blanket (2017, 33,344 acres) Middle Fork Complex (2008, 21,110 acres) Timbered Rock (2002, 27,106 acres)
Gold Beach**	Gold Beach	Klondike (2018, 175,287 acres) Chetco Bar (2017, 191,237 acres) Collier Butte (2015, 12,270 acres) Biscuit (2002, 500,338 acres) Unnamed (2001) (2001, 280 acres)

3. The Tillamook burn, occurring just north of the Southern Tillamook case study, was a historically significant series of four wildfires from 1933-1958 that burned 350,000 acres.

Mt. Shasta-Weed	Mount Shasta	Mountain (2022, 13,441 acres) Mill (2022, 3,939 acres)*** Lava (2021, 26,329 acres) Mussolini (2002, 3,218 acres) Hotlum (2006, 3,023 acres)
Smith River-Gasquet	Gasquet	Smith River Complex (2024, 94,621 acres) Slater (2022, 157,430 acres) Eclipse Complex (2017, 91,125 acres) Gasquet Complex (2015, 100,369 acres) Siskiyou Complex (2008, 143,970 acres)

** Fires included are within 5 miles of case study boundary.*
*** This includes fires intersecting the Brookings CCD boundary.*
**** The 2022 Mill Fire in Weed was a structural conflagration that began on the Roseburg Forest Products Mill site and destroyed 118 residential and other structures.*

Community futures

When asked about their hopes and concerns for their communities in the next 10 years, at least some interviewees in seven communities voiced concerns about the potential impacts of climate change and wildfires. Many interviewees expressed a desire to see additional mitigation efforts taken to avoid wildfire disasters. Interviewees in every community mentioned concerns about the impacts of increasing recreational use of the national forest. Social impacts and other changes resulting from increased tourism was another related concern in five of the communities: Packwood-Randle, Naches, Southern Tillamook, Butte Falls-Prospect, and Gold Beach. Decreased availability and increased costs of housing was a concern in Naches, Upper Hood River Valley, Southern Tillamook, and Mt. Shasta-Weed.

Conclusions and highlights

Industrial histories, demographic changes, and challenges that communities face in housing and other developments make it clear that the timing and intensity of social and economic shocks associated with the NWFP and the timber industry broadly, varied significantly across the case study areas. Although the NWFP may not have uniformly contributed to the declining or stagnating social and economic trajectories of the case study communities monitored for the NWFP 30-year anniversary, the plan effectively constrained opportunities related to each community's potential to derive benefits from their local national forest.

Out of the eight case study communities, social and economic impacts of the NWFP were most significant in the Packwood-Randle community. Although the study area retained wood processing capacity and, between 2013 and 2023, local federal timber harvest volumes remained the highest of the eight case studies, the implementation of the NWFP caused significant negative impacts to that Packwood-Randle's economy. The most notable event related to the NWFP was the closure of the Packwood Lumber Mill in 1998. The mill had been dependent on large diameter timber from the national forest, a supply effectively cut-off by conservation measures imposed by the NWFP. By the 2000 US Census, two years after the closure of the mill, the share of low-income population in Packwood-Randle was over one and a half times greater than the low-income population in the rest of the NWFP area. Between 2000 and 2020, the community experienced significant population loss across all age cohorts as households moved to find employment opportunities

in other communities. Although this outmigration ultimately contributed to a lower concentration of low-income residents, it likely drained considerable human capital from the community. Vacated homes opened up the housing market to new investors who purchased homes and repurposed them as vacation homes and short-term rentals. While this transformation offers new economic possibilities for year-round residents, it also presents new challenges. For example, with fewer year-round housing options, by 2024, local businesses were experiencing difficulties finding housing for their workers.

Naches, Upper Hood River Valley, and Southern Tillamook were each buffered by a more diversified economy. Orchards in the former two and dairies in the latter communities provided more stable employment and income. The Tillamook State Forests (a legacy of wildfire history) additionally supplemented timber supply and helped retain wood processing capacities immediately adjacent to the Southern Tillamook study area. Nonetheless, segments of the population in each of these communities experienced social and economic disruptions related to changes in federal forest management. In Butte Falls-Prospect, events related to shifting industrial geographies largely pre-dated the NWFP. Most of the impacts related to the NWFP in that study area were associated with staffing and station changes internal to the Forest Service and BLM. These changes had ripple effects across the community's institutions, including its schools and other organizations contributing to the community's capacity to maintain and improve well-being.

Although the impacts of the NWFP to Gold Beach's timber industry were likely significant, that community was already transitioning toward an amenity economy based on attracting retirees. The relationship between the NWFP and social and economic changes in Mt. Shasta-Weed are complicated. However, the wood processing industry had largely abandoned Mt. Shasta by the late 1980s. Weed retained its wood processing facility until 2025, but the study area retained little to no dependency on federal timber in the post-NWFP era. Lastly, conservation efforts in the Smith River-Gasquet community including National and State Park, Wild and Scenic River, and National Recreation Area designations pre-empted the majority of impacts that the NWFP would have imposed on local timber supply. Although the timber industry suffered considerable decline in that community, its demise was not directly connected to the implementation of the NWFP.

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Biscuit Fire, Eight Dollar Mountain, 2002

For full report, visit:
https://hdl.handle.net/1794/31412

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Chapter 3: Packwood-Randle, Washington

Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns, Naomi Serio

Case study facts

Population (2020): 2,348

Location: Lewis County, Washington

Federal forest lands (80% of study area): Gifford Pinchot National Forest, Cowlitz Valley Ranger District

Climate:
Average Annual High: 60.6 °F/Low: 40.8 °F
Annual Precipitation: 58 inches;
Snowfall: 31.5 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<15,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 3.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Packwood-Randle study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

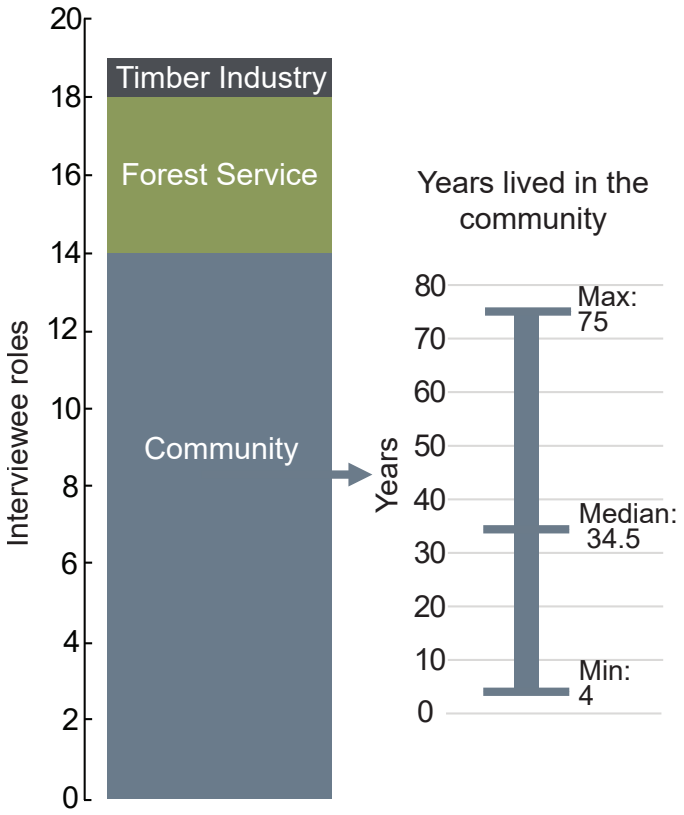

Figure 3.1. *Graph of interviewees by role and number of years lived in the community. Our sample included fourteen community members, six Forest Service employees, and one timber industry representative. Community interviewees lived in the study area for a minimum of four years, a maximum of 75 years, and a median of 34.5 years.*

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Study area and geography

The Packwood-Randle community case study focused on the Cowlitz Valley Ranger District of the Gifford Pinchot National Forest. We spatially defined the Packwood-Randle case study boundary as the Big Bottom Census County Division (CCD) (Figure 3.2). The Big Bottom CCD encompasses eastern portions of Lewis County, including the unincorporated communities of Packwood and Randle. Both towns are located along the large floodplain of the Cowlitz River and the US Route 12 (US 12) corridor that connects Napavine to Yakima over White Pass (Tompkins, 1933). The county seat is Chehalis, which is approximately 58 miles from Randle and 72 miles from Packwood. The Cowlitz Valley Ranger District covers the area of the former Packwood and Randle Ranger Districts. The ranger station is located in Randle. Forests in this region are dominated by Douglas-fir and Western hemlock. The Forest Service manages 80 percent of the study area and other public lands comprise nine percent.

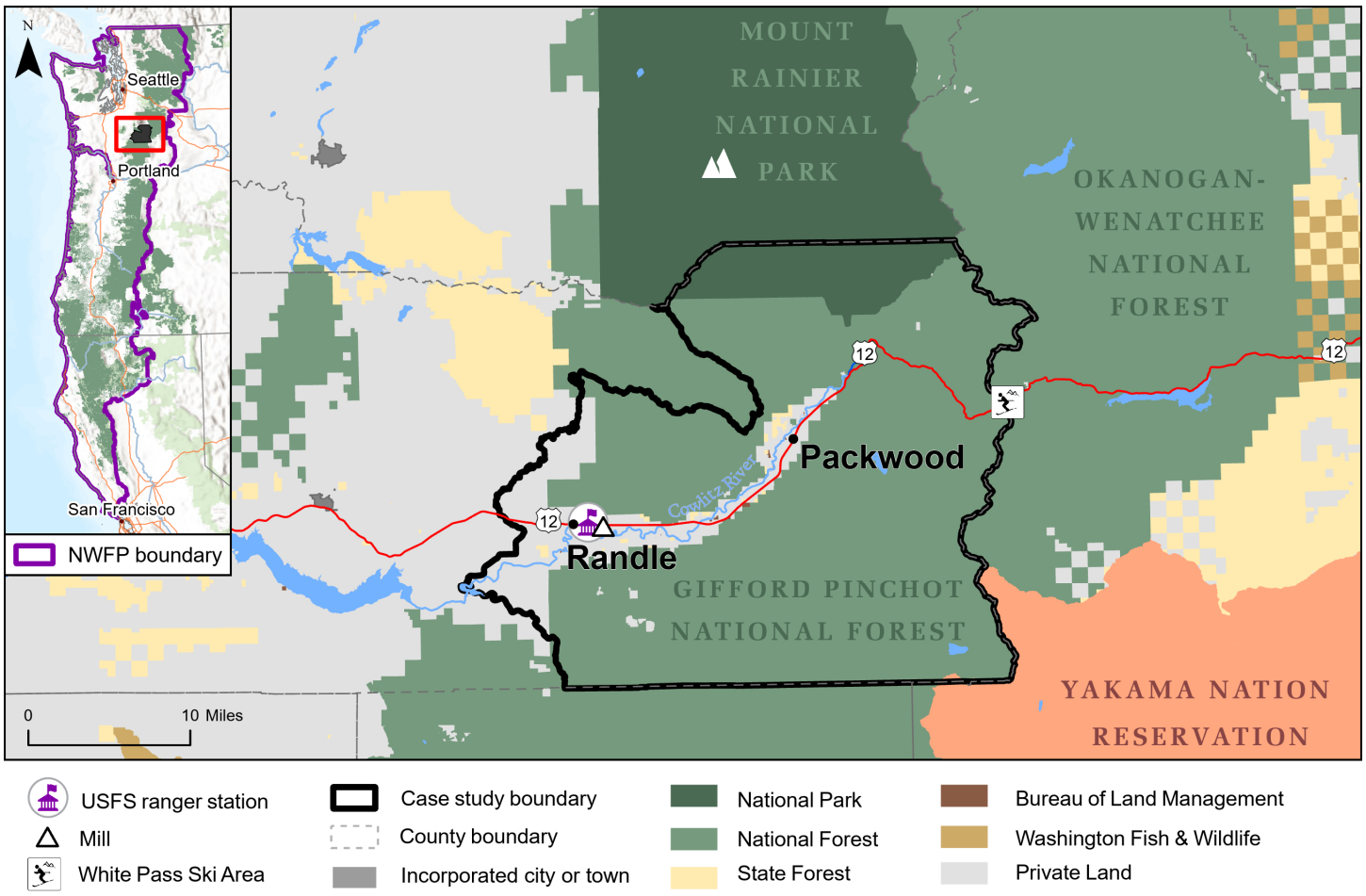

Figure 3.2. *Packwood-Randle case study area.*

Shared sense of place

Interviewees noted differences between Packwood and Randle. Packwood is situated directly south of Mount Rainier National Park, and interviewees suggested that Packwood's economy recently reoriented towards tourism. One interviewee commented that *"Packwood is pretty much a recreation town only."* Along US 12 through Packwood, there is a downtown area with a grocery store, shops, hotels, and restaurants.

Residents foresaw future developments in the area, including a proposed development at the old millsite for apartment-style housing.

Interviewees indicated that in Randle, agriculture and timber are important to the local economy. For example, one interviewee stated that *"Randle, you know, is honestly organic farms and dairies*." Hampton Lumber has been a major employer in the community for many years. The company operates a dimensions sawmill and a sister mill in Morton (approximately 20 miles away), known locally as the Cowlitz Stud Mills ("Randle, Washington," n.d.). Randle is more dispersed, and, in contrast to Packwood, it lacks a downtown business district. Randle has been relatively insulated from the recent increases in recreation and tourism experienced by Packwood.

Points of interest

Mount Rainier National Park

Mount Rainier National Park, established in 1899, is known for its picturesque scenery and its prominent scenic drives. Visitors from the cities of Tacoma and Seattle influenced the park's development due to their proximity (approximately a two-hour drive). The closest park entrance to the Packwood-Randle study area is the less-popular southeastern Stevens Canyon entrance, which is normally open from June through September ("Stevens Canyon Entrance," 2024). The park's most popular corridor, Paradise Valley Road, runs just 15 miles north of Packwood and links Packwood to Paradise Valley via Skate Creek Road (Forest Service Road 52). Skate Creek Road is popular for dispersed camping, but the route closes in winter ("Forest Road 52/Skate Creek Road," n.d.). In 2024, the Park Service implemented a new timed entry system for the park. This change could encourage visitors to use less popular entrances to Mount Rainier, such as the route passing through Packwood ("Timed Entry Reservation FAQs," 2025). From 1994 to 2023, Mount Ranier National Park received an average of about 1.9 million total visitors each year (National Park Service, n.d.).

Ohanapecosh, home to a former hot spring resort that operated from 1921 through 1960, is located near the Stevens Canyon entrance. Historically, the resort catered to individuals in poor health, as well as a small summer community of approximately 125 people who stayed in nearby national forest campgrounds and used the bathhouse (Catton, 1996). The Ohanapecosh area was first administered by the Forest Service, but in 1931 it was added to the National Park, and management was transferred to the Park Service. From 1938 through 1940, there were two Civilian Conservation Corps (CCC) camps in the area—one at Ohanapecosh and one at Packwood; they made improvements in this area of the park, built portions of Stevens Canyon Road, and constructed flood control infrastructure on the Nisqually River (Catton, 1996). In 1957, the Stevens Canyon Road was completed, connecting the eastern and western portions of the park ("Stevens Canyon Entrance," 2024). One interviewee noted that the Ohanapecosh area had always been a tourist destination, and that Mount Rainier had always been a big draw for recreationists.

White Pass Ski Area

The ski area is located on both the Gifford Pinchot and Okanogan-Wenatchee National Forests and is approximately 20 miles east of Packwood on US 12. The Yakima Valley Ski Club opened the White Pass Ski Area in 1953, two years after the road over White Pass was completed (Lewis County, 2024; Meyers, 2018). White Pass Ski Area expanded in 2008, and the lease covers 1,402 downhill acres and 11.2 miles of cross-country ski trails. The mountain is known for being a smaller, independently owned mountain (Donofrio, 2022; Thompson, 2024).

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forest in northern California, western Oregon, and western Washington. This section provides a summary of direct impacts of these events on the social and economic wellbeing of the Packwood-Randle study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and ongoing changes in the community's wellbeing following 30 years of the NWFP.

The Packwood Ranger District recorded its highest sale volumes in the late 1980s (Lewis County, 2024). Between 1988 and 1996,[1] timber harvest on the Gifford Pinchot National Forest (Figure 3.3) fell from 514.2 million board feet (mmbf) to a low of 11.3 mmbf, representing a nearly 98 percent decline (USDA Forest Service, 2025). From 1996 to 2023, harvests averaged 22.4 mmbf per year but varied between 1.7 mmbf (during the 2008 recession) and 41.6 mmbf, with a standard deviation of 11.9 mmbf.

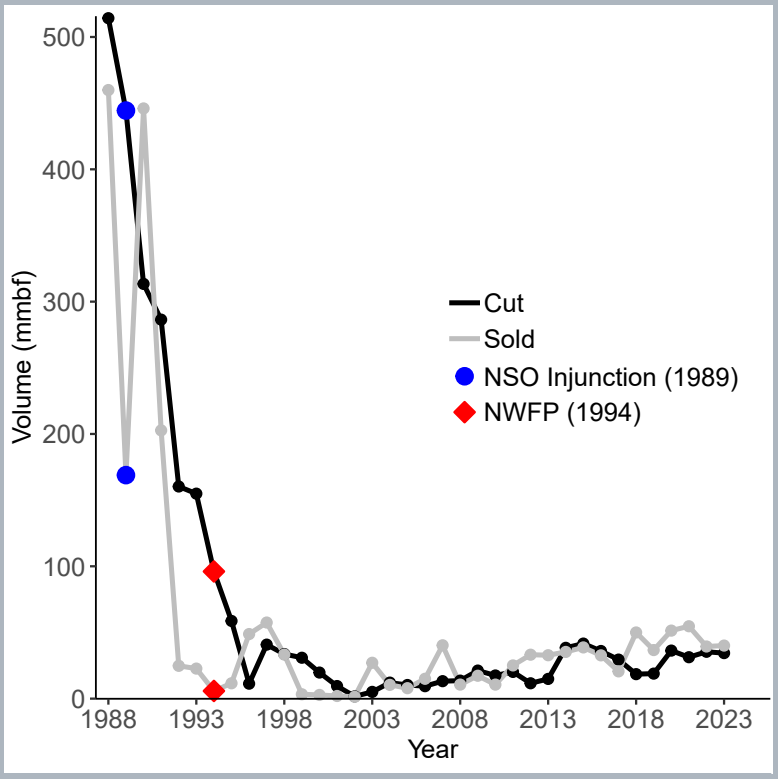

Figure 3.3. *Line graph showing timber harvest and sales ("cut" and "sold" volume in million board feet) for the Gifford Pinchot National Forest, federal fiscal years 1988 through 2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the NWFP indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

Between the end of World War II and the late 1980s, federal timber provided mills[2] in the study area with a relatively steady supply of large diameter timber. At that time, the timber industry (including the Forest Service and local mills) in Randle and Packwood employed 400 people full-time and 150 people part-time (Lenentine, 2009). Previous analysis of social and economic characteristics of Lewis County found that in 1990, the county had a high economic dependence on federal forest lands relative to other counties in the NWFP region (Adams, 2025).

Community members and Forest Service interviewees alike thought that the Northwest Forest Plan (NWFP) had significant, negative impacts on the Packwood-Randle study area. Packwood's sawmill closed in 1998, and two interviewees directly attributed the closure to decreases

1. USDA Forest Service cut and sold data reported in federal fiscal years.
2. The term "mill(s)" is used throughout to indicate any wood processing facility, including, for example, dimensional sawmills, shake mills, plywood and particleboard facilities, and paper mills.

in federal timber harvests associated with the NWFP. Approximately 220 jobs were lost due to the mill closure (Lewis County, 2024). Interviewees described the aftermath as a period of economic depression. In addition to job losses in the private sector, the Gifford Pinchot National Forest also reduced its staffing. Nearly half of the community relocated elsewhere (Lewis County, 2024). The Packwood Ranger District closed and consolidated with the Randle Ranger District to form the Cowlitz Valley Ranger District in 2003 (Lewis County, 2024). In 2004, the elementary schools in Packwood and Randle consolidated to Randle because of declining enrollment (Graham, 2004).

Reflecting on the 2000s and the aftermath of the implementation of the NWFP, one interviewee described Packwood as "*a sad place.*" Another stated that, "*everything had closed—the school, the mill, the ranger station.*" One interviewee recalled that Packwood residents were nostalgic for the past and would describe "*how vibrant the place had been with logging.*" However, another interviewee suggested that the NWFP forced change to the study area that may have happened eventually: "*I feel like the Northwest Forest Plan was the catalyst for a lot of things... [timber] jobs left and then [Packwood's economy] moved into tourism... [the NWFP] made that sort of happen. But, I mean, it [Packwood] sits in the context of Mount Rainier [and] has been a tourist destination since it formed as a [National] park.*"



34-inch Douglas Fir in Gifford Pinchot National Forest

Pre-NWFP history

Settlement

Indigenous inhabitants of the Cowlitz Valley Ranger District and Big Bottom CCD included the Táytnapam (also spelled Taidnapaum) people; present-day Randle and Packwood are within their traditional territories (Lewis County, 2024). Descendants of the Táytnapam are members of the present-day Cowlitz Indian Tribes and Confederated Tribes and Bands of the Yakama Nation. The Confederated Tribes and Bands of the Yakama Nation have ceded territory within the Gifford Pinchot National Forest (Healy, n.d.) and tribal members are active in working with the Forest Service on managing huckleberries and fish habitat (Woolington, 2025).

Although trappers, prospectors, and surveyors traversed the area in the mid-19th century, the earliest Euro-American settlers arrived in the valley in 1882 (Tompkins, 1933). President Grover Cleveland created the Mount Rainier Forest Reserve in 1897, which was later transferred to the Forest Service in 1905. The Forest Reserve Act limited new settlement in the areas around present-day Randle and Packwood until the valley areas were excluded from the national forest in 1914 (Jermann and Mason, 1976; "Gifford Pinchot National Forest," n.d.). A lack of suitable agricultural lands and poor transportation infrastructure also hindered settlement during the first half of the 20th century (Lenentine, 2009; Jermann and Mason, 1976).

From the outset, Euro-American settlers in the Packwood-Randle area relied on a combination of timber, tourism, and agriculture (Clevinger, 1942) although sheep and cattle grazing were also important through the 1920s (Jermann and Mason, 1976). The earliest timber activities in the study area supported clearing for agriculture and local needs. A portable sawmill arrived in 1899. By 1910, two stationary mills were operating in the study area (Tompkins, 1933). These operations were not very large, and large-scale commercial logging was not viable until the 1930s, following the construction of a modern road (Lewis County, 2023, 2024; Lenentine, 2009). This development led to significant changes in the community. For example, the populations of Randle and Packwood doubled between 1900 and 1937, in part due to migrants from Appalachia who were attracted to opportunities in the timber industry (Clevinger, 1942; Jermann and Mason, 1976). In 1935, the Packwood Lumber Company built a sawmill and power plant and provided the first electricity to the community (Jermann and Mason, 1976).

Post-World War II timber industry

During World War II, the Forest Service increased forest road construction and timber harvests in the Packwood Ranger District to meet demand for resources. The Packwood Lumber Company modernized its mill to increase production. After World War II, the local timber industry increased its reliance on the national

forest (Winkler, 2023), as the Forest Service increased its timber sale volume dramatically in response to the post-war housing boom (Lenentine, 2009).The expansion of the timber industry and the development of plywood manufacturing, led to new growth in the study area. During the 1950s, for example, Packwood supported several shingle mills and sawmills, including the Puget Sound Plywood Company (Lewis County, 2023). A 1959 magazine, The Lumberman (1959, p.175), listed three plywood plants in operation in the study area: Pac Ply Veneer Company in Packwood (processing 100 mmbf/year), Randle Veneer Company in Randle (108 mmbf/year), and the Cowlitz Veneer Company (100 mmbf/year). The Mount Adams Plywood Mill in Randle was also built around this time and in operation by 1963 (Washinton Department of Fish and Wildlife, 2010).

By the 1970s, the Packwood-Randle study area included at least four major wood processing facilities: the Packwood Lumber Company mill and the Cowlitz Stud Company (both owned by the Pacific Timber Company of Seattle), the Mount Adams Veneer Company, and R.D.W. Manufacturing in Randle (Haynes, 1983). Between December 1974 and September 1977, the Pacific Timber Company purchased 409 mmbf of timber (28 percent of total volume sold) from the Packwood and Randle Ranger Districts. In 1976, production at the Packwood and Randle mills consisted of 42 percent lumber and 54 percent plywood.



Logging in Gifford Pinchot National Forest, 1956

The Mount Adams mill in Randle closed in the 1980s. In 1988, the Washington Mill Survey (Larsen, 1992) listed five wood processing facilities in the study area: Gardner Mill Company (Randle), Pacific Lumber and Shipping/Cowlitz Stud Company (Randle), Pacific Lumber and Shipping/Packwood Lumber Company (Packwood), White Pass Cedar Products (a shake/shingle mill in Packwood), and West Veneer (Randle). By 1990 the Gardner Mill Company and White Pass Cedar Products had closed (Larsen, 1994).



Former Mill Site, Packwood

Packwood-Randle after the NWFP

Employment and industry

Community members generally thought that employment opportunities decreased in Packwood and Randle over the last 30 years. Nine of 13 interviewees said that employment had decreased, two mentioned that it had both increased and decreased, and two stated an increase in employment. Nine interviewees mentioned an increase in the tourism and service industries, and 10 mentioned declines in the timber industry locally since the implementation of the NWFP. Interviewees indicated that young people saw job opportunities in Randle as being *"the mill, ... the school, and... the gas stations and the coffee shops and some tourist service industry."*

When the NWFP reduced federal timber harvest in the 1990s, private and state forests supplemented timber supply. Nonetheless, Lewis County had a 50% decrease in overall timber harvest during this period (Lewis County, 2024). As timber supplies grew constrained in the early 1990s, the West Veneer mill in Randle closed (U.S. Congress 1993). Packwood Lumber Supply had primarily processed large-diameter old-growth logs from federal lands, and as federal timber harvest declined, the mill was unable to make up the enfolding deficit with other timber sources (Lenentine, 2009). The mill closed in 1998 and Packwood lost approximately 220 jobs. The mill's owner, Hampton Lumber, placed a restrictive deed covenant on the mill's property to prevent future use of the site for timber processing (Lenentine, 2009). As one interviewee pointed out, the closure of Packwood mill brought significant changes for Packwood: it changed *"not just who lives here, but what their life trajectory is going to be."* In 2022, developers from Battleground, Washington bought the mill site and intend to develop it for mixed commercial and residential use (Vander Stoep, 2022).

As of 2024, Hampton continued to operate sawmills in Randle and nearby Morton. These mills are limited to producing dimensional lumber, representing an overall decline in wood product diversity. Formerly, the study area hosted a joiner plant, veneer plant, tie mill, and shake mill. The Randle Mill processes 260 mmbf of lumber each year, primarily two species: Hemlock (60%) and Douglas-fir (30%) ("About Hampton Lumber," n.d.). In 2011, Hampton reported that 70% of their logs were sourced from private lands (Pearson, 2011). One interviewee mentioned that they thought that most of the mill's supply came from Oregon rather than locally. Despite these changes, timber remained important to the local community; as one interviewee put it: *"That [timber] is the traditional work of the people of Randle."*

While the mill in Randle continued to be an important source of local employment in 2024, interviewees thought that the role of timber was not as economically important as in the past. As one interviewee from Packwood said, *"Timber is very important—exactly how has shifted so much,"* indicating that timber has been particularly important culturally even as the economic importance declined. As another interviewee put it, *"there's still that emotional memory"* of timber production as a successful industry.

Tourism significantly increased in Packwood in the 2010s, and community members mentioned that it accelerated further during the pandemic. Between 2019 and 2022, visits to Packwood Visitor Center increased over 400 percent from 1,903 to 8,113 (Lewis County, 2024). One interviewee linked the expansion of the ski area to the discovery of Packwood by tourists: "*When White Pass Ski Area expanded.... that time's when Packwood started to be noticed a little bit more.*" In the 2020-2021 and 2021-2022 seasons, White Pass ski Area had its two busiest seasons, and season passes sold out each year (Thompson, 2024). Northbound traffic counts on US 123 to the Stevens Canyon Entrance of Mount Rainier National Park also increased from 98,037 in 2019 to 114,334 in 2021 (Lewis County, 2024).

Interviewees from Packwood described tourism as the "*lifeblood of the community.*" One interviewee described the relationship between locals and tourism as one of love and hate: "*[tourism] is the economy, but ...right at this moment, it has some really detrimental impacts to the locals.*" Some interviewees thought the problems were because Packwood "*is not set up to handle the amount of tourism that's coming through it.*" For example, one interviewee suggested that, "*[In the] grocery store on a Friday night in the summer, you can't get hamburger buns. … To know that until Tuesday, when the next delivery gets to Blanton's, there may not be eggs, milk, bread at the grocery store, because they're just simply sold out. … And while that might be a slight inconvenience for the tourists, it is crushing for the people who live there.*" Interviewees also suggested that second-home owners did not benefit the community: "*They're more like a weekend warrior. They come build a cabin, they spend the weekend, you know, then they're gone again.*" Overall, interviewees thought that Packwood was unprepared for the increase in tourism that had recently come to the town, and that tourism was not as beneficial to the community as they hoped.
Interviewees viewed tourism employment as inconsistent over the course of the year: *"There's the snow people, and there's the touristing during summer. ...What are we gonna do for the other six months?"* However, others noticed that there was less of a shoulder season to tourism than there used to be, and that there were *"a lot more people...steadily through the year."*

In contrast to Packwood, interviewees saw Randle as being less impacted by tourism: *"Randle is less affected [by tourism] … [there are] more mill workers and other small industry type work available in Randle versus Packwood."* However, interviewees did think that tourism could eventually have an economic impact on Randle.

Demographic and community changes

According to US Census data for the Big Bottom CCD, the total population in the Packwood-Randle study area declined by nearly one third between 2000 and 2020 (Table 3.1). Low-income populations in the CCD also declined by about 46 percent while retirement age populations increased from 18 percent to 39 percent of the population.

Table 3.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	3,328	2,882	2,348	Decreased
Low-income population*	1,473	1,176	677	Decreased
% Low-income population	44%	41%	29%	
Population aged 25-44	754	430	499	Decreased overall, but recovering
% Population aged 25-44	23%	15%	21%	
Population aged 65 or older	603	744	908	Increased
% Population aged 65 or older	18%	26%	39%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

Interviewees thought that the most significant demographic changes in the community were (1) an influx of outsiders purchasing new property and (2) the aging of the community. Eleven interviewees agreed that people from outside the area were relocating to Packwood and Randle. These interviewees collectively characterized new residents as retirees (n=7), teleworkers (n=4), and wealthy individuals (n=2). They also noted that many people who purchased property in the area did not live in Packwood or Randle full-time. Interviewees characterized these new property-owners as investors and vacation-home owners rather than full-time residents. As one community member estimated, *"I'd say at least 90% of people that come here are to invest [in] land, build Airbnbs and make money off it."* As another interviewee put it, *"They don't come here to live. The people who are buying second homes are hoping to retire here in the future."*

Interviewees agreed (n=8) that there are fewer families with children than there used to be in Packwood and Randle. Some saw this as linked to an aging population of retirees: *"if you look at the demographic, it just really shifted towards, you know, [people in their] 50, 60, 70[s]."* Interviewees thought that younger people typically left the area because of a lack of job opportunities, but that some returned home after trying to live elsewhere. Of those who stayed, they often did so to assist with aging family members or to work at the mill or schools.



Downtown Packwood, 2024

Housing and development

When the Packwood mill closed in 1998, many working-age families and individuals left the area, and many homes were converted to vacation homes or seasonal rentals. By 2000, approximately half of the homes in Packwood were seasonal rentals or vacation homes (Lewis County, 2024). Demand for vacation homes and short-term rentals has increased the cost of housing. Housing prices in Packwood increased 300% between 2012-2022 (Lewis County, 2024). Of 12 interviewees who commented on local housing, eight mentioned the increased costs of housing, and one characterized these changes as gentrification.

Housing issues related to vacation rentals were specifically mentioned by eleven interviewees. Four interviewees pointed out that demand for vacation homes and short-term rentals has also created a shortage of available housing for year-round residents. A common sentiment was that increased tourism has hurt housing availability: *"The availability of housing, I think, has declined because of the tourist industry. I mean, I have a neighbor that has a perfectly good house that gets rented out two or three times a month for a weekend and that pays their mortgage... instead of having a family that could, you know, rent…for a month for the same amount of money."* An online search revealed 312 short-term rental homes in the study area as of October, 2024.

These housing issues have also impacted local employers and their employees. Both the White Pass Ski Area and the Cowlitz Valley Ranger District in Randle have reported that the area lacks sufficient housing for year-round and seasonal employees (Lewis County, 2024). In 2024, five interviewees noted a lack of housing for employees, and one mentioned that employers purchased housing for employees because employees would otherwise be unable to afford local rental prices. Interviewees saw these changes in the rental market as contributing negatively to community well-being in both Packwood and Randle.

In response to these challenges, Lewis County initiated the Packwood Subarea Plan process (Vander Stoep, 2023a; Lewis County, 2024). As part of this planning process, the Lewis County government collected data about housing in Packwood. The study found that in 2024, only eight percent of the single-dwelling residential parcels in Packwood were owner-occupied, 14 percent were short term rentals, and 33 percent were vacation homes. While uses for the remainder of the parcels (45 percent) were not specified within the data, the county housing report suggested they were not primary, owner-occupied residences. Nearly half of the vacation rentals registered in Lewis County are in Packwood (Lewis County, 2024).

County planners expected Packwood's growth to remain high through 2030. The county estimated that approximately 1,200 people will live in Packwood and its surrounding neighborhoods by 2045, in comparison to the 1,073 documented in the 2020 census (Lewis County, 2024). The community well system in place in 2024 could accommodate approximately 229 more single-family connections without needing further improvements (Lewis County, 2024). As of 2024, there were 444 parcels of undivided vacant land that could be developed assuming adequate water supply and construction of new sewer (Lewis County, 2024; Vander Stoep, 2023a). Developers have also proposed to redevelop the mill site in Packwood as housing, which would require that a sewer system be constructed in downtown Packwood (Vander Stoep, 2022). Another potential barrier to housing development is US 12. The highway passes directly through Packwood's downtown corridor, but there are no current traffic calming measures, designed parking, or designated walking areas (Lewis County, 2024).

Community services

During peak timber harvesting in the 1980s, Packwood had a doctor, dentist, pharmacy, volunteer fire department, golf course, community hall, library, elementary school, four churches, several gas stations, laundromat, air strip, and 30 other local businesses (Lenentine, 2009). Between the late 1980s and early 2000s, some local businesses consolidated, and Packwood lost a grocery store, several gas stations, and business-centered services.

Following a tourism boom that began around 2010, the number of services began to recover. The number of restaurants increased and two new breweries were established in Packwood. Four interviewees mentioned that services (including restaurants, health care, gas stations, grocery stores, and personal or business services) were now more oriented toward tourists and were no longer meant for locals. As one interviewee put it, *"Things have come back now, big time, but it's not... [the] same kind of thing coming back like we had before. The things that are coming back now... [are for] rich people, you know, people with lots of money."* For example, in 2024, a new initiative was underway to create eight electric vehicle charging stations along the White Pass Scenic Byway (US 12), including one in Packwood and at White Pass Ski Resort (White Pass Scenic Byway, n.d.).

However, some new services *are* locally oriented. For example, the two new breweries often host social events for locals. A newly established health clinic offers another example of a locally oriented service. This clinic opened in 2024, after years without medical services in Packwood.

During the Lewis County Packwood Subarea Plan process, community members identified a need to attract and support a range of locally owned businesses, including pharmacy, dental, veterinarian, and other services. Community members also identified a need for more indoor, family-friendly facilities such as a gym, movie theater, and arcade (Lewis County, 2024). Community amenities in the Packwood-Randle study area are summarized in Figure 3.4 on the following page.



Downtown Packwood, 2024

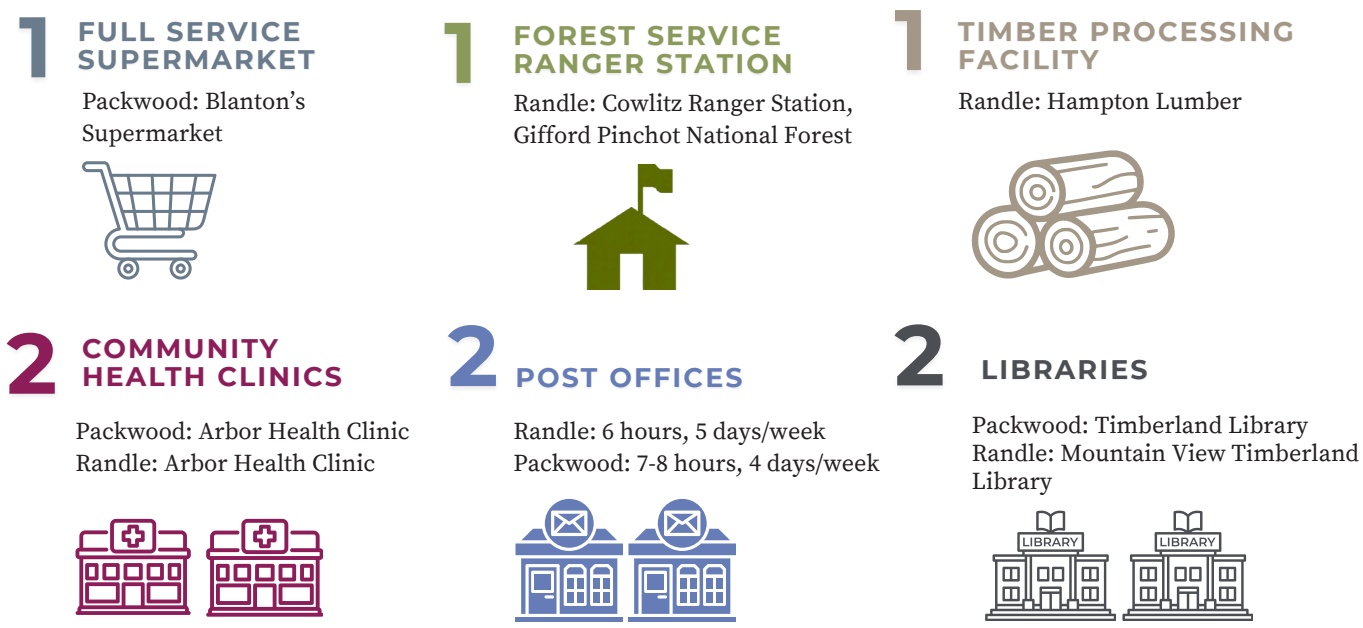

Figure 3.4. *Community amenities in the Packwood-Randle study area. Includes: one full-service supermarket (other locations that accept SNAP benefits, such as gas stations or convenience stores, not included), two community health clinics, two post offices, two libraries, one forest service ranger station, and one timber processing facility.*

Community governance

Unincorporated communities lack local governments. This poses challenges for the Packwood-Randle study area as the community is geographically distant and culturally distinct from the county seat, yet it depends on the county for services. Interviewees felt disconnected from the county government, and some described the relationship between the community and the county as contentious. One interviewee noted that many new residents were drawn to the community because it is rural and isolated. However, those same residents were often frustrated by the lack of services.

Although Packwood is not incorporated, one interviewee suggested that *"people always think that Packwood is incorporated because it behaves like a town."* Residents mentioned that Packwood could use more community cohesiveness and organization. As one interviewee put it: *"Packwood is a zoo, or a circus; we need a ringmaster."* For example, two interviewees mentioned that having an organized group or government could bring to fruition long-held plans to install a wastewater system in Packwood's downtown area.

Packwood does have many community organizations, including the Packwood Improvement Club, Livable Packwood, the Senior Center, the Gifford Pinchot Trash Force, Packwood Trail Project, the White Pass Country Historical Museum, and Friends of the Library. In contrast, interviewees did not think that Randle had as many community organizations aside from the local school.

Community relationship with the Forest Service

The relationship between the Forest Service and the community has been contentious since the Forest Reserve was established in 1897. Community members resented the new rules on grazing, logging, and access to the public domain (Jermann and Mason, 1976). Some interviewees repeated that this sentiment was still common; as one Forest Service employee put it: *"I've kind of gotten that sense that, you know, they [generational community members] feel like, it's their forest, … and we're just here for a while, and then we'll leave and …and, you know, they don't like all the rules."*

Of the 17 interviewees who commented on the relationship between the Forest Service and the community, three said it was positive, eight said negative, five said that the relationship depended on the district ranger, and five mentioned that they thought their local office was understaffed (results not additive). Community members frequently remembered particular district rangers who they thought did a good job by attending community meetings, being responsive to individual concerns of adjacent landowners, and dealing with concerns like illegal refuse dumping.

Others thought that the relationship between the community and the Forest Service changed positively since the Northwest Forest Plan, in part because the community changed. As one interviewee explained, *"if you shut down the sawmills, shut down the logging, say a third of the people moved out.... Those houses are still going to be occupied. And who are those going to be occupied by? Well, maybe retired people, maybe the preservationists who work in an area... So, it changes [the] structure of the community. So, the relationship between the community and the Forest Service may be changed, but it's because the community has changed."* In other words, the composition of the community changed over time more than the attitudes of individuals.



Mount Rainier viewpoint, 2010

We asked community interviewees about their views on Forest Service management priorities (Figure 3.5). Interviewees thought that the socioeconomic well-being of local communities was either a low priority for the Forest Service (67 percent), or that the Forest Service was neutral about it (33 percent). About half of the interviewees thought that incorporating public opinions into the planning process was also a low priority for the Forest Service, while only seventeen percent thought it was a high priority. Although interviewees thought that the Forest Service was either neutral or placing a high priority on climate change, only 33 percent thought that the Forest Service was prioritizing wildfire resilience.

The Pinchot Partners, a local forest collaborative, was considered among interviewees to be effective at working with the Forest Service. The group's mission is to "promote watershed health, create quality local jobs, and encourage sustainable recreation" (Pinchot Partners, n.d.). Interviewees described the Pinchot Partners as helping the Forest Service plan projects and integrate input from across different user groups with a focus on local jobs and forest health. The group historically worked on planning for projects related to restoring fish passage, huckleberry habitat, mitigating wildfire risks, and maintaining roads.

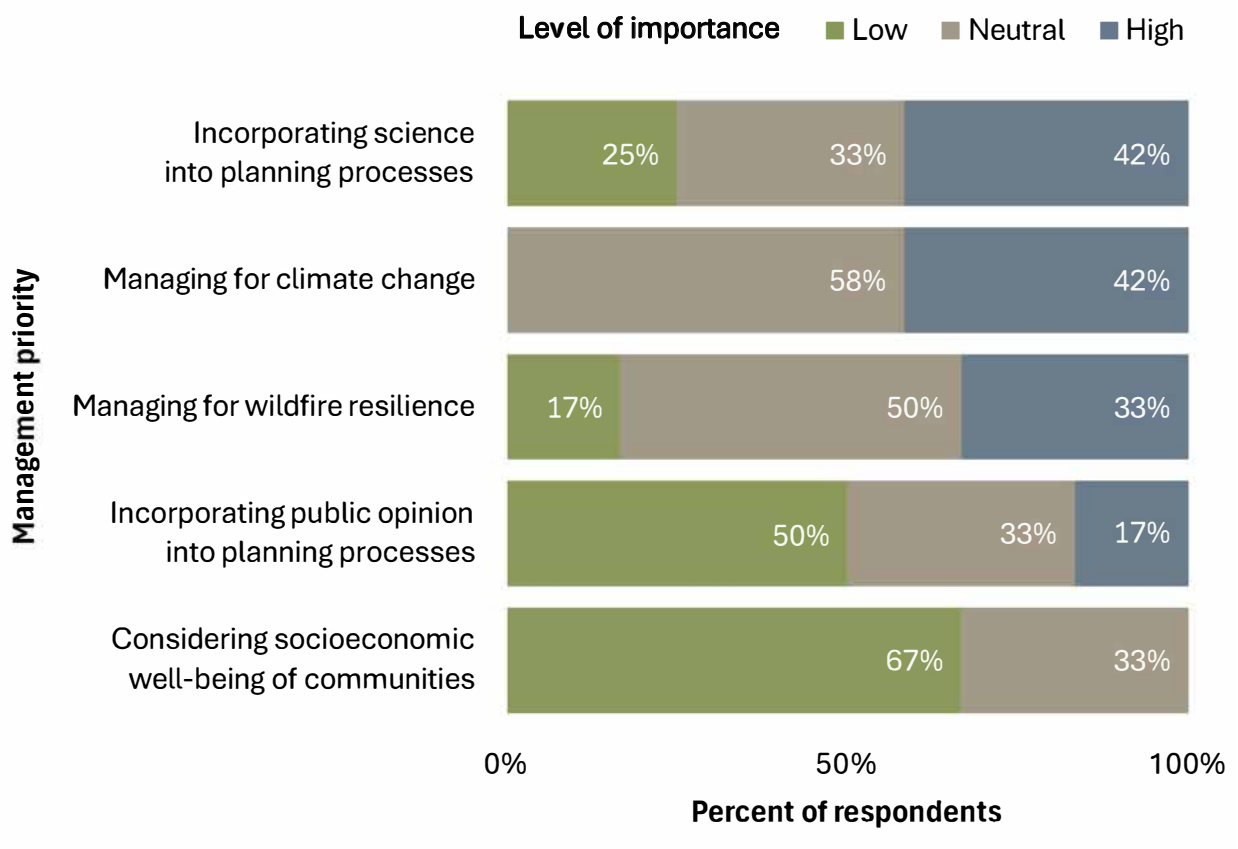

Figure 3.5. *Community perception of Forest Service management priorities (n=12). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

Community relationship with national forest lands

Interviewees agreed that the national forest—primarily its beauty and recreation opportunities—attracted both new residents and tourists alike. Interviewees ranked non-timber forest products, hunting and fishing, and timber as the most important aspects of their use of national forest lands (Figure 3.6). While the Cowlitz Ranger District timber program is briefly described above (see "Summary of local impacts of the NWFP"), below we discuss non-forest timber products and aspects of recreation, tourism, hunting and fishing (including forest access issues) described by interviewees.

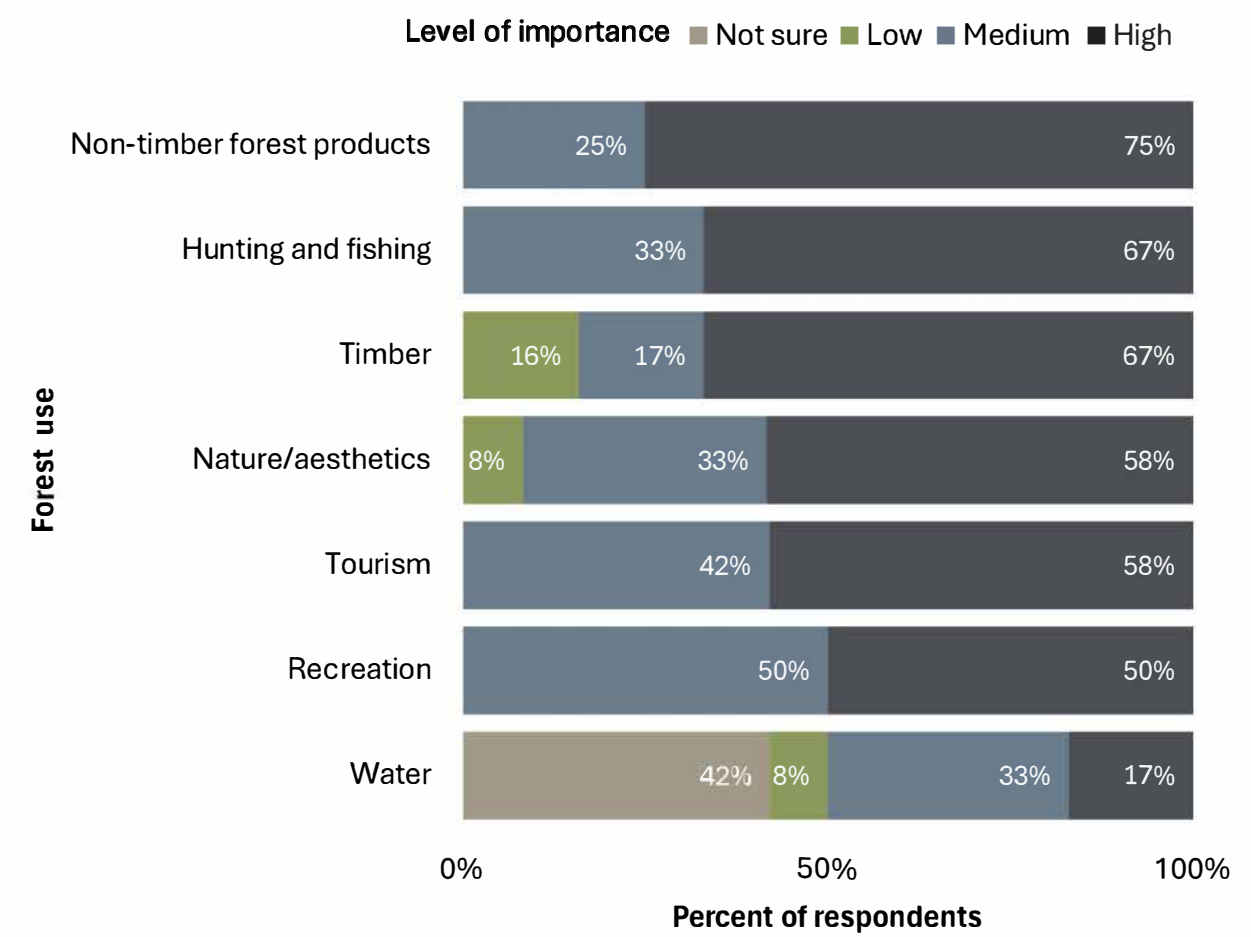

Figure 3.6. *Importance of national forest uses to community (n=12). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Non-timber forest products

Although interviewees mostly agreed that non-timber forest products were important to the community, only three interviewees discussed them at length. In 2024, the Gifford Pinchot National Forest had one of the largest special forest products programs in the nation, and, of the three ranger districts, Cowlitz Valley has the largest program. Forest products managed under the program include berries, beargrass,

salal, firewood, cascara, boughs (primarily Noble fir), and Christmas trees. In terms of commercial harvests, the highest value non-timber forest product on the district were Noble fir boughs. For example, between 2013 and 2023, the Cowlitz Valley Ranger District sold 5,394 tons of boughs for nearly $1.1 million with approximately $10,000 worth of boughs purchased by buyers from the study area (USDA Forest Service, 2023).

As of 2024, the Gifford Pinchot National Forest was the only national forest in the country with a "large-scale" commercial huckleberry permitting program (Woolington, 2025). In the 2023 season, there were 63,225 gallons of huckleberries sold for a total value of $94,837 (USDA Forest Service, 2025). One interviewee suggested that of all the non-timber forest products, huckleberries *"have the biggest buzz in political implications."* Huckleberries are contentious because of the broad range of interested parties, which include commercial, recreation, and Tribal interests in the species. As early as 1932, the National Forest formally set aside approximately 2800 acres of huckleberry fields for Native American use (Woolington, 2025). However, commercial pickers often encroach on huckleberry fields nominally protected for Tribes (Woolington, 2025). In 2024, the NWFP Federal Advisory Committee recommended a review of the program to ensure the protection of Tribal treaty resources, including limiting the commercial permitting program (NWFP Federal Advisory Committee, 2024).

According to interviewees, there was a sense among some locals that non-timber forest product collection has become more commercial over time, and that *"it's not left for the locals like it used to be."* As demand for non-timber forest products increased in recent years, the Forest Service began issuing permits. This annoyed some locals who felt like they should not have to pay for picking: *"Now, everything you do, the Forest Service wants to make you pay for it, right? But they don't give you nothing back."* One interviewee suggested that mushroom and berry picking also attracted commercial buyers to the study area. In 2023, the Gifford Pinchot National Forest issued permits for 20,545 gallons of mushrooms worth over $41,000 (USDA Forest Service, 2025). Over 484,000 pounds of bear grass worth over $48,000 was also commercially harvested that year.

Two interviewees mentioned that firewood collecting was also important for home heating in the study area. Although individuals can cut firewood for their own use, the district also issues contracts for commercial firewood sales. Over the past decade (2013-2023), the ranger district issued $53,210 of commercial firewood contracts for a total of 915 cords from 40 different sales (USDA Forest Service, 2023). Thirty of those sales were purchased by individuals or businesses local to the study area.

Forest management has shaped habitat for non-timber forest products. According to one interviewee, some forest products are less prevalent than before due to a decline in timber harvest following the NWFP. They cited a decline in the availability of noble fir boughs (cut from small trees in younger plantations) related to the lack of clearcutting and replanting. They also suggested that beargrass (dependent on larger canopy openings), and huckleberries (dependent on light availability) were less prevalent. Although the Forest Service has undertaken habitat enhancement projects for huckleberry, these actions have not successfully addressed the overall decline in huckleberry habitat resulting from larger forest-level changes (Woolington, 2025).

Recreation, tourism, and roads

Recreation in the national forest increased, in part due to spillover effects from Mount Rainier National Park. For example, interviewees suggested that the increasing popularity of Mount Rainier and the National Park Service's new reservation system have resulted in more hiking and recreation in the nearby Gifford

Pinchot National Forest. Community initiatives, such as the Packwood Trail Project, have also aimed to increase local recreational opportunities.

While hunting is an important activity locally, interviewees mentioned a decline in habitat for deer and elk: *"A lot of tourists come here to hunt, and as the Gifford Pinchot [National Forest] fills up with tourists, the locals go elsewhere to hunt."* For many locals, that elsewhere is just across White Pass on the Naches Ranger District in the Okanogan-Wenatchee National Forest.

Interviewees mentioned the following kinds of recreation were most popular: hiking (n=7), off-road vehicles (n=4), hunting (n=1), camping (n=1), fishing (n=1), high mountain lakes (n=1), and skiing (n=1). Scenic attractions in the area beyond Mount Rainier and the White Pass Ski Area include Packwood Lake and the Goat Rocks wilderness, caves and waterfalls near Randle, and High Rock.

Nine interviewees mentioned that forest roads and their maintenance were of great importance to the community. Some interviewees expressed annoyance over road closures, noting that many people use roads for recreation in the forest. They also mentioned that roads provide access for fire suppression during wildfires. One interviewee felt nostalgia for the pre-NWFP forest road system: "*[Its] brutally painful to drive around up there [after] growing up in it and seeing how nice they were... Roads with nothing wrong with them, but now they're so brushed in.*" Interviewees noted that this lack of maintenance was particularly hard for older people who otherwise may lack forest access. In 2024, interviewees expressed recent concern around roads in relation to firefighting and fire mitigation needs: *"People will be like, 'Why don't they just maintain all the Forest Service roads as fire blocks?' ...Those aren't maintained anymore."*

Five interviewees noted other maintenance issues. For example, they disliked the mess caused by dispersed camping and dumping in the forest, especially along Skate Creek road: *"it's really disgusting, like poop and toilet paper all over the place, and it's right on the water, and we have community groups that pick up trash, like, on a weekly basis out there, just because it's our community."* This challenge was especially visible to locals because of the increase in tourism during the pandemic.

Timber

Over the last decade (2013-2023), federal timber has supported very little local economic activity. For example, only two of 21 timber sales (excluding firewood, boughs, and pinecone sales) on the Cowlitz Ranger District were sold to businesses based in Packwood (USDA Forest Service, 2023), representing approximately four percent of the total timber sale volume. Another four sales were sold to a logging business in nearby Silver Creek (20 percent of sold volume), while the remainder (approximately 75 percent of sold volume) went to businesses along the I-5 corridor and beyond, between 85 and 185 miles away from the study area.



Yacolt Fire burn, 1902

Wildfire and other forest disturbances

Historically, large fires impacted the area around Randle and Packwood. In 1902, the Yacolt fire burned approximately 130,000 acres of heavily timbered lands across what was then the Columbia National Forest (Mack, n.d.; Fenby, 1914). As early as 1914, foresters commented that the area "is sure to be set afire sooner or later either by lightning or by the carelessness of one of the many fishermen, berry pickers, or other campers" (Fenby, 1914). In 1918, over 30% of the Randle District burned in what was known as the Cispus Burn, and there were other significant fires in 1929 and 1939 (USDA Forest Service, n.d.; Mack, n.d.).

Nevertheless, with a lack of large wildfires during the mid-20th century the Gifford Pinchot National Forest earned a reputation for being resistant to fire (Mack, n.d.).

In 2022, the Goat Rock fire came within two miles of Packwood and authorities closed US 12 from Packwood to the White Pass summit (Olympian Staff, 2022). The Packwood neighborhoods of Timberline, Goat Rocks, and High Valley were evacuated (Vander Stoep, 2023b), and many worried that they could lose their homes. Fortunately, no homes were lost; many interviewees credited a change in wind direction with saving the neighborhoods (Vander Stoep, 2023b). In total, the fire burned around 6,196 acres and resulted in forest closures through the following winter (Fairbanks, 2023).

According to interviewees, fire only became a concern in Packwood following the Goat Rocks fire. Only four interviewees thought wildfire management on the national forest was of high importance to the community. Six interviewees mentioned that community members thought that the fire was not suppressed sufficiently. There was debate among participants about whether fires should be fought in wilderness areas, such as where the Goat Rocks fire originated. Another community perception was that a lack of suppression allowed the fire to burn, and then when winds changed, the fire threatened Packwood: *"They let it burn for a month, and then conditions got right, and then they realized, oh, there's like nothing between here and Packwood, except for timber."* After the fire, more residents became involved in a local Firewise program (Vander Stoep, 2023b). In 2024, Lewis County adopted a county-level Community Wildfire Protection Plan, something they previously lacked (Brown, 2023; "Lewis County Hazard Mitigation Plan," 2024).

Five interviewees said that they were not aware of any Forest Service wildfire mitigation efforts in the area. Of the remaining four interviewees, only one mentioned an active wildfire mitigation project they were aware of; all others mentioned projects that they thought were in planning stages or assumed were happening. Some thought that it was possible that the Forest Service was conducting more work, and that the office was not as good at communication: *"Transparency is probably another one that ... [we] do have a problem with, because the people that come in to work the Cowlitz Valley Ranger District, a lot of the higher ups, are not from our area and [they] do not communicate very well with the local community."* Community members seemed to want more communication from the ranger district to understand what wildfire mitigation efforts the agency was undertaking.

Other forest disturbances mentioned by interviewees included landslides (n=5), flooding (n=2), drought (n=1), and tree mortality due to insect infestations (n=1). Because of their location along the Cowlitz River floodplain, Randle and Packwood flood with relative regularity. Since the 1990s, the river gauge at Randle has reported a major flood event (over 22 feet) approximately once every four years, most recently in 2011, 2015, and 2021 ("Cowlitz River at Randle," 2025). However, none of our interviewees suggested these floods were related to forest management.

Community futures

When asked about the next 10 years, four interviewees mentioned wildfire and climate change as issues they saw getting worse in the future. Additionally, there were concerns that increased recreation would amplify wildfire risk, as many of the area's wildfires are started by people.

Nine of 13 interviewees mentioned recreation and tourism as important issues in the community and thought that current trends would likely continue. These include increasing recreation and impacts on Forest Service lands, as well as increased needs for services catering to tourists. Some interviewees thought that a proposed new wastewater system might be constructed, allowing for increased development in downtown Packwood. This development might bring greater density, more services, and public bathrooms in the downtown area. Some people in Packwood saw the town as a *"pre-Leavenworth"* [a tourist town in north-central Washington] or see a potential future as a *"northern Aspen"* [Colorado]. One interviewee thought that places like Randle would become *"a suburb of the I-5 corridor"* because of the draw to recreation and nice amenities: *"It's too, too nice out here, people are gonna keep coming."*



Packwood Lake, 2024

Conclusions and case study highlights

The Packwood-Randle community experienced significant decline in social and economic well-being following the implementation of the NWFP. However, the community remains tied to the national forest through the various ecosystem goods and services it provides. Since the implementation of the NWFP, recreational opportunities and tourism-related amenities on the national forest have gained in local economic importance but their development faces significant constraints.

Packwood-Randle key forest management takeaways

- Timber remains culturally important for many long-time residents and the post-NWFP decline in community wellbeing plays a significant role in the community's social memory.
- Some residents suggested that since the implementation of the NWFP, the Forest Service has neglected to maintain its access roads. This lack of maintenance was disappointing as it limited forest access for older and differently-abled individuals.
- Although negative attitudes toward the Forest Service are retained by some residents, demographic changes within the community have softened this hostility.
- Although the local economy has re-orientated toward providing recreation, tourism, and vacation home (i.e. amenity migrant) related- services, the community faces significant infrastructural constraints to further development:
    - A shortage of low-income housing for year-round and seasonal employees hinders local businesses.
    - Limitations on existing waste-water infrastructure constrains development of worker-housing, additional vacation homes, and tourist lodging.
- Given the recent uptick in wildfire activities, community members were interested in learning about Forest Service plans for wildfire mitigation activities in the study area.

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Rainbow in Randle

For full report, visit:
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Ecosystem Workforce Program

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Chapter 4: Naches, Washington



Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns

Case study facts

Population (2020): 8,586

Location: Yakima County, Washington

Federal forest lands (61% of study area): Okanogan-Wenatchee National Forest, Naches Ranger District

Climate:
Average Annual High: 64.3 °F/Low: 37.3 °F
Annual Precipitation: 8.01 inches;
Snowfall: 20.3 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<15,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 4.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Naches study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

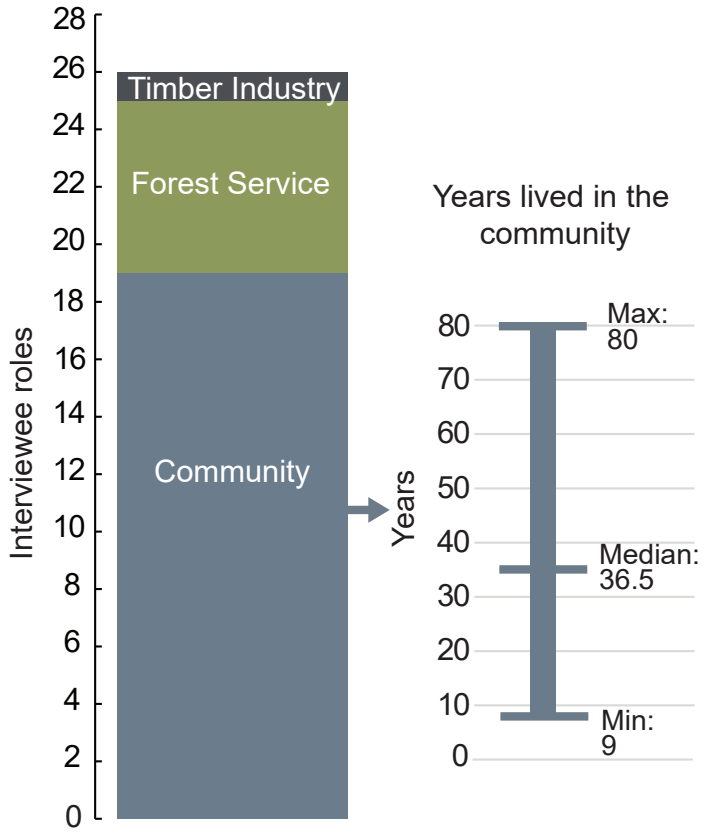

Figure 4.1. *Graph of interviewees by role and number of years lived in the community. Our sample included 19 community members, six Forest Service employees, and one timber industry representative. Community interviewees lived in the study area for a minimum of nine years, a maximum of 80 years, and a median of 36.5 years.*

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Study area and geography

The Naches case study focused on the Naches Ranger District in the Okanogan-Wenatchee National Forest. We spatially defined the community as the Northwest Yakima Census County Division (CCD) (Figure 4.2). The Northwest Yakima CCD includes the town of Naches and the unincorporated area of Gleed, as well as smaller settlements along US Route 12 (US 12) (White Pass) and State Route 410 (SR 410) (Chinook Pass) corridors. Naches is located along the Naches River, a tributary of the Yakima River that feeds into the Columbia River. The county seat is Yakima, which is located approximately 14 miles southeast of Naches. The Naches Ranger Station is located in the town of Naches. In addition to Forest Service-managed lands (61 percent of the study area), the Washington Department of Fish and Wildlife and the Department of Natural Resources all manage significant landholdings within the CCD. Forests in the study area are dominated by dry mixed conifer forests of Douglas-fir, ponderosa pine, and grand fir, with some higher elevation mountain hemlock and subalpine fir.

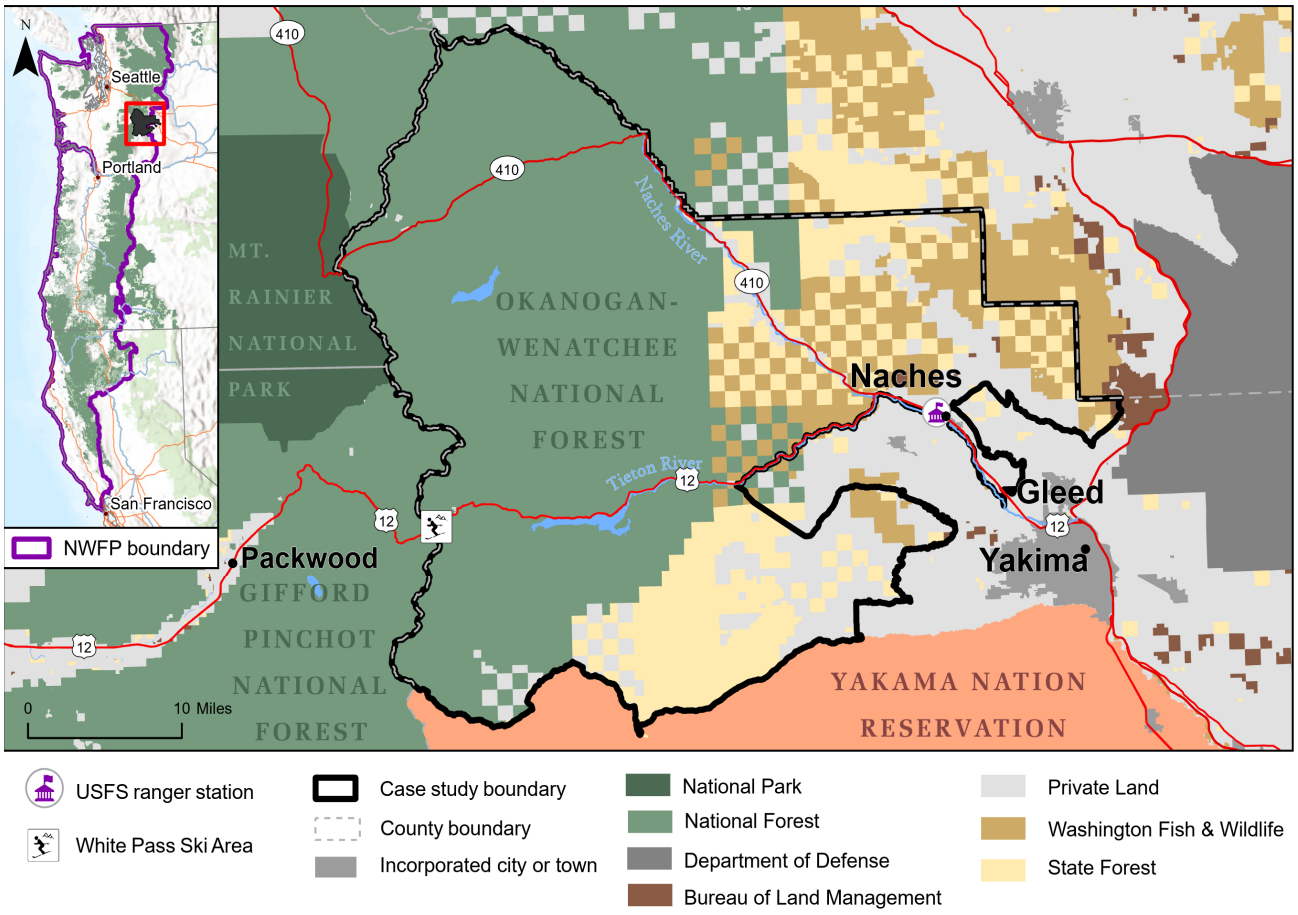


Figure 4.2. *Naches study area. State forest managed by Washington Department of Natural Resources.*

Shared sense of place

In terms of community character, interviewees from Naches felt that their town was socially and economically connected to nearby Yakima: *"we're not a big tourism [town]; we're a bedroom community of Yakima."* Another interviewee stated that *"the community itself [Naches] is basically now an agricultural*

community or a bedroom community for Yakima." Interviewees suggested that the community's small-town feel made it appealing to families looking to get out of Yakima. Along the US 12 and SR 410 corridors, Rimrock Retreat, Nile, Cliffdell, and Goose Prairie have mostly part-time residents with a few full-time residents. In 2024, there were approximately 500 recreation residences on land leased from the Forest Service between White Pass and Chinook Pass, as well as second homes and full-time private homes along private land on each of these roads (Residents of the Highway 410 and 12 Communities, 2005). In comparison to Naches and Gleed, these areas are much more dependent on recreation and have not had a substantial timber industry presence since the 1940s or earlier.



Yakima Peak, Chinook Pass, 1920-1980

Points of interest

Mount Rainer National Park

At 14,411 feet, Mount Rainier is the tallest and most heavily glaciated peak in the Pacific Northwest. The mountain has been a major destination for tourists since it became the nation's fifth national park in 1899. The park receives almost two and a half million visitors per year. The park is accessible from five entrances: Nisqually (southwest), Stevens Canyon (southeast), White River/Sunrise (northeast), Carbon River (northwest), and Mowich Lake (northwest). The Nisqually entrance is the most popular and provides access to Longmire and Paradise, the most popular destinations. Today, 97% of the park's 236,381 acres are congressionally designated wilderness.

White Pass Ski Area

The White Pass Ski Area is located on both the Gifford Pinchot and Okanogan-Wenatchee National Forests. The Yakima Valley Ski Club opened the White Pass Ski Area in 1953, two years after the road over White Pass was completed (Lewis County, 2024; Meyers, 2018). After twenty years of contestation, the White Pass Ski Area was expanded in 2008 (Lewis County, 2024). The lease covers 1,402 downhill acres and 11.2 miles of cross-country ski trails. The mountain is known for being a smaller, independently owned ski area (Donofrio, 2022; Thompson, 2024).



View from William O. Douglass Wilderness

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forests in northern California, western Oregon, and western Washington. This section provides a summary of the direct impacts of these events on the social and economic wellbeing of the Naches study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and on-going changes in the community's well-being following 30 years of the NWFP.

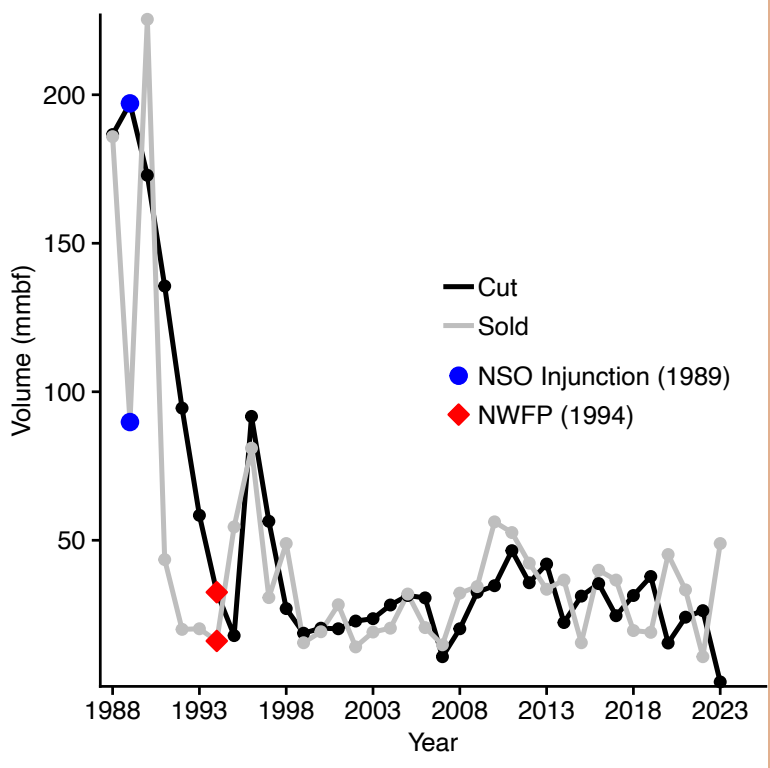


Figure 4.3. *Line graph showing timber harvest and sales ("cut" and "sold" volume in million board feet) for the Wenatchee National Forest, federal fiscal years 1988 through 2008 and then the Okanogan-Wenatchee National Forest 2009-2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the NWFP indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

In the late 1980s, timber from the Wenatchee National Forest supplied the Layman Lumber mill in Naches, as well as Boise Cascade's facility in nearby Yakima. Harvests on the Wenatchee National Forest fell from 197.1 million board feet (mmbf) in 1989 to 17.9 mmbf in 1995, a decline of 91 percent (Figure 4.3) (USDA Forest Service, 2025).[1] From 1996 to 2008, harvest volumes varied between 91.7 to 10.8 mmbf, averaging 30.9 mmbf annually. Both Layman Lumber and Boise Cascade ceased operations by 2006.

In 2009, the Wenatchee National Forest merged with the Okanogan National Forest and combined volumes averaged 29.5 mmbf annually through 2023. This mean annual harvest volume for the merged forests represented less than 10 percent of the combined Okanogan and Wenatchee National Forest harvest volumes for fiscal year 1989 (USDA Forest Service, 2025).

Community interviewees generally agreed that the NWFP significantly impacted the local timber industry in Naches. Four community interviewees directly associated

1. *USDA Forest Service cut and sold data reported in federal fiscal years.*

the NWFP with the loss of local mills[2] in both Naches and Yakima. As one community member succinctly stated, *"Layman's [Layman Lumber, a local sawmill] closed because of the hoot owl,"* implying that logging restrictions associated with northern spotted owl habitat conservation caused the mill to close. Interviewees nevertheless saw Naches—and the Yakima Valley generally— as being resilient to these impacts on the timber industry because of the continued importance of agriculture in the study area. As one interviewee explained, *"I'm sure there was loss in revenue due to the timber... Maybe from taxes and forestry side of it, but the mill was not the predominant economic driver... for Naches and Yakima."*

Previous analysis of social and economic characteristics of counties in the NWFP region found that in 1990, Yakima County's dependence on federal timber was equivalent to the region's overall dependence (Adams, 2025). Before the NWFP, the Naches Ranger District was a *"huge cutter... I think our [timber target] cut was 78 [mmbf], but we were cutting 110 [mmbf] there, which is way too much, I'll admit, and we all knew it at the time and complained about it, but it went away to nothing. It just, poof."*

Interviewees considered the Naches Ranger District to be ecologically distinct from other areas of the NWFP, and some interviewees noted that management strategies created for "west-side" forests were being inappropriately applied to "east-side" forests:[3] *"you look at Washington, it's a biodiverse area. So each forest is just going to be so different. Like, how you manage the Naches Ranger District is not how you're going to manage [districts on] the Mount Baker Snoqualmie [National Forest]."* Interviewees also linked NWFP management strategies to changes in forest composition and wildfire behavior and management. As one interviewee put it, *"I know that the intent…. of the Forest Plan [NWFP], was to return the forest back to a natural [condition], some picture they saw in 1883... It has grown back up into a jungle, which is very, very hazardous to fight fire in. And that's part of why these fires get so large."* This view is consistent with the 2004 social and economic monitoring of the Naches community, in which interviewees linked then-current pest infestation, dead trees, and wildfire to forest policy (Dillingham et al., 2008).



Naches Ranger Station, 1957

2. The term "mill(s)" is used throughout to indicate any wood processing facility, including, for example, dimensional sawmills, shake mills, plywood and particleboard facilities, paper mills.

3. The term "west-side" is frequently used to talk about forest west of the Cascade divide and conversely "east-side" refers to forests east of the Cascade divide within the Pacific Northwest Region. Although the Wenatchee National Forest is an east-side forest, the entire forest is within the boundaries of the NWFP. It was additionally exempted from the 1994 21-inch rule that prohibited east-side national forests from harvesting of trees over 21-inches diameter (Hessburg et al., 2020).

Pre-NWFP history

Settlement

The peoples of the Yakama Nation have lived in the Yakima Valley since time immemorial. The confederated tribes and bands of the Yakama Nation include the Klikitat, Palus, Wallawalla, Wenatchi, Wishram, and Yakama Peoples (among others) (Wester, 2014). In 1855, the 14 tribes and bands signed a treaty with the United States, granting them a 1.3-million-acre reservation. The reservation, adjacent to the study area, encompasses much of the lower Yakima Valley, as well as areas to the west and south.

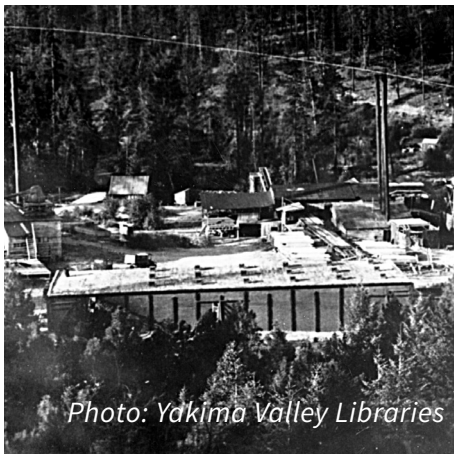
Euro-American settlement of the study area began in the 1860s with the arrival of sheep and cattle ranchers who drove livestock into the forests in summer and back to the valley in winter (Wissmar, 1994). Euro-American settlement of the Yakima Valley increased rapidly when the Northern Pacific Railroad reached Yakima in 1884 and crossed the Cascades in 1887, allowing significant expansion of ranching and agriculture (Drennan, 2013).

As a result of increasing agricultural demand for water in the late 1800s, private irrigation companies began to construct irrigation canals and ditches in the valley (Drennan, 2013). From 1909 to 1933, the Bureau of Reclamation built six major dams and extensive canals to provide irrigation for the Yakima Valley (Drennan, 2013). This irrigation scheme was successful in attracting additional settlers and increasing agricultural production in the region.

From 1880 to 1930, grazing was a more significant use of forest land than logging (Wissmar, 1994). Small-scale burning of meadows and shrublands by Indigenous peoples and Euro-American ranchers was common from the 1850s through the 1920s (Wissmar, 1994). This practice was criticized by the Forest Service and agriculturists, who thought it contributed to erosion and sediment in waterways (Wissmar, 1994). In 1905, a grazing allotment system partially resolved conflicts between farmers and livestock grazers by designating grazing areas (Gossett, 1964).

In 1910, elk were reintroduced to the forest following their extirpation in the 1880s (Washington Department of Fish and Wildlife, 2002). This reintroduction further limited grazing, as elk competed with livestock for forage (Gossett, 1964). Sheep and cattle grazing continued to decline in the early part of the 20th century. Wissmar (1994) estimated that by 1930, sheep grazing had declined by 90 percent from its peak around 1900.

The timber industry in the Yakima Valley initially developed to supply wood for fruit boxes (Mason and Lippke, 2009). As transportation improved and the railroad came to Yakima, the agricultural export market expanded, as did the demand for fruit boxes. In the late 1910s and into the 1920s, new road infrastructure along what would later become the SR 410 corridor enabled new investments in the timber industry, including the development of the Nile Mill and another mill in the nearby Rattlesnake Creek area, which burned down in 1921 (Gossett, 1979). In 1935, the Naches Sawmill opened. This mill processed ca. 15,000 board feet per day in 1936 and eventually increased production to ca. 60,000 board feet (MacNeil, 2023). In the late 1930s, the industry began to consolidate, with Cascade (later Boise Cascade) gaining an interest in the study area (Gossett, 1979).



Nile Sawmill, 1931

Post-World War II timber industry

After World War II, logging and sawmilling became very important to the upper Yakima Valley, including Naches. Post-war logging was mostly on federal lands, as private lands had already been heavily logged by this time (Gosset, 1979). The primary species processed were ponderosa pine and Douglas-fir.

During the 1950s, two brothers opened Layman Lumber in Naches (Associated Press, 2006). In 1960, the mill employed around 100 people, including forest workers, and operated two shifts (MacNeil, 2023). Around 1962, timber harvests in the Naches area increased, but the industry began consolidating operations. In 1965, Boise Cascade (which also operated a mill in Yakima) closed its Naches sawmill and box factory, resulting in a loss of employment for more than 100 people (Wissmar, 1994). However, in 1981, Layman built a second mill in Naches west of US 12. This mill processed smaller diameter white fir, pine, and Douglas-fir (MacNeil, 2023).

Naches after the NWFP

Employment and industry

When asked about changes in local employment over the last 30 years, interviewees thought that employment opportunities had decreased (n=12) or had not changed (n=2). Twelve interviewees (46 percent) connected changes in employment to declines in the timber industry. However, seven interviewees (27 percent) mentioned the ongoing presence of agriculture, and five (19 percent) mentioned tourism as factors helping to insulate the community from the loss of timber industry jobs.

In 2006, Layman Lumber closed its operations in Naches. Mill owners blamed low timber supply for the closure (Associated Press, 2006); however, interviewees in 2024 also blamed the closure on poor management, outdated equipment, and ownership turnover after the original owner's death. One community member stated that the mill was never a source of high-income jobs for the community: *"working for the mill was only a lower-middle class job."* Around this same time, Boise Cascade's Yakima facility also started closing in stages—first, the large-log mill in 2004, second, the small-log mill in 2005, and third, the plywood mill in 2006 (Wilma, 2006; Dillingham et al., 2008).

Interviewees noted that the study area had other forestry workforce challenges. Specifically, the industry faced difficulties attracting new loggers and log truck drivers. As one person who worked in the industry noted, *"We work with one guy... he's a senior citizen.... there's a lot of reasons why it's not a job kids are going into anymore."* Another person familiar with the industry agreed: *"It's like the log truck drivers are age classing out and you're not getting in the next generation."*

As of 2024, Yakama Nation's Yakama Forest Products mill was the largest producer of wood products remaining in the Yakima Valley. The mill processes both large- and small- diameter logs (Dillingham et al., 2008). However, the mill primarily processes timber from the reservation's 480,000 acres of commercial forest (Fiander, 2024).

Although the timber industry played a large role in the history of the Naches community, agriculture was the dominant industry. In Naches, interviewees mentioned Allan Brothers (fruit) and Rowe Farms (fruit packer) as the two largest private-industry employers in 2024. Because of the economy's stable agricultural foundation, many community members thought that the study area was more insulated

from changes in the timber industry in comparison to other communities in similar geographies. One interviewee suggested that:

> *"[Naches is] not like Bend, Oregon, where, when the mill shut down, there was nothing else...They had nothing, they needed recreation, they were absolutely desperate for something. Yakima's never had that desperation. So, recreation and things like, you know, the Forest Service and the timber industry, yes, they're, they're part of it, and everybody wants them, but ...they've never had that same make or break factor."*

However, some interviewees thought that the loss of timber revenues made the Yakima Valley more dependent on agriculture as an industry. As one interviewee surmised, *"when we lost the sawmills, that was big to the community... but the orchards are coming in and replacing that."* While Naches is geographically a gateway to the nearby national forest and Mount Rainier National Park, interviewees from Naches proper did not understand themselves to be a tourism-dependent town. Nonetheless, interviewees from the SR 410 and US 12 corridors did view themselves as dependent on tourism. SR 410 (closed seasonally) connects Naches to Mount Rainier National Park (approximately 45 miles from Naches), while US 12 connects the study area to the White Pass Ski resort (approximately 40 miles from Naches).

Demographic and community changes

Interviewees thought that the largest demographic changes to the community involved new people moving to the valley and the continued growth of the Latine community. Between 2000 and 2020, the population of the Naches CCD grew by approximately 550 individuals (Table 4.1). During this same time period, the percentage of the population aged 25 to 44 decreased by 5 percent while the percentage of the population aged 65 or older increased by 10 percent.

Table 4.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	8,029	7,968	8,586	Increased overall, but variable
Low-income population*	2,230	2,779	2,496	No clear trend
% Low-income population	28%	35%	29%	
Population aged 25-44	2,254	1,719	1,961	Decreased overall, but recovering
% Population aged 25-44	28%	22%	23%	
Population aged 65 or older	926	1,242	1,856	Increased
% Population aged 65 or older	12%	16%	22%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

Eleven interviewed community members agreed that, in 2024, new people were moving to Naches. These interviewees described new people as retirees (5), families (3), wealthy (2), and teleworkers (2). Three people mentioned that they thought new residents were coming from cities or urban areas. Interviewees thought that newcomers were attracted to Naches for various reasons, including the community's reputation of safety as well as their location as the *"last town before the mountains."*

While new people have been moving to Naches, community members disagreed as to how the structure of the community has changed over the last 30 years. Three community members thought that there was a decrease in the number of families with children, three thought there was no change, and one thought it had both increased and decreased.

Community member interviewees noted that younger adults have decided to stay in Naches or return to raise families. However, the rationale for younger people to return to where they grew up is different from in the past: *"it's not the same as it was before. People would come back to run, to run a family business, or they would stay to run a family business. Now, those same people that come back, they often want more than that...They do want some recreation...[and] social opportunities."*

The Yakima Valley has long had a large Latine community. Valley agriculturalists began recruiting Mexican workers through the Bracero Program during World War II, an agreement between Mexico and the US for Mexican workers to temporarily come to the US for agricultural work (Darian, 2006). According to interviewees, the program established a long-term relationship between Yakima Valley farmers and Mexican laborers. In the 1970s, the second wave of Mexican workers came to the valley, most from Michoacán. According to an interviewee, approximately a quarter of the school-age children in Naches are Latine.[4] Many Latine families now take advantage of local forest amenities: *"it's the Hispanic community, which has grown dramatically here, has started to really use the mountains...just in the last seven or eight years, it's a lot more Hispanics up around Rimrock Lake [that are] camping."*

Housing and development

Twelve respondents agreed that both the availability and affordability of housing decreased over the last 30 years. Five interviewees specifically mentioned that the lack of available housing was a problem for Naches, and four interviewees discussed high costs of housing. Interviewees noted that many people perceive Naches as a highly desirable community to live in, whereas *"Yakima is tough—there's a fair amount of gang [activity] and crime."* However, interviewees suggested that housing availability was a significant issue deterring the community's growth: *"It's primarily how tight it [housing availability] is. There's people that are always looking to move out to Naches."* Four interviewees commented that houses in Naches did not stay on the market for more than a week before selling. Nonetheless, three interviewees noted that these increases in housing costs corroborated what they perceived as national trends.

In comparison to the town of Naches, the SR 410 and US 12 corridors had different housing issues. Along these corridors, recreation and summer homes were more dominant, whereas Naches had more full-time residents. Over the last few years, housing availability in these areas was further constrained by the rise of short-term vacation rentals. As one interviewee said, *"There's one that was … full time residents, sold to somebody else, they used it as a rental, they sold it to a person who had the Airbnb next door, now it's an Airbnb."* An online search revealed 51 short-term rental homes in the study area as of October, 2024.

4. Naches Valley High School lists "Hispanic" students at 24.6% of total student enrollment: https://reportcard.ospi.k12.wa.us/ReportCard/ViewSchoolOrDistrict/103169

There has been an ongoing debate in Naches about growth—while some residents supported the idea of increasing housing (via new construction) and revitalizing the downtown area, others worried that new development would compromise the town's values or bring in lower-income residents. Interviewees in Naches frequently spoke of how they valued the town as a quiet and safe place: *"It's a place where people care about each other, that you know, you don't have to necessarily worry about crime...That's kind of the allure."*

This ongoing debate has played out at the level of town council elections in Naches. In the 2023 election, there was considerable turnover on the town council. Interviewees reported that this was the result of debates over new developments in the town. While the mayor at the time supported a new development, many locals rallied to oppose it. One resident was quoted in the paper as saying: *"Do we need to grow? Absolutely not. We've lived there for 40 years and there's been no change"* (Martinez, 2023).

Community services

Interviewees mostly agreed that services (including restaurants, health care, gas stations, grocery stores, and personal or business services) had generally decreased in the study area (Figure 4.4 summarizes significant amenities). However, this decrease may be related to the study area's proximity to Yakima which, as a metropolitan city, offers a wide variety of services.

Interviewees pointed out that downtown Naches suffered economically when US 12 was rerouted away from downtown in 1938. As a result of the reroute, new businesses opened along the highway, and the downtown area declined. When Layman Lumber closed in 2006, downtown businesses experienced another decline. In 2024, there were still many vacant storefronts. When asked about local businesses in the downtown area, interviewees most frequently mentioned Cot's Peak Coffee, which is owned by a local church. There are also a few restaurants and bars in the study area. As one interviewee described, *"Naches has no shortage of drinking facilities."* Interviewees thought that businesses in Naches had declined in quantity as well as the quality of products and services after the closure of Layman Lumber. For example, one interviewee mentioned a gas station by the mill that chose to raise prices to compensate for the decline in business rather than to find another business model.

One interviewee observed that businesses along the US 12 corridor had also declined. Of the three main businesses in that area, *"they're multifaceted, right, they have trailers, RVs, the boat launch, some sort of food and beverage, often a little bit of a general store aspect... Out of those, only one of them is still operating more or less the way it always has …The other two, one of them, the restaurant's gone, it's just boat launch and a little bit of RV, and that's it. The other one-… they're still doing the boat launch, but they don't offer gas for boats anymore. And then down in … Rimrock Retreat … Tavern's torn down. The motel has been completely rebuilt into second home residences, vacation residences. The [general] store, yeah, the store's not a store anymore. The restaurant is barely surviving."*

Along the SR 410 corridor, interviewees suggested that businesses had mostly remained the same over the last 30 years. While some businesses near Bumping Lake have closed, stalwarts like Whistlin' Jack's Outpost, Gold Creek Saloon, and The WoodShed Bar & Grill had remained. These businesses have been largely dependent on tourism in the summers, although some of them were popular with hunters in the fall and snowmobilers in the winter.



Figure 4.4. *Community amenities in the Naches study area. Includes: zero full-service supermarkets (other locations that accept SNAP benefits, such as gas stations or convenience stores, not included), one forest service ranger station, zero timber processing facilities, one community health clinic, one post office, and one library.*

Community governance

Interviewees noted that the municipal government in Naches played an important role in determining the town's development. They also mentioned the importance of other civic groups in Naches, including an exceptionally active Lions Club. Other interviewees noted how the local volunteer fire department was a center of activity, both in Naches and in Nile. Although these civic groups were active, some interviewees felt that Naches lacked entrepreneurs willing to revitalize the downtown area. Others mentioned the hope that a new town council would succeed in revitalizing the community.

Community relationship with the Forest Service

In 2024, six interviewees thought that the relationship between the community and the Forest Service was negative. As one interviewee put it, *"people here are not appreciative of the federal government."* However, two interviewees said that the relationship was positive, two indicated that it was non-existent, and four mentioned that the relationship depended on the district ranger, a position that experiences frequent turnover.

Community interviewees conveyed that they believed high turnover and hiring practices within the Forest Service had a particularly detrimental impact on the Naches Ranger District. Five interviewees commented

that they thought the local Forest Service district was understaffed. Some interviewees thought that the district had an inability to recruit new employees who were effective. For example, one interviewee noted that, after a particularly effective employee retired, *"they hire two people to take his place, and neither one of them could do anything."* Interviewees noted that specialists who left would sometimes not be replaced, leading to further issues in implementing projects. Interviewees also noted that high turnover in upper-level staff meant a constant change in priorities at the district: *"And the problem with the Forest Service is that people come and go, and then different attitudes show up. Some are better than others.... Like this one believes in bats [conservation], and this one believes in horses [equestrian activities], and this one believes in motorized [recreation]."* According to interviewees, this turnover had a negative impact on ongoing projects in the district, including agreements with motorized recreation groups that frequently conduct trails and roads projects. One interviewee mentioned that some of these staffing challenges might have contributed to past discussions of consolidating the Naches and Cle Elum Districts of the Okanogan-Wenatchee National Forests.

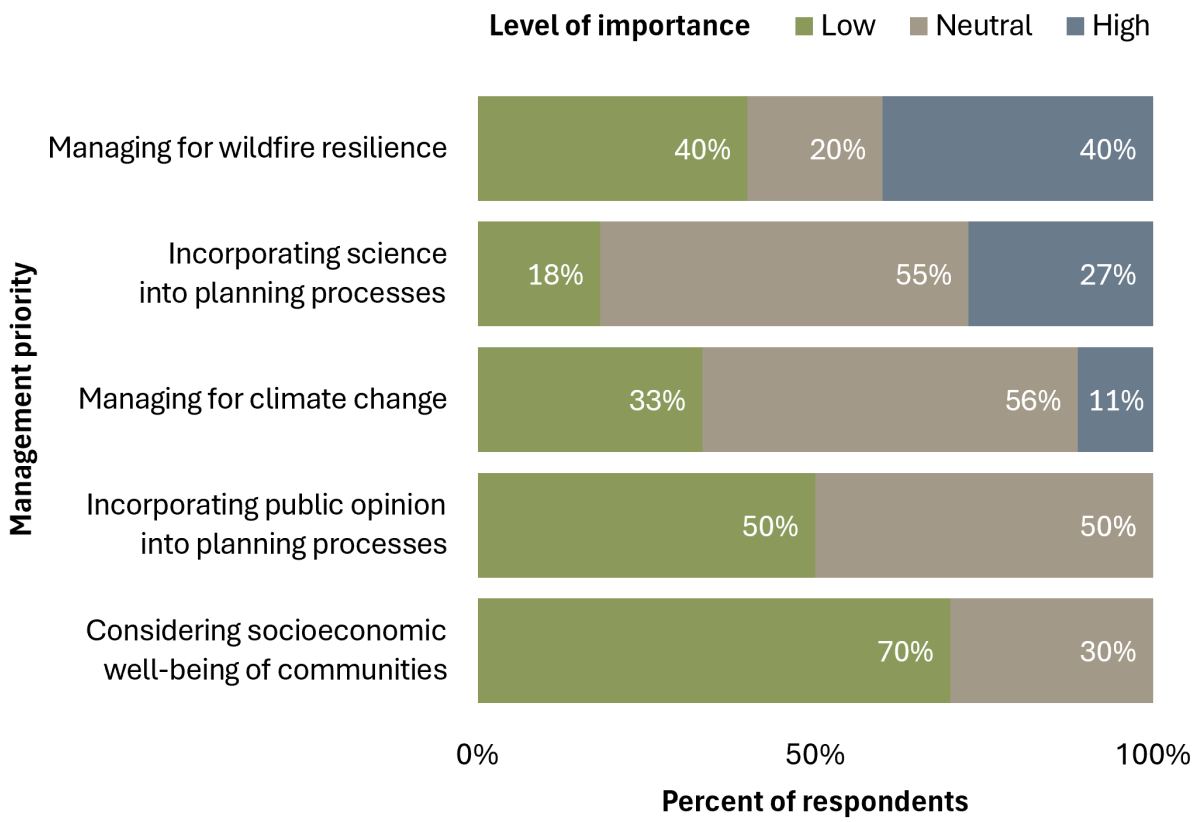


Figure 4.5. *Community perception of Forest Service management priorities (n=11). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

We asked community interviewees about their views on Forest Service management priorities (Figure 4.5). Interviewees thought that the socioeconomic well-being of local communities was either a low priority orating public opinions into the planning process was also a low priority for the Forest Service while the other half thought that the Forest Service was neutral about public opinions. Interviewees did not think that the Forest Service was prioritizing climate change, and only 27 percent thought the agency was incorporating science into its planning process. While only 40 percent of interviewees thought that the Forest Service was prioritizing wildfire resilience, this was the highest ranked of all the management priorities we asked about.

Checkerboarded landownership and forest collaboratives

In previous socioeconomic monitoring of the Naches area conducted in 2004, the checkerboard landownership pattern was listed as a major challenge in the study area (Dillingham et al., 2008). These lands created management issues during the early 2000s since landownership changes section to section (1 square mile or 640 acres) from state or federal government to timber industry (e.g. Boise Cascade and Plum Creek). The Tapash Sustainable Forest Collaborative was founded in 2003, in part to address *"a crisis of Plum Creek [Timber Company] starting to sell off their private lands"* in an area of checkerboard land ownership. One of Tapash's goals was to solve checkerboard management challenges through a land transfer of 10,400 checkerboarded acres from Plum Creek Timber Company to the Washington Department of Fish and Wildlife (Corrao and King, 2016). However, the Tapash Collaborative faded in importance with the resolution of these checkerboard issues.

More recently, the collaboratives involved with the Naches Ranger District have been the Naches Forest Partnership and the Trail and Wilderness Interest Group, the latter of which has been around since at least 2004 (Dillingham et al., 2008). According to one interviewee, the Naches Forest Partnership is *"representative of motorized recreation clubs..., wildlife groups, conservation groups, fish folks. So, you know, it's a true collaborative. It's representative of all users."* The perceived efficacy of this group appears to have changed over time. One interviewee thought that the partnership was not particularly effective: *"they partner with [the Forest Service], really only at the level to tell [the agency that they are] doing a crappy job."*

Community relationship with National Forest lands

Naches residents have diverse uses for national forestlands. Interviewees ranked hunting and fishing, recreation, and water as the most important aspects of their use of national forest lands (Figure 4.6). As one interviewee stated: *"If you can do it in the mountains, it's done in the Little Naches. Whether it's mining in the rivers and mushrooms and hiking and wilderness and huckleberries and horses and cross-country skiers and snowmobilers, and it's all done in the Naches area, all of it. That's why it's been so difficult to do anything with on this National Forest [Motorized Vehicle] Plan."*

Recreation

Interviewees noted that the following types of recreation were the most popular: motorized vehicle use (n=12), water recreation (8), hunting (7), hiking (7), fishing (7), camping (5), and skiing (4). Scenic attractions include White Pass Ski Area, Rimrock Lake, Bumping Lake, Boulder Cave, and Naches Peak. There are three wilderness areas, which one interviewee described as follows: *"the Goat Rocks is all REI, William O. Douglas is all hunters, and Norse Peak is nobody,"* which was their description of the different types of people or activities associated with three wilderness areas: Goat Rocks is popular with hikers and backpackers; William O. Douglas with hunters, and Norse Peak receives few visitors. Interviewees agreed that the national forest's recreational opportunities attracted both new residents and visitors to the study area, and one Forest Service employee commented that they thought of the district predominantly as a recreation forest, rather than favoring timber production or other uses.

Visitor use of the Naches Ranger District increased during the pandemic. Interviewees described this increase as overcrowding and noted that it caused conflict and strained recreational staffing capacities. One interviewee noted that *"people [were] pulling guns on each other over campsites."* Other issues related to ongoing recreational use included campground maintenance. As a result of recreational overcrowding, the Forest Service implemented a reservation system at the popular Boulder Cave Recreation Area (City of Yakima, n.d.).

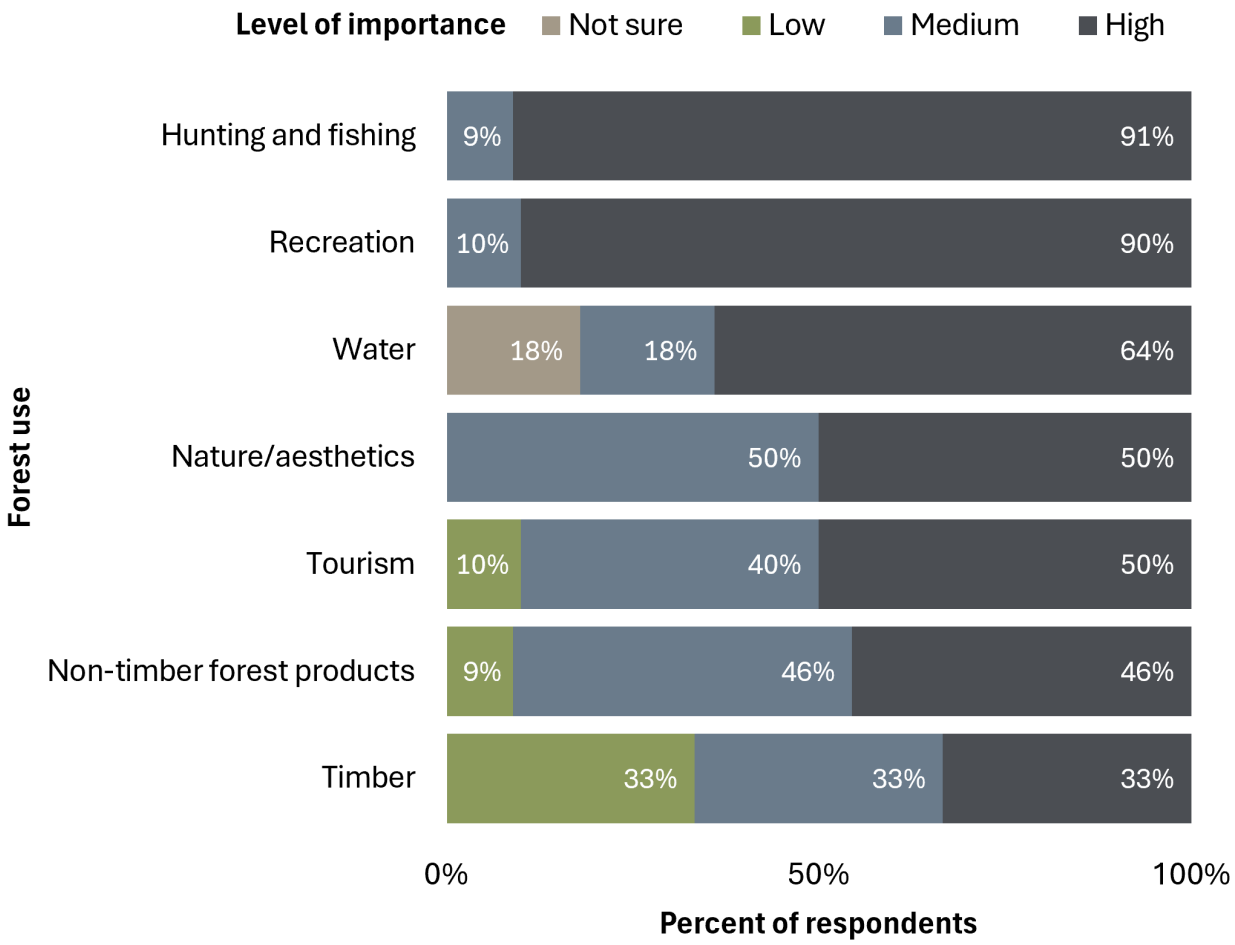


Figure 4.6. *Importance of national forest uses to community (n=11). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Recreation residences

"Recreation residences," referred to locally as cabins, on the Naches Ranger District have long constituted most of the special use permits on the district. Recreation residences are "privately owned cabins located on National Forest System Lands that are part of the Special Use Permit Program" (USDA Forest Service, n.d.), and they are often set up in clusters—sometimes known as "recreation residence areas"—not dissimilar from a modern subdivision. Recreational homesites on forest lands were set up in 1919 (Gossett, 1979). Typically, lots along US 12 and SR 410 had electrical and telephone services but did not have water or sewage connections. However, some areas along SR 410 had no services.

Recreational residences in Naches were typically used from late spring through early fall (Healy, 1991). In 2024, interviewees claimed that the Naches Ranger District had the highest number of recreation residences of any national forest ranger district. A 1971 government report stated that the Naches Ranger District had the highest concentration of second homes in the state, with 455 homes on 320 acres of Forest Service Land (Interagency Committee for Outdoor Recreation, 1971).

Comparing recreation residence owners on national forest lands and commercial second-home owners on private lands, a 1971 report estimated that approximately 60 percent of recreation resident lessees' primary residences were in the immediate vicinity of their recreation residence (Interagency Committee for Outdoor Recreation, 1971). One 2024 interviewee, a part-time Naches resident and recreational cabin owner, stated that *"50 to 60 percent of the cabin owners are from Yakima. We have a large ownership out of Seattle area… I'm gonna say 25 percent out of Seattle, and then they're just scattered all over the place."*

In 2024, Forest Service interviewees were concerned about recreation residences being susceptible to wildfires. Because the land is leased from the Forest Service, there are limits on what residents can do to clear trees and debris from the property, and many recreation residents believed that they are unable to manage the property because they lack land ownership. A program from the local Resource Conservation District has encouraged residents to remove brush from the areas around their homes and has provided free chipping services. This program has grown since the Norse Peak (2017) and Schneider Springs (2021) fires. Recreation residences have also been an issue for firefighting because the Forest Service is obligated to protect these cabins even if local cabin owners do not conduct clearing: *"like during Schneider Springs [fire], when resources were limited, you know, we Forest Service] had to divert a ton of resources to structure protection for all those rec[reation] residences."*

Off-highway vehicles and roads

In the Naches Ranger District, both summer and winter off-highway vehicle use has been an important use of the national forest, and off-highway vehicle groups hold special use permits for sanctioned events.

In the winter, snowmobiles are a popular use of the national forest lands. Snowmobiles allow for access to Chinook Pass during wintertime closures, and snowmobilers can access areas like Crystal Mountain Ski Resort. Over time, snowmobiling has been declining in popularity—across Washington, there were 38,331 registered in 2002, whereas there were only 18,434 registered in 2024 (Washington State Parks, 2024). Three Sno Parks near Yakima were closed during the 2024-2025 season due to budget issues (Thompson, 2024). One community member commented that they thought the closure was related to lack of funding for Forest Service personnel to monitor and groom Sno-Park areas.

In the summer, off-highway vehicle use was also popular, in part because some uses have been allowed on the Naches Ranger District that were not allowed on the neighboring districts on the Gifford Pinchot National Forest. However, a unique problem for the Naches Ranger District and the Okanogan-Wenatchee National Forest was that it lacked a travel management plan as of 2024. Such a plan identifies a cohesive strategy for the road system, including identifying roads to close and designating roads for different uses. The lack of a plan made it more difficult to manage use and deter behavior that would ordinarily be regulated under the management plan.

The lack of a travel management plan has long been identified as a major issue in this district. As one community member stated, *"every forest supervisor that we get to meet that comes here says... 'One of the*

things on my to-do list is we're going to get this travel management plan done.'" Despite this, as of 2024, the plan had not been completed. The same community member mentioned that *"you can't make everyone happy... when they come down to put one [a travel management plan] in this area, it'll get challenged, either those that want things all closed, you know, if they don't get their way, they're going to go legal,"* thus implying that there is a high risk of litigation upon the plan's completion. Other interviewees voiced frustrations about what they saw as the arbitrary nature of road closures, which they attributed to the motivation of one district specialist. Another interviewee suggested that, without a travel management plan, it is more difficult to manage and enforce laws and regulations on national forest lands.

Previous NWFP social and economic monitoring in the Naches area conducted in 2004 discussed issues related to summer off-highway vehicle use and checkerboard ownership. For example, the Forest Service does not allow non-street legal vehicles to use established forest roads, whereas the state restricts motorized use to established roads in designated areas (Dillingham et al., 2008).

In addition to these road-related issues, interviewees suggested that a lack of trail maintenance has caused *"frustration with things [maintenance] not happening fast enough."* Both Forest Service employees and community members reported that members of the public sometimes do their own maintenance on national forest lands. For example, the Forest Service has documented more than sixty instances where chainsaws have been used to clear trails in wilderness illegally.

Water

Due to the history of large-scale irrigation projects in the Yakima Valley (collectively known as the Yakima Project), agricultural water rights have been a contentious issue within the study area. The Yakima Project provides irritation water to over 450,000 acres of agricultural land in south-central Washington. Bumping and Rimrock Lakes serve as significant water storage for the Yakima Project. The tributaries that feed these reservoirs have their headwaters in the Naches Ranger District. However, interviewees associated water management with the Bureau of Reclamation and irrigation districts more than with the Forest Service.

In 1981, the Yakima Project began what was described by multiple interviewees as the "flip-flop" operation, when they switched flows from the Cle Elum Dam to the Tieton and Bumping dams to improve fish habitat (Bureau of Reclamation, 2012). This change was a result of a court case from the Yakama Nation regarding salmon habitat (Dillingham et al., 2008). The flip-flop also provides benefits to commercial white-water rafting within the study area (Dillingham et al., 2008). As one person familiar with rafting on the Naches noted, *"[I] don't know that any other river we run... the same amount of people within like, a three-week span."*



Downstream face of Tieton Dam

In 2012, the Yakima River Basin Integrated Water Management Plan was finalized (Bureau of Reclamation, 2012). The final adjudication of water rights in the Yakima Basin was determined in 2019 in the Ecology v. Acquavella case, which had been in progress since a 1977 drought (Ferolito, 2021). The plan includes fish passage for some areas, including Bumping, Rimrock, and Clear Lake in the Naches Ranger District (Bureau of Reclamation, 2012).

The Yakama Nation holds some of the most senior water rights in the basin (dating to the 1855 treaty) and continues to be actively involved in water policy and management, particularly with respect to issues that might impact its treaty rights. The 2019 Yakima River Basin water adjudication protected both the Nation's irrigation rights and the right to maintain instream flows for fish (Ottem, 2008).

Non-timber forest products

Interviewees suggested that firewood, Christmas trees, and mushrooms were the most important non-timber forest products on the Naches Ranger District. One interviewee explained, *"firewood's huge here … Christmas trees are huge here … and then, after we have a big fire, [its] commercial mushrooms."*

Non-commercial firewood permits are free and are quite popular. As one interviewee commented, *"we've got people cutting up on the forest all the time. I think it's a great way to get fuel off the forest. I certainly support it. And I mean, it's free, so you just pick up your permit, and you can get five cords or something with a permit."* Commercial fuelwood harvesting is also significant. One interviewee noted that, *"when the firewood season is open, there's all kinds of trucks coming down [from the mountains] with firewood."* Unlike many other districts, commercial fuelwood sales on the Naches Ranger District are not clearly indicated in Forest Service timber sale (Timber Information Manager) data from 2013-2023 (USDA Forest Service, 2023). However, Forest Service Cut and Sold data show that the Okanogan-Wenatchee National Forest sold 2.3 mmbf of commercial fuelwood in 2023. This amount was significantly lower than the national forest's 10-year annual average of nearly 5.2 mmbf.

Between 2013 and 2019, Forest Service Cut and Sold data show the number of Christmas trees sold annually on the Okanogan-Wenatchee National Forest was fairly consistent with an average of approximately 6,100 per year. Since 2020, Christmas tree numbers were either very low or not reported (USDA Forest Service, 2025).

Interviewees suggested that commercial mushroom picking was also popular on the Naches district. One interviewee reported that, *"people certainly go up and harvest the hell out of mushrooms and, yeah, sell them wherever."* Another interviewee suggested that *"people can't wait to go get mushrooms."* Cut and Sold reports show that between 2013 and 2023, the commercial mushroom harvest on the Okanagan Wenatchee National Forest has been highly variable, ranging from nearly 92,000 gallons in 2013 to 530 gallons in 2023 (in 2020 and 2021 mushrooms were not recorded) (USDA Forest Service, 2025).

Lastly, one interviewee suggested that berry picking used to be popular, but forest management practices have made them scarce: *"it used to be Labor Day was Huckleberry picking time, but the forest is so overgrown that there's very few huckleberries anymore."*

Timber

Between 2013 and 2023, the Naches Ranger District timber program had only limited economic impacts within the study area (USDA Forest Service, 2023). During this period, the district sold 25 timber sales with a total volume of 94.7 mmbf for $13.5 million. While eight of these sales were purchased by seven different businesses based in Naches, those sales represented less than 0.2 percent of total volume sold. Nearby Yakima Forest Products purchased nearly 25 mmbf from the district using both conventional and stewardship contracts. However, most of the remaining timber sold was purchased by businesses based in communities between 175 and 275 miles away from the study area.

Wildfire and other forest disturbances

Fire is a frequent and important ecological process in eastern Cascade landscapes. For example, in the Nile Creek area, median fire return intervals are estimated to be as frequent as every seven years (Everett et al., 2000). While Indigenous fire stewardship maintained open forest structures through frequent, low severity cultural burning, early Euro-American settlers considered *"the forest...an enemy in the path of farming,"* and set more severe forest fires to increase cropland (Gossett, 1979, p. 305). Ranchers also frequently set fires in the study area to improve range conditions, but these practices were curtailed as grazing regulations accompanying allotments prohibited fire use for range improvement. The Forest Service set up fire lookouts in the 1930s in response to frequent forest fires and a particularly large 1927 fire (Gossett, 1979).

Interviewees considered fire to be among the most important, if not the most important, management issue for the Forest Service. As one Forest Service employee mentioned: *"fire drives everything, and that's actually the only time we do have, I think, a really good relationship with the community is we're heroes, and we put out fires, stop people's houses from burning. The rest of the time we're kind of, maybe, maybe not, villains, but not everybody's favorite people."*

Two recent large fires were frequently mentioned by interviewees: the 2021 Schneider Springs Fire and the 2024 Retreat Fire. The Schneider Springs Fire began on August 4, 2021 as a result of lightning ignition and burned 113,689 acres, with the vast majority (103,320 acres) on national forest lands and the remainder mostly on Washington Department of Natural Resources lands (USDA Forest Service, 2021; Contreras et al., 2021). The fire burned along the SR 410 corridor, impacting places like Nile, Cliffdell, and Goose Prairie. Because the fire began while the Forest Service was at Preparedness Level 5, there were limited resources across the agency to fight the fire. Community members thought that the Forest Service handled the Schneider Springs Fire *"very poorly,"* and residents of Nile were particularly upset with perceived mismanagement. Referring to the Schneider Springs Fire, one interviewee reported that: *"we lost a ton of late successional reserve[5] forest, that we had not done anything [treatments] in because it was [northern spotted] owl habitat. Well, now it's all gone."* However, after the fire, one Washington DNR official stated that around two-thirds of the fire burned at a low intensity (Zucco, 2022). The fire did burn through some areas that had been previously thinned and prescribed burned, like the Angel Underburn Project in Rattlesnake Creek. These treatments were apparently effective at mitigating fire severity (Zucco, 2022). After the fire, one interviewee suggested that another issue for the local municipal water district concerned water quality decline due to increased soil erosion from the burned areas, resulting in a high amount of soil particles being dissolved in the water (i.e. high turbidity). As a result, the local water treatment facility had to shut down: *"it turned the river literally black overnight, and there was no way we could treat it."* While this problem was solved locally through voluntary water conservation, future fire-related erosion events could imperil the water system.

The 2024 Retreat Fire began when a propane tank exploded at a cabin in Rimrock Retreat. The fire burned over 45,000 acres along the US 12 corridor (Johnson, 2024). Small unincorporated areas along US 12, including both recreation residences and year-round residences, had to evacuate and at least two cabins

5. Naches has both late successional reserve (LSR) and managed late successional areas (MLSA). LSRs are identified based on old-growth conditions and as habitat for old growth related species like the northern spotted owl. In these areas, limited management is possible (1994). MLSAs are Managed Late-Successional Areas, similar to LSRs but these are fire-adapted landscapes where fire hazard reduction treatments are permitted in order to reduce risk of complete stand destruction (USDA Forest Service and Bureau of Land Management, 1994).

were lost (Johnson, 2024). Tieton and Cowiche were briefly at risk of burning (Square, 2024). During the fire, landslides and debris damaged a 114-year-old irrigation canal that provided water to members of the Yakima-Tieton Irrigation District, a private irrigation district serving agricultural users (Metcalf, 2024). According to interviewees, the district then limited water delivery to approximately 40% of normal supply. At a cost of $240 million, major repairs on to the canal may include a retrofit to cover and protect it from future landslides (Franklin, 2024). Additionally, US 12 was closed for several weeks during the firefighting, which locals thought displaced recreation to the SR 420 corridor. There were also impacts on local popular trails, including the Tieton River trail, some of which were burned during the fire (Thompson, 2024). Overall, however, community members seemed more satisfied with the firefighting on the Retreat Fire, which one interviewee attributed to the heavier investments in aerial firefighting. Current (2024) planning efforts to mitigate wildfire risk on the South Fork of the Tieton River include a collaboration between the Naches Ranger District and the Yakama Nation. Interviewees familiar with the Naches Ranger District mentioned that this project was seen as *"the most important project"* for the local district.

Findings from the Northwest Forest Plan ten-year social and economic monitoring suggested a local need for education about the role of fire in the local ecosystem (Dillingham et al., 2008, 41). Our 30-year monitoring results suggested that public understandings of fire and the Forest Service's approach to fire management have shifted. While many interviewees in 2024 discussed their perceived need for the continuation of fire suppression policies, most interviewees wanted to see more fire mitigation efforts that include activities like prescribed burning.



Highway 12 Corridor, 2024

Air quality

Yakima County has longstanding air quality issues because of its geography, high prevalence of wood burning in the winter, and summer wildfires (Yakima Regional Clean Air Agency, 2015). For example, as early as 1868-1870, Yakima Valley settlers reported smoke settling in the valley during the summers. In 1967, the county began regulating local air quality through the Yakima Regional Clean Air Agency. Air quality measures have directly impacted management on Naches Ranger District. After a lawsuit in Yakima County, the Naches Ranger District was under court order to review its firewood program because of the negative impacts of wood burning on air quality in the Yakima Valley (Devlin, 1990). Interviewees in 2024 suggested

that air quality regulations made it difficult for the Naches Ranger District to complete prescribed burns. As one person put it, *"we have an extra layer of, I'm gonna say, bureaucracy for a lack of better term, in air approval for smoke."* One interviewee suggested that even though it is well known that large wildfires decrease air quality in the summer, Yakima Regional Clean Air Agency regulations have cancelled or postponed preventative measures such as prescribed burns.

Despite measures to control smoke, Yakima County's air quality has continued to decline since 2015, mostly because of summer wildfires. In 2024, Yakima was ranked as the city with the 12th worst air quality for both short-term and long-term particle pollution (American Lung Association, n.d.). Smoke also has negative impacts on agricultural crops. Hops growers have reported *"smoke taint,"* a term coined in 2020 to refer to how hops got a smoky taste after being exposed to wildfire smoke during harvest or during the drying process (D'Anella, 2024). Because smoke taint does not always appear immediately after crops are harvested, it can be challenging for growers to ascertain how the flavor has been impacted—sometimes until after the beer has been brewed. As one interviewee put it, wildfires have been *"causing a lot of economic and environmental damage to our [agricultural] products."* One interviewee directly linked the fires and impacts on agriculture to the NWFP: *"When you [can] lose entire crops of fine wine grapes because they were smoke tainted, all because a plan [NWFP] decades ago changed the entire course of an industry and land management."*

Community futures

When asked what changes the next ten years might bring to Naches, seven interviewees anticipated recreation and tourism continuing to be important issues in the community. Interviewees expected that additional recreationists would move to the Naches area. Interviewees hoped that the Forest Service would increase funding for recreation to meet the level of use on the district, and that this increased recreation funding might result in more open roads and improved maintenance of roads and facilities. Moving forward, some interviewees saw Naches's potential as a recreation hub: *"Yakima and Bend are both right on the foothills of the same range, but Yakima is just far enough out... And so the same appeal that drew, and they're not necessarily retirees, but folks to Bend [Central Oregon] is the same description that people give like, 'oh yeah, we love living in Naches.'"*

Three interviewees anticipated that housing would become a more significant issue for the community as debates over housing developments and growth were already dominating public discourse. Other concerns for the community's future included wildfire risk (n=3) and climate change (n=1).



Naches Information Center, 2024

Conclusions and case study highlights

In the wake of the NWFP, the Naches study area experienced significant impacts to its timber industry, including the closure of wood processing facilities in Naches and Yakima. Although the timber industry specifically blamed the closures on the decline in federal timber supply, interviewees suggested that other factors also played a role. However, the community was insulated from significant impacts to its wellbeing due to the diversity of its economy, including a significant agricultural sector. Recent demographic changes include a growing Latine population and an influx of younger amenity migrants attracted by recreational opportunities and the small town feel of the community.

Naches key forest management takeaways

- Wildfire mitigation was a top concern for the community. Interviewees were largely supportive of increasing the use of prescribed fire on the national forest.
- There is a need to develop new- or make more explicit existing- policies and protocols for fuels management and other wildfire mitigation actions around recreation residences within the national forest.
- Recreational development in the forest was important to community members.
- Community members continue to be interested in the development of a travel management plan for national forest roads.
- The community perceived negative impacts from Forest Service staffing policies, including those that encourage position turnover.



Layman Lumber Company Mill Site, 2024

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Tieton River along Retreat Fire Scar, 2024

For full report, visit:
https://hdl.handle.net/1794/31412

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Ecosystem Workforce Program

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We extend our thanks and appreciation to interviewees from Naches who shared their experiences with us.



Chapter 5: Upper Hood River Valley, Oregon

Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns, Naomi Serio

Case study facts

Population (2020): 3,276

Location: Hood River County, Oregon

Federal forest lands (74% of study area): Mt. Hood National Forest, Hood River Ranger District

Climate:
Average Annual High: 61.1 °F/Low: 41.1 °F
Annual Precipitation: 30.4 inches;
Snowfall: 17.2 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<15,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 5.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Upper Hood River Valley study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

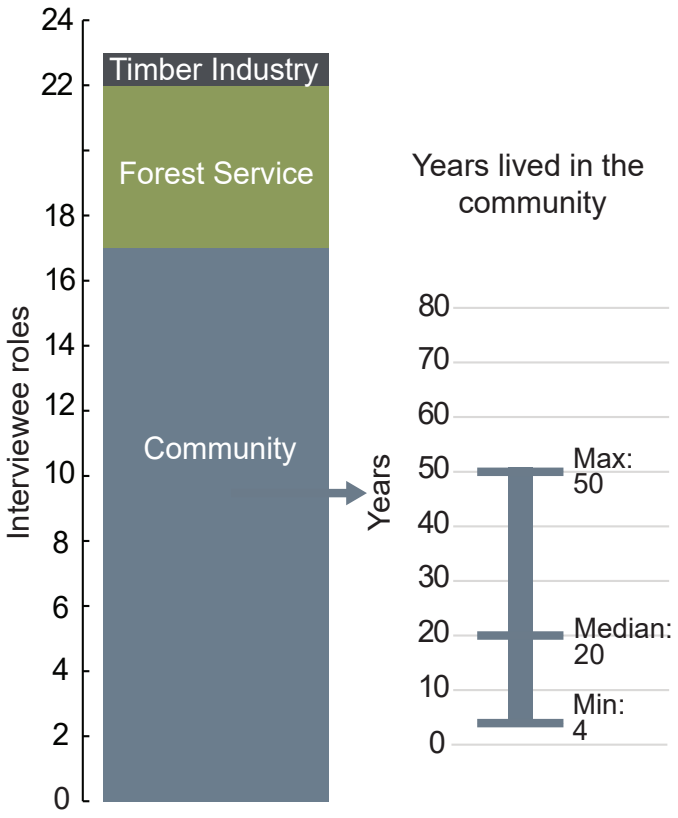


Figure 5.1. *Graph of interviewees by role and number of years lived in the community. Our sample included 17 community members, five Forest Service employees, and one timber industry representative. Community interviewees lived in the study area lived in the community for a minimum of four years, a maximum of 50 years, and a median of 20 years.*

Sizek, J., Coughlan, M., Huber-Stearns, H., & Serio, N. (2025). Chapter 5: Upper Hood River Valley, Oregon, In M. Coughlan, H. Huber-Stearns, & S. Schneider (Eds.). *The Northwest Forest Plan: 30 years of social and economic change in rural forest-based communities (1994–2024)* (Working Paper No. 125). Ecosystem Workforce Program. Institute for Resilient Organizations, Communities, and Environments, University of Oregon. https://hdl.handle.net/1794/31412

Study area and geography

For the Upper Hood River Valley community case study, we focused on the Hood River Ranger District of the Mt. Hood National Forest. We defined the community spatially as the Parkdale and Dee census county divisions (CCDs) in Hood River County, Oregon (Figure 5.2). National Forest occupies 74 percent of the study area and Hood River County Forest occupies nearly 5 percent. The study area includes the unincorporated community of Dee and the census-designated places (CDP) of Mt. Hood ("Mt. Hood CDP", 2020 population) and Parkdale (2020 population of 299) all of which are located on the north side of Mt. Hood, west of Oregon Route 35 (OR-35) along Oregon Route 281 (a secondary highway).[1]

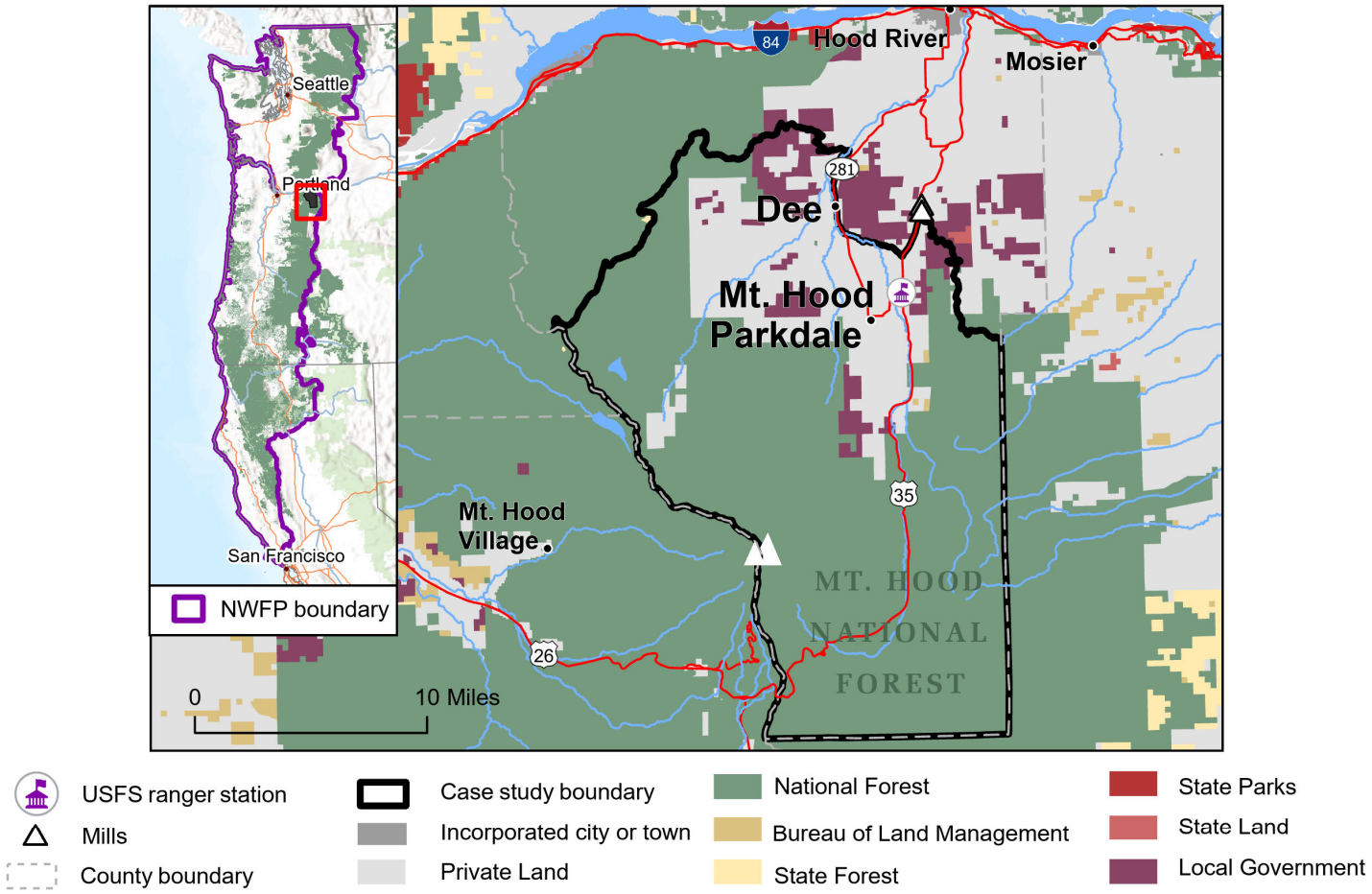


Figure 5.2. *Upper Hood River Valley case study area.*

The Hood River Ranger Station is located in Parkdale, just south of Mt. Hood CDP. The county seat is the City of Hood River, which is located adjacent to the Columbia River approximately sixteen miles from Parkdale and twelve miles from Dee. The Columbia River corridor also provides residents of the Upper Hood River Valley with access to US Interstate 84, which connects the area to Portland and the Portland International Airport. National forest lands make up 74 percent of the study area. Forests in this region are dominated by dry and mesic mixed conifer forests of Douglas fir, grand fir, and western hemlock at lower elevations, grading to silver fir at higher elevations.

1. *Population figures from (Rynerson, 2026)*

Shared sense of place

The Upper Hood River Valley is known for its fruit orchards, farm tourism, and scenic views. Interviewees described Parkdale as *"a farming community with a big recreation segment."* Parkdale residents proudly described the town as a *"strong, vibrant community that is extremely close-knit."* Many interviewees believed that the strong sense of community protected Parkdale from unwanted changes: "*no one's gonna be able to walk into this town and just take over."* However, interviewees did note that there were divisions between new amenity migrants and long-term, generational residents. As one said about local change, *"the biggest changes are just the economic disparities between...the long-term locals, and the people that are coming in."* Others thought that new residents didn't understand local life: *"People that come to rural communities that have no understanding of the economics of a rural community,"* and that they often imagined the appeal of a small rural farm without acknowledging the difficult financial reality of farming. Despite the strong sense of community, interviewees also characterized the community as changing. While the area has retained its agricultural feel, interviewees thought that housing and cost of living had become less affordable. One interviewee mentioned that the area had taken an *"aspect of being like Sun Valley"* complete with absentee ownership and tourism-centric businesses in the downtown area.

In contrast to Parkdale, interviewees described Dee as residential, or *"just some homes"* rather than as a community or destination. Dee was also noted among residents for historically having a substantial population of Japanese Americans tied to the agricultural industry. In 2023 American Community Survey data (US Census), this population was too small to estimate (i.e. 10 persons +/- 100 identified as "Asian").

Interviewees often contrasted the Upper Hood River Valley with the city of Hood River, which they saw as a *"yuppie, recreational, affluent community,"* or as *"getting gentrified."* As one interviewee put it, Interviewees thought that almost all new residents in Hood River came to the area for its recreational opportunities: *"They didn't move here to become orchardists, they moved here because they're [wind] foiling, they're skiing, they're kayaking." In contrast, Upper Valley residents thought that "recreation hasn't really impacted [them]."*

Points of interest

Mount Hood

As Oregon's tallest mountain, Mount Hood, is an active volcano and part of the Cascade Range. The peak reaches 11,225 feet above sea level (ft asl) and forms an iconic component of Portland Oregon's skyline. The mountain attracts as many as 10,000 climbers per year (Hale, 2023).

Mount Hood ski areas

In the 1950s, Cooper Spur Resort (located approximately 8 miles due south of Parkdale) opened as a small ski area with two rope tows and beginner skier runs (Mitchell, 2005; "Cooper Spur Ski Area Opens," 1971; Hunt, 2019). Mt. Hood Meadows ski area opened in 1967 on the southeast side of the mountain. The resort became Oregon's second-largest and second-most-visited ski area (Mitchell, 2005). However, the two ski resorts are day use areas, mainly attracting skiers from Portland, and are not well-known ski vacation destinations. The Timberline Lodge at 6,000 ft (asl) on the southwest portion of the mountain is a National Historic Landmark and is Mount Hood's most well-known ski resort.



Cooper Spur Ski Area, 1967

Mount Hood Scenic Byway

The Mount Hood Scenic Byway is a tourist loop road first constructed in 1925. From Portland, the route can be circumnavigated in one day. The route passes through Parkdale and has been important for study area's development (Mitchell, 2005) and continues to attract tourists to the area.

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forests in northern California, western Oregon, and western Washington. This section provides a summary of direct impacts of these events on the social and economic wellbeing of the Upper Hood River Valley study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and on-going changes in the community's wellbeing following 30 years of the NWFP.

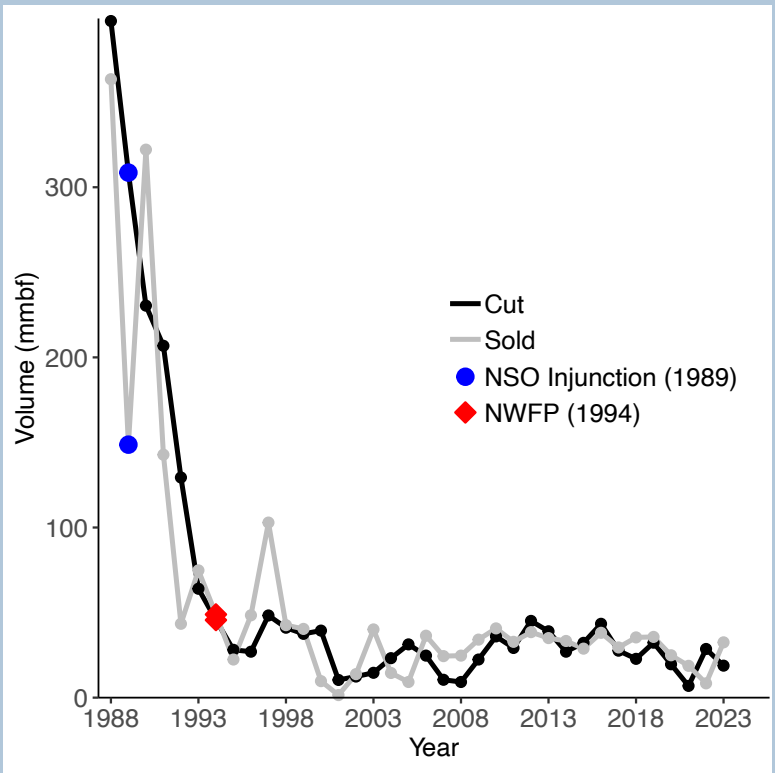


Figure 5.3. *Line graph showing timber harvest and sales ("cut" and "sold" volume) in million board feet for the Mt. Hood National Forest, federal fiscal years 1988 to 2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest, and the 1994 implementation of the NWFP are indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

Timber harvest on the Mt. Hood National Forest dropped 90 percent from a peak volume of nearly 400 million board feet (mmbf) in 1988 to 27 mmbf in 1996 (USDA Forest Service, 2025). From 1997 to 2024, annual harvest volume averaged 27.1 mmbf, ranging from 48.3 (1997) to 6.9 mmbf (2021, during the Covid 19 pandemic) (Figure 5.3).

Following implementation of the NWFP, recreation became the dominant resource management concern on the Mt. Hood National Forest (Kay et al., 2007). The number of employees on the Mt. Hood National Forest decreased from approximately 700 in 1991 to 240 in 2006 (Kay et al., 2007). Other changes on the Mt. Hood National Forest include the consolidation of seven ranger districts into four (Kay et al., 2007). As part of this consolidation, the Barlow Ranger District was merged with the Hood River Ranger District

In 2024 and 2025, 13 of the 17 community members we interviewed described at least some familiarity with the NWFP. Seven interviewees thought that the NWFP reduced timber harvest, seven related the

NWFP to spotted owl conservation, five viewed the NWFP in terms of land use planning, and two associated the NWFP with the conservation of old-growth forests (some interviewees mentioned more than one category). Interviewees commented that the NWFP was locally controversial, especially as a nearby mill was *"falling on hard times, and it's kind of related [to the NWFP]."* Interviewees also noted that mechanization of logging had impacted the timber industry in addition to the NWFP.

Since the adoption of the NWFP in 1995, Parkdale has become less of a timber community. As one interviewee put it, *"dislike and criticism of [the] extraction industry became very pronounced gradually from that [NWFP] time onward, and we became much more of a non-forest, non-timber community."* Despite this shift away from timber, however, one interviewee mentioned that some community members still supported increased logging, and that the *"mentality still in the community is that [the Forest Service]...is just not cutting [timber]."*

However, other interviewees commented that they thought that a decline in timber production associated with adoption of the NWFP had a limited impact in the Upper Hood River Valley because of the *"more diversified economy"* including agriculture in the area, and timber production from county forest lands. As one interviewee put it, *"the limited amount of receipts that was probably coming off the [federal] timber from timber sales probably wasn't felt as strongly in Hood River County because they had that [County Forest revenues]."*

In the immediate aftermath of the NWFP, the Forest Service gave a Rural Community Assistance grant to Hood River County (Mitchell, 2005). This grant helped the community initiate a development action plan for Parkdale with the goals of maintaining the community's rural character and protecting farm and forest land uses (Mitchell, 2005). However, despite the loss of economic activity associated with federal timber and recognition of the need to plan for future economic development, interviewees participating in both the 10-year (Charnley et al., 2006) and 30-year socioeconomic monitoring work (presented here) suggested significant local resistance (i.e. "strong and opposing views") to the idea of developing an economy centered on tourism or the attraction of amenity migrants such as wealthy retirees and remote workers.



Parkdale Work Center, Forest Service

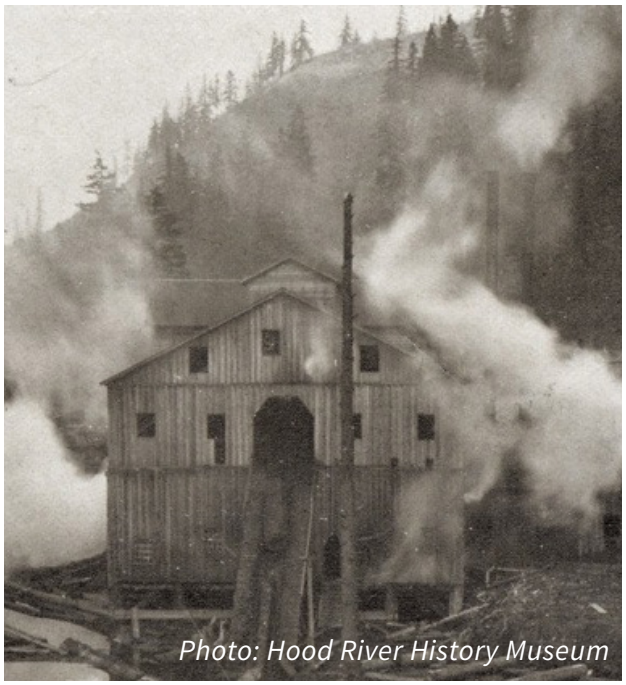
Pre-NWFP history

Settlement

Since time immemorial, Wasco and Warm Springs peoples lived along the Columbia River and in the Upper Hood River Valley (McConnell, 2006). In 1855, several tribes signed a treaty to create the Warm Springs Reservation, which is located on the south side of Mount Hood (Kay et al., 2007). The descendants of these people now belong to the Confederated Tribes of Warm Springs (CTWS). CTWS has rights on ceded lands in the Upper Hood River Valley, where they practice traditional harvesting, hunting and fishing (Kay et al., 2007). The Tribe also has off-reservation rights to fish in the Columbia Basin (McConnell, 2006).

Euro-Americans first settled the area around Parkdale in 1882, when homesteaders came to the east side of the Hood River (Page, 1927). Logging began on private lands in Hood River County as early as the late 1800s (Baron, 1957). In 1890, the Oregon Lumber Company (which later founded Dee) began buying land in the Hood River Valley. Starting around 1900, the Oregon Lumber Company began selling harvested lands to settlers. These sales included the present-day Parkdale townsite (Page, 1927).

Federal forest management of present-day Mt. Hood National Forest began in 1893 with the establishment of the Cascade Range Forest Reserve. The forest came under the purview of the the Forest Service in 1905 when it was transferred from the US Department of the Interior to the U.S. Department of Agriculture. This same year, the Oregon Lumber Company constructed the Mt. Hood Railroad which ran between Hood River and Dee (Page, 1927; Abbott, 2023) and, in 1906, opened a sawmill and founded the settlement of Dee as a company town (Oberst, 2021). The mill soon supported approximately 250 people who worked in Dee. At the time, the Dee Mill was the largest mill in the Upper Hood River Valley. However, production was limited due to its dependance on federal timber supply (Baron, 1957). In 1909, the company expanded the railroad to reach Parkdale (Page, 1927). Eventually, this railroad line was used for transporting both fruit and timber, and for tourism (Page, 1927; Mitchell, 2005).



Dee Mill

Fruit growing was also important to the Upper Hood River Valley. Farmers primarily grew apples, but pears, peaches, cherries, and strawberries were also important crops (Page, 1927). Early in the development of the valley's agriculture, landowners began hiring Japanese immigrants to clear fields. Landowners granted less productive plots of land to these immigrants in return for their labor. These new Japanese Americans soon gained recognition as strawberry farmers and apple growers (National Park Service, n.d.).

The Cascade Range Forest Reserve merged with the Cascade National Forest in 1908 and was renamed the Oregon National Forest (Mitchell, 2005). In 1924, it was renamed again as the Mt. Hood National Forest. Although some Portlanders advocated for Mount Hood to become a national park, this plan was quashed because of the timber, range, and mineral interests in the area (Mitchell, 2005).

A 1927 dissertation described the people of Upper Hood River Valley as follows: homesteaders who had not converted to commercial farming, a group of scientific apple farmers that had migrated from New England, farm laborers, Japanese American farmers, and timber industry workers (Page, 1927). There was dairying in the area as well. During this same period, there were four sawmills in the Upper Hood River Valley employing approximately fifty men. These men and their families were described as "transient" and as making "little contribution to community institutional life" (Page, 1927). Japanese Americans were similarly disparaged and faced considerable racism during the 1920s (National Park Service, n.d.).

By 1940, the county led the state with a fruit harvest at $2.2 million per year (Pierce, 2007). Around 1942, pears overtook apples as the most popular fruit produced by acreage in Hood River County (Baron, 1957). During World War II, Japanese farmers were interned and faced considerable racism and hostility on their return to their lands after the war's end (Bussel and Tichenor, 2017). The community of Hood River was famously hostile to Japanese American soldiers returning from the war (National Park Service, n.d.).



Wagon of apple crates through downtown, 1907

The fruit produced in Hood River County was sold internationally as early as the 1950s, with one-third of fruit produced in that decade exported to Sweden, the United Kingdom, and South America (Baron, 1957). However, in the 1970s, Hood River County's agricultural sector was hit hard by a combination of high inflation and stagnant economic growth, and apple and pear sales dropped (Pierce, 2007). In 1984, Diamond Fruit Growers closed its Parkdale facility, so farmers sent their produce elsewhere (Mitchell, 2005).

Tourism was also important in the early history of the area. The Cloud Cap and Cooper Spur Inns located on the mountain's east side, near Parkdale and Dee, were among the most popular recreation areas on Mount Hood in the early 1900s. However, both lost business when the Timberline Lodge was constructed on the mountain's west side (Baron, 1957). The Cloud Cap Inn closed in 1940 (Baron, 1957). As tourists shifted from the east side of the mountain to the west, tourism in the Upper Hood River Valley declined even as overall tourism around Mount Hood increased in the 1950s (Baron, 1957).

Post-World War II timber industry

By the 1950s, the forestry sector was second to agriculture in its importance to Hood River County (Baron, 1957). From the 1950s through the 1980s, there were three timber mills operating in the Upper Hood River Valley area (Charnley et al., 2006): the Oregon Lumber Company mill in Dee, the Hanel Lumber Company mill just north of Parkdale at the intersection of US-35 and Neal Creek Road (later known as the "upper mill" or "upper Neal Creek mill"), and the Neal Creek Lumber company mill in Odell (later known as the "lower mill" or "lower Neal Creek mill"). The main source of timber for local mills was the Mt. Hood National Forest, as most of the private land had already been logged (Baron, 1957). Consequently, the Upper Hood River Valley mills were forced to compete over the federal timber supply.

The smallest operation, the Hanel Lumber Company mill, was constructed in 1952 (Neumann-Rea, 2014). By the mid-1950s the mill employed 35 men and processed approximately 40,000 board feet per day (Baron, 1957). The Neal Creek mill employed 60 men and processed approximately 60,000 board feet per day. By contrast, the Oregon Lumber Company mill in Dee employed 300 men at that time (Baron, 1957).

In 1958, the Hines Lumber Company purchased the Dee sawmill and company townsite and dismantled the houses (Abbott, 2023). Champion Lumber later purchased the mill and operated it until its closure in 1984 (Mitchell, 2005). In 1986, the Dee sawmill was purchased and reopened by Dee Forest Products.

Champion Lumber also obtained the lower Neal Creek mill in Odell. In response to an economic recession in the early 1980s, Champion Lumber closed the lower mill (Pierce, 2007). The lower mill remained closed until it was purchased by the Hanel Lumber Company and reopened in 1983. This mill depended entirely on large diameter, long logs (up to 40 feet in length) from the national forest, but by the 1980s trees of that size were in short supply. The Hanel Lumber Company deemed it too costly to retool the mill to process smaller logs, and the company eventually decided to close the mill and use the site as a log yard. Hanel Lumber continued to operate the upper mill into the 1990s (Pierce, 2007).



Oregon Lumber Company logging, 1900

Upper Hood River Valley after the NWFP

Employment and industry

Community members interviewed in 2024 described the Upper Hood River Valley today as predominantly agricultural with tourism and timber as secondary industries. When asked about employment opportunities in the area, interviewees responded that local employment opportunities had increased (6), decreased (3), or increased in some sectors and decreased in others (3). Interviewees noted that the agricultural industry was still strong in the Upper Hood River Valley, even as aspects of the industry had shifted to encompass agritourism and orchard-based businesses like fruit stands and a cidery. Indeed, interviewees described agriculture as *"a big part of the work"* in the Upper Hood River Valley.

In the 1990s, area leaders decided to revitalize horticulture by investing in an existing agricultural research station and cold-storage modernization. In 1993, merchants and growers joined together to establish the "Fruit Loop," a 45-mile self-guided driving tour through Hood Valley orchards (Mitchell, 2005). As of 2024, the Diamond Fruit Packing Plant remained open in Parkdale, though some other facilities have been consolidated (Doxsee, 2023). Interviewees described farming activities in 2024 as being approximately 80% pears, with some apples, blueberries, cherries, and other fruits. Interviewees noted how the Fruit Loop remained a popular way for tourists to experience the Upper Hood River Valley. It was also noted that, in the agricultural sector, employment had changed. Orchardists switched from having undocumented employees to having employees under the H-2A foreign labor visa program. Additionally, there has been a noticeable increase in new orchard owners, some of which don't yet understand the requirements of farming in the area.

Interviewees thought that logging had declined as an industry over the last thirty years, specifically within the study area. Some interviewees compared the local decline in the timber industry to similar changes that had happened throughout the state. One interviewee suggested that, *"the biggest change [in the study area] has been...the diminishment of logging."*

Interviewees also noted that there was less milling and selling of lumber than in previous decades. As one interviewee put it, *"timber is not what it was."* By 1994, when the Forest Service implemented the NWFP, there were only two mills still operating: the Hanel Company's upper Neal Creek mill and the Dee Forest Products mill.

In 1995, the Hanel Lumber Company sold the upper Neal Creek mill to Morgan Lumber Company. Bob Hanel, son of Hanel Lumber Company founder Sterling Hanel, formed Hanel Development Group which cut timber and built forest service and private roads (Neumann-Rea, 2014). The business retained property at the lower mill site in Odell.

In 1996, the Dee Forest Products mill was destroyed by a fire and was not rebuilt (Mitchell, 2005; Abbott, 2023). Interviewees also recalled that large amounts of snowfall following the fire cemented the mill's closure by damaging the remaining unburned structures at the mill site. In the mid-1980s, a group of local investors from Hood River had purchased the Dee train line (the Mt. Hood Railroad) that had served the sawmill and converted it to a tourism train (Mitchell, 2005; Mt. Hood Railroad, n.d.). As of 2024, the Mt. Hood Railroad continued to run as a round-trip scenic tour train from Hood River, through Dee, to Parkdale.

In 1996, Morgan Lumber Company sold the upper mill to Quality Veneer and Lumber, which closed it in 2000 due to financial troubles (Pierce, 2007). In 2001, the upper mill was purchased by High Cascade International Corporation, but the company did not reopen the mill until 2004 ("Upper Hanel Mill," 2004). At this time, a portion of the lower mill site was converted into a window-making facility (Pierce, 2007). In 2014, the Hanel Development Group, still in possession of some of the lower mill site in Odell, sold the remainder of the lower mill property to the Port of Hood River.

The NWFP 10-year social and economic monitoring study found that some mill workers left the area after the mill closures, while others found replacement jobs in the fruit industry, manufacturing, trucking, service industries, or odd jobs (Kay et al., 2007). In 2024 and 2025, interviewees noted that many families of loggers now either work in construction or in the orchards, had started small businesses, or had left the community.

In 2024, the only operating lumber mill in Hood River County was Mt. Hood Forest Products, which had taken over the upper Neal Creek mill after the bankruptcy of the previous owners (Neumann-Rea, 2020). Mt. Hood Forest Products currently advertises that they "produce over 175 million board feet of Pacific Northwest Douglas-fir dimensional timber annually" (Mt. Hood Forest Products, n.d.). However, none of this timber appears to have been sourced from the national forest.

Hood River County also manages forest lands that generate county revenue (Charnley et al., 2006; Baron, 1957). In 2006, the county managed approximately 31,000 acres of forest lands and generated approximately half of the county's budget from timber proceeds (Charnley et al., 2006; Kay et al., 2007). Interviewees noted the unique nature of the large amount of county and industrial timberlands in the area. One interviewee estimated that, in 2024, approximately 30-40 percent of county revenues came from timber harvests on county lands.

In recent years, the share of recreation and tourism in the study area's employment and small business patronage have increased (Charnley et al., 2006). Interviewees noted that Mt. Hood Meadows Ski and Summer Resort (Mt. Hood Meadows) was a significant employer for the local community. Many interviewees also thought that the Mount Hood ski areas attracted visitors from Portland who then

visited Parkdale businesses. Although OR-35 (which connects Hood River to Mt. Hood Meadows) does not pass directly through Parkdale, interviewees did not think that this negatively impacted tourism: *"I feel like more people know that Parkdale is not that far off [Route] 35 and they have found the brew pub."*

However, the potential for developing tourism and recreation in the study area did not seem to be a shared value for the community. For example, a 1997 community land use planning process in Parkdale revealed negative local attitudes toward tourism (Mitchell, 2005). In the planning process, Parkdale residents said things like "Leave everything as is, tourists can stay in Hood River," and "Just leave us alone! Just look at what you've done to Hood River with your tourism. You've ruined our small town" (Mitchell, 2005, p. 90). The NWFP 10-year social and economic report indicated that interviewees continued to be concerned about the rise of tourism, including the proposed expansion of the Cooper Spur Ski Resort (Kay et al., 2007).

Conflicts over ski resort expansions have deep roots in the Upper Hood River Valley. For example, in 1977, study area residents opposed a proposal from Mt. Hood Meadows to change zoning to allow for commercial use and vacation condominiums (Kay et al., 2007). Despite this opposition, the county commission approved the development. However, locals appealed the decision to the state commission, which doomed the proposal (Kay et al., 2007). Later proposals to develop the area in 1981 and 1991 also failed, and plans for on-site housing were finally abandoned in 1995 (Kay et al., 2007). In 2002, Mt. Hood Meadows began purchasing land around Cooper Spur with the idea (first proposed in 1977) to develop a major ski resort near Parkdale to replace the old Cooper Spur resort (Katauskas, 2002; Wilson, 2025a). The proposal met substantial resistance from residents, in part because of the impacts that increased development could have on land values and agricultural lands (Associated Press, 2004). The NWFP 10-year social and economic monitoring report noted that while some interviewees expressed concern about the expansion of the Cooper Spur Resort or about transitioning to a recreation- and tourism-based economy, others were supportive of recreation to expand local economic opportunities (Kay et al., 2007). Some community members supported a land trade instead of developing the old Cooper Spur. This idea would have allowed expansion of the existing Mt. Hood Meadows footprint (Associated Press, 2004). After a court case, a land exchange was settled to preserve the north side of Mount Hood and to expand development near Government Camp, though as of 2025, the dispute was not completely settled because of disagreement over land values and Meadows' potential plans to expand Cooper Spur Ski Resort (Wilson, 2025b).

Interviewees confirmed that the proposal to expand the Cooper Spur Ski Resort had been controversial in the Upper Hood River Valley. Some interviewees thought that Mt. Hood Meadows had not been *"a fair and honest player in the game,"* and that the Forest Service had been pressured into making a favorable deal with Mount Hood Meadows rather than completing the land swap preferred by the local community.

Locals have opposed other efforts to develop tourism as well. Interviewees described continued efforts to support farmland and prevent farmland conversion to other uses like housing or tourism-related development such as golf courses. For example, between 2013 and 2021, the owners of the Dee Mill site proposed to build a hotel and event venue on the former mill site but faced local opposition and failed to begin construction; they decided to sell the land instead (Oberst, 2021). However, interviewees also noted a generational shift in attitudes toward developing a recreational or tourist amenity economy: *"If you talk to people who have been here longer, they'd say, ...they wish they [tourists] would go away. But I think more of the middle-aged to younger folks recognize how important it is economically, and a lot of them work in that industry."*

Demographic and community changes

Interviewees thought the main demographic changes in the area were: new people moving to the area and an increase in a year-round Latine population. Interviewees uniformly noted that there were new people moving to the Upper Hood River Valley, and characterized new residents as: wealthy (n=13), teleworkers (n=6), retirees (n=5), amenity migrants (n=2), families (n=2), and "city people" (n=2).

According to US Census data for the Parkdale and Dee CCDs, the total population in the Upper Hood River study area has increased by about 15 percent since 2000 (Table 5.1). Low-income populations did not show a clear trend but ranged from 33 to 42 percent of the total population. Populations aged 24 to 44 declined over the 2000-2020 period from 28 to 24 percent.

Table 5.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	2,852	2,865	3,276	Increased
Low-income population*	1,166	951	1,383	No clear trend
% Low-income population	41%	33%	42%	
Population aged 25-44	810	794	795	Decreased
% Population aged 25-44	28%	28%	24%	
Population aged 65 or older	310	346	506	Increased
% Population aged 65 or older	11%	12%	15%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

During the 1990s, many retirees began moving to the Upper Hood River Valley (Charnley et al., 2006). Interviewees thought that this change had continued to take place since that time and that the new wealth in the area had *"displaced people in the lower half of the income level in the county."* Indeed, between 2000 and 2020, the proportion of population aged 65 and over increased relative to other age groups from 11 percent to 15 percent. In addition to these newer people, interviewees thought that other high-income earners were moving to the area. As one described Parkdale's new residents, *"maybe a third retired people, a third wealthy people who don't need to work but maybe work on a non-profit or something, and then a third people that are maybe employed in the tech sector or schools or government."* However, these observations were not reflected in the US Census data.

Since the implementation of the NWFP, there has been an increase in Latine residents in the Upper Hood River Valley (Kay et al., 2007). Though many Latine workers at the orchards had historically only

stayed seasonally, the NWFP 10-year social and economic monitoring noted that in the mid-2000s Latine residents lived in the area full-time. US Census data for the study area CCDs suggests that changes in this population have been modest to insignificant since 2000 with the Latine population comprising 33 percent of the population in 2000 and 37 percent of the population in 2020 (See Appendix A for data citations). Nevertheless, interviewees commented that there were more Spanish-speaking students in the school, and that there was a permanent population of agricultural workers and others who had opened grocery stores and other services targeted toward Latine people.

Housing and development

Interviewees (n=14) thought that the availability and affordability of housing had decreased. Ten interviewees mentioned that they thought second homes or short-term rentals were impacting housing availability, and four mentioned that there was little or no housing available for workers. An online search revealed only 3 short-term rental homes in the study area as of October, 2024.

Interviewees thought that increasing competition for existing homes had made it harder for new residents to come to Parkdale. While some housing was being built in 2024-2025, interviewees thought that most of it was high-end housing. One interviewee mentioned that it's *"becoming harder and harder to actually attract [working] people from out of the area because of housing."* Some interviewees noted that they would not be able to move into the area because of the significant price increases of housing: as one person put it, *"If I had to move today, I couldn't live here."* Others mentioned that it was difficult to keep staff at local small businesses because of limited housing: *"[Parkdale] is a very tiny town, and there is no affordable housing unless someone personally has a house that they rent out at an affordable rate."*

Mt. Hood CDP (within the Parkdale CCD) underwent a planning process in 2006. Community members answered a survey addressing the changes they'd like to see in the zoning of their area. The community was quite divided, with approximately 60 percent of community members asking for zoning changes, either to facilitate development within the existing business area or to allow for more types of businesses (Hood River County, 2006). The other 40 percent of community members did not want zoning to change in the area. Respondents to the 2006 survey mentioned that they moved to Mt. Hood CDP because Hood River was changing too much. Others thought that Parkdale, rather than Mt. Hood CPD, should be developed further (Hood River County, 2006).

In 2023, as part of the Parkdale Unincorporated Community Plan, community members discussed the need for more housing for workers, including condos. In 2024, one community interviewee summarized the process as being largely about *"trying to find land or opportunities to develop more worker housing, affordable housing."* A further analysis found that up to 21 dwelling units could be constructed in Parkdale (Doxsee, 2023). However, as of 2023, development in Parkdale was significantly limited by the capacity of its wastewater treatment plant (Doxsee, 2023).

A survey of residents associated with the 2023 planning process included questions about the kinds of housing respondents thought should be added to Parkdale. Survey respondents indicated a need for single-family homes (69 percent), accessory dwelling units (42 percent), duplexes (32 percent), and apartments or condominiums (19 percent) (Doxsee et al., 2023). In 2024, community interviewees noted that housing development remained somewhat controversial among residents. Many were opposed to additional development in the area, even as they recognized the importance of affordable housing and housing for workers in Parkdale.

Community services

Interviewees thought that the number of services in the area had either increased (n=6) or had not changed (n=6) over the 30-year period since the NWFP was implemented (one interviewee thought that services had both increased and decreased, and one interviewee thought that services had declined). Interviewees noted that some of the community services were highly dependent on local entrepreneurs. For example, a local farmer bought the grocery store and hardware store and decided to improve it for the community. This means that *"local people in the area go buy their produce there, rather than driving clear to Hood River."*

Historically, Parkdale residents have relied on Hood River for services. In 2024 and 2025, interviewees noted that Hood River had always been the *"community hub"* for the area, and that Parkdale and Dee residents would have to go to the area for some services like health care. Figure 5.4 summarizes significant community amenities.

Six interviewees thought that the schools suffered from a lack of funding. Of those, four thought this was connected to the head counts of students in school. Two connected it to consistent insecurity of funding from timber sales and the Secure Rural Schools funding. Interviewees also noted that there had been some consolidation of schools in the area, especially in the upper levels of school.



Figure 5.4. *Community amenities in the Upper Hood River Valley study area. Includes: zero full-service supermarkets (other locations that accept SNAP benefits, such as gas stations or convenience stores, not included), zero community health clinics, one post office, one library, one Forest Service ranger station, and one timber processing facility.*

Community capacity

In 2024 and 2025, eleven interviewees noted that local community groups like Thrive Hood River and the Mount Hood Town Hall successfully addressed local problems such as land use disputes and the needs of agricultural producers. Interviewees also commented that groups in the Upper Hood River Valley had been

successful at acquiring grants for agricultural and water projects. Others noted how businesses had joined together to begin ventures like the Fruit Loop.

Community relationship with the Forest Service

Of the nine interviewees who described the current relationship between the community and the Forest Service, five interviewees described the community as being divided about its relationship with the Forest Service. One interviewee described the relationship as positive, and three described it as negative. Three additional interviewees thought that there was little interaction between the Forest Service and the community. Three interviewees noted that there had been a positive change in the relationship between the Forest Service and the community, and that this was a result of *"considering the bigger picture of the lands that they manage,"* including both recreationists and the timber industry.

The NWFP 10-year social and economic monitoring report revealed community members' thought that the Forest Service lacked the transparency and decision-making authority that it had previously (Kay et al., 2007). Those interviewees mentioned that the Forest Service had a poor record of forest management, and residents no longer trusted the agency. In 2024 and 2025, some interviewees repeated that sentiment, as one interviewee noted, *"people...who are in the know, I think, generally don't think the Forest Service is managing their lands well."* Other interviewees mentioned specifically that *"old-timers or local families see the Forest Service as very dysfunctional,"* whereas new residents had more positive opinions of the agency. Some interviewees thought that the Forest Service was not doing much work on the landscape: *"it's difficult to see that there's much work being done [by the Forest Service]."*

We asked community interviewees about their views on Forest Service management priorities (Figure 5.5). Most interviewees (79 percent) thought that the Forest Service was prioritizing management for wildfire resilience. Interviewees also thought that the Forest Service prioritized incorporating public opinions into its planning process (71 percent). A majority (57 percent) also thought that the Forest Service prioritized the socioeconomic well-being of local communities.

Fourteen interviewees were familiar with the Hood River Forest Collaborative, which was initiated in 2011 (Hood River Forest Collaborative, n.d.). Interviewees had different perspectives on the forest collaborative and its role and relationship with the Forest Service. For example, one interviewee mentioned that they thought the collaborative was *"totally anti-logging of any kind"* and *"recreation-oriented,"* or were part of organized non-profits with specific interests instead of members of the public. Interviewees involved in the collaborative thought that it helped shape projects as *"the discussions we had in the group... changed aspects of the project."* Others thought that the collaborative helped bring additional funds to the Forest Service, particularly in getting grants for wildfire mitigation in the study area. While some interviewees thought that the collaborative had increased the pace of management projects, others were skeptical and thought that projects



Parkdale Community Center

on the Hood River side of the ranger district were particularly prone to litigation. As one interviewee put it, *"It's a challenging place to collaborate, because we're in Portland's backyard."*

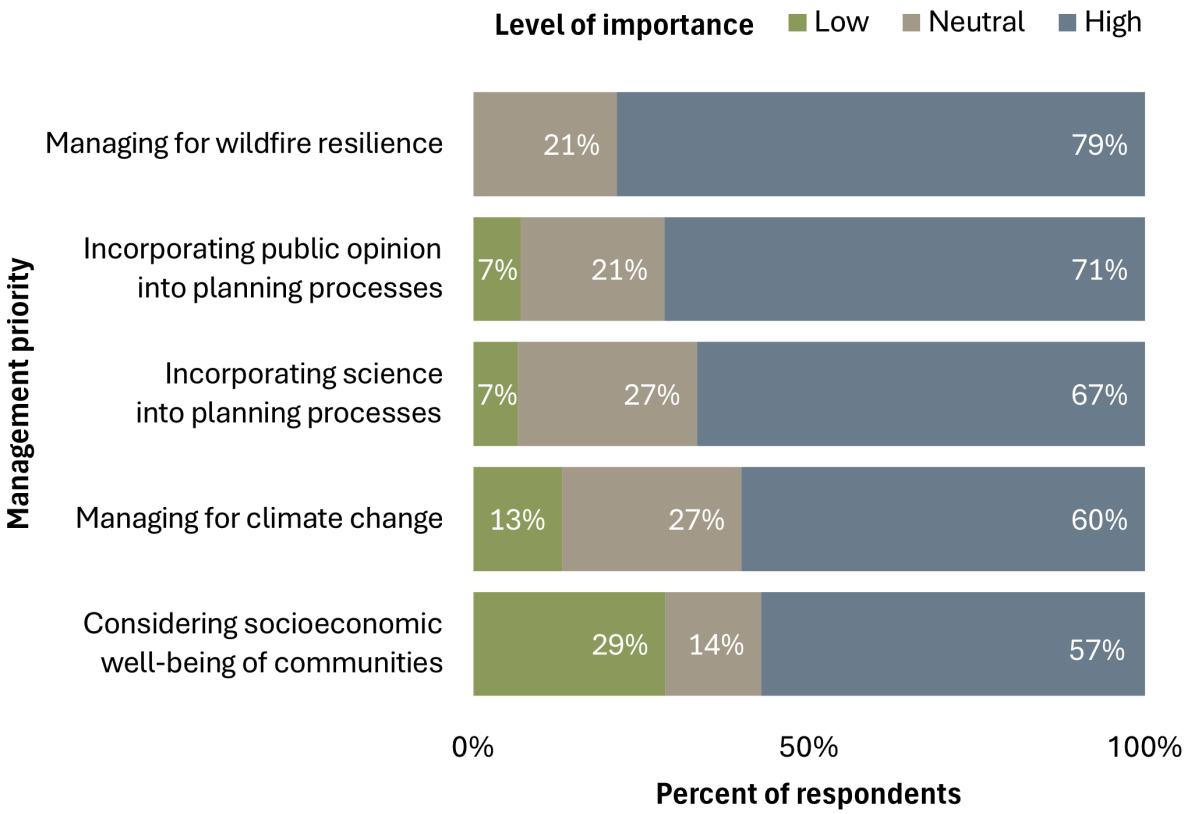


Figure 5.5. *Community perception of Forest Service management priorities (n=15). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

Community relationship with national forest lands

In the NWFP 10-year social and economic monitoring report, interviewees noted that they enjoyed the clean water, clear air, and scenic vistas of the area, as well as the quiet. The forest amenities were part of the reason why they lived in the area (Kay et al., 2007). The scenic values of the area were so valued by residents that one described living in Parkdale in this way: *"We live in a postcard."*

In 2024 and 2025, interviewees unanimously characterized nature/aesthetics and recreation on the national forest as having a high level of importance (Figure 5.6). Water was also ranked highly by 93 percent of interviewees, and hunting and fishing were additionally of high importance to 67 percent of interviewees. Interviewees ranked tourism, timber, and non-timber forest products as least important.

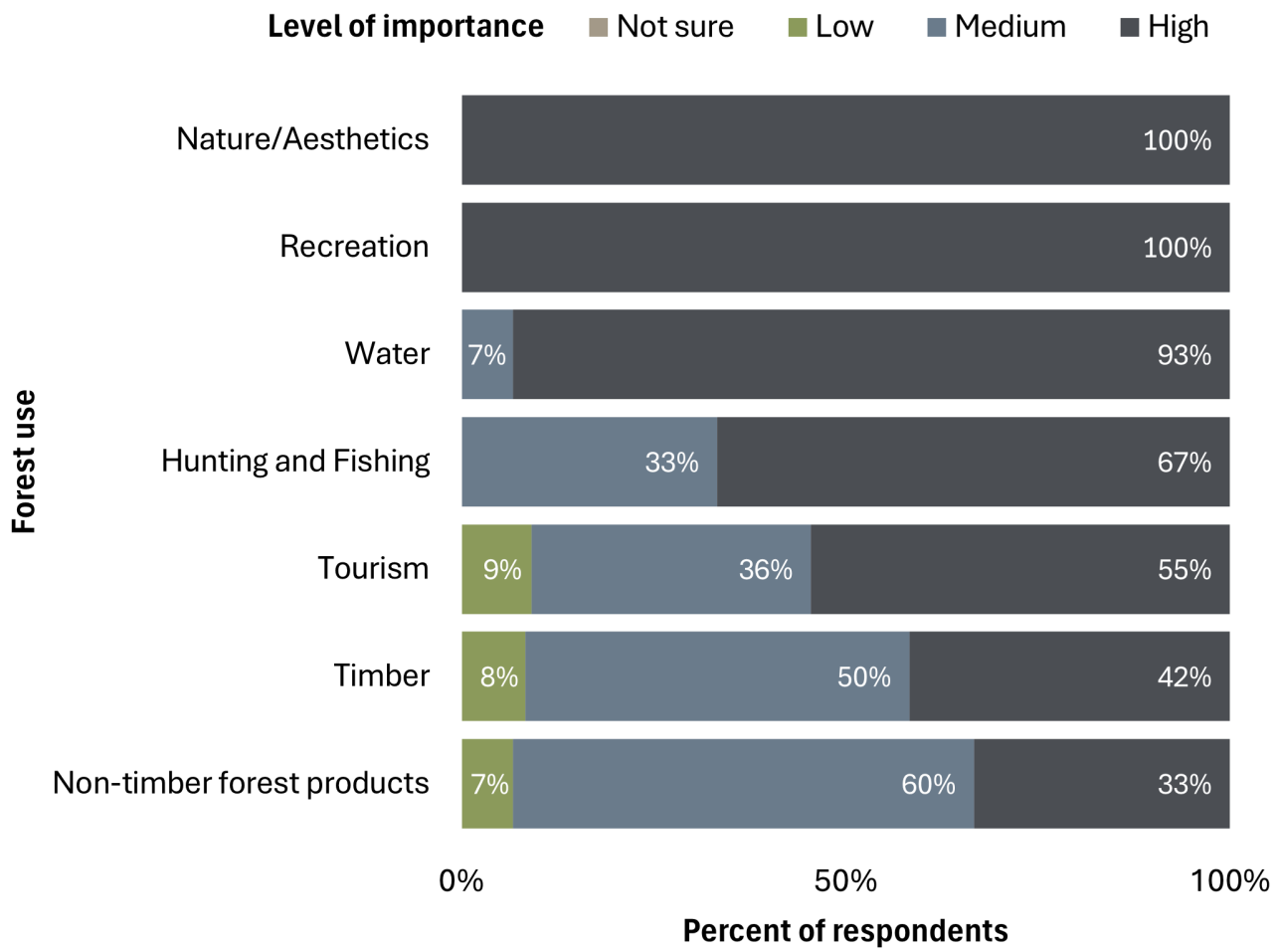


Figure 5.6. *Importance of national forest uses to community (n=15). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Recreation, roads, and trails

Interviewees mentioned that the most popular outdoor recreation activities were: hiking (n=13), mountain biking (n=12), skiing (n=11), off-highway vehicle use (n=6), camping (n=5), fishing (n=3), and water-based recreation (n=2). While recreation is often associated with Portlanders, interviewees noted that there was a strong tradition of ski racing in the local community, and that many local farmers had long participated in ski racing and other activities. As one interviewee put it, *"they're old school farmers that would ski race in the winter...they were also climbers and hikers."* Interviewees in 2024 and 2025 suggested that the increasing popularity of the Mount Hood area for tourism and recreation continued to be a divisive issue for local communities. For example, the local search and rescue organization was strained by the increasing demand to rescue recreationalists from Mount Hood. Interviewees also noted that areas like Teacup Nordic, which is located on the southeast side of the mountain near Mt. Hood Meadows, had become increasingly popular. Interviewees noticed that specific areas, including certain campgrounds, had become more popular without being able to increase their capacity. For example, interviewees commented that some areas *"like [Mt. Hood] Meadows...and Timberline...[are] five times as crowded as they were 20 years ago."*

Interviewees were also concerned about national forest access. For example, some interviewees noted that the Forest Service roads *"are in really bad shape"* because of a decrease in logging, and that there had also been some roads closed due to wildfires. Interviewees noted that there have been more increased

recreational demands on local trails recently, and that more maintenance was needed to meet these demands.

Water

Interviewees noted that water from the national forest (and its management by the Forest Service) was particularly important for Upper Hood Valley residents. In part, this importance stems from the significance of water quality and supply for the valley's orchards and other agricultural endeavors.

Timber

Over the last decade (2013-2023), timber sale volume at the Hood River Ranger District (USDA Forest Service, 2023) represented approximately 17 percent of Mt. Hood National Forest timber sales, but little, if any, of this economic activity directly benefited the local economy. Businesses that purchased timber sales from the Hood River Ranger District during this time were all based outside of the study area. However, one company located within 10 miles of the study area boundary purchased timber sales in 2017 and 2018 with volume totaling 1.6 mmbf (approximately 3% of sale volume during this period). Other timber sales were purchased by companies based in nearby Carson, Washington and Molalla, Oregon. The most distant purchaser was based over 200 miles away in Elgin, Oregon.

Non-timber forest products

Both Forest Service and community interviewees who commented on non-timber forest products gathered in the area mentioned that locals gathered mushrooms (n=14), berries (n=11), firewood (n=6), Christmas trees (n=5), bear grass (n=3), salal (n=1), limbs and boughs (n=1).

According to Forest Service Cut and Sold reports from 2013 to 2023 (USDA Forest Service, 2025), the commercial fuelwood program was the most lucrative non-timber forest product program for the Mount Hood National Forest, generating a total of $269,455 for the ten-year period. However, fuelwood sales have declined (or were sometimes misreported) since 2017. Christmas tree permits generated nearly $50,000 from 2013 to 2019, but data appears to be missing after 2020. Commercial mushroom permits show more consistent reporting over the ten-year period, totaling nearly $50,000 for 28,000 gallons with annual proceeds averaging $3,843. Limbs and boughs generated over a total of $26,000 while salal generated $21,000 for the 2013-2023 period. Ferns and dry cones were reported only occasionally and generated a total of $2,500 and $240, respectively. Fruits and berries were not reported for the Mount Hood National Forest.

Wildfire and other forest disturbances

Interviewees who mentioned disturbances in the forest almost all mentioned wildfire (n=14). Many interviewees reported that they had previously believed that the forest was resistant to fire. One interviewee noted that the area *"used to be called the asbestos forest, even though on the east side, it's shaped by fire."* Recent fires have changed that perception.

When asked about how wildfires had impacted the local community, interviewees mentioned evacuations (n=5), damage to local trails and roads (n=4), increased wildfire smoke in the area (n=3), decreases in tourism

(n=3), negative impacts to agriculture (n=1), and mental health concerns (n=1). Interviewees mentioned the Eagle Creek Fire (2017) as an example of a fire that significantly impacted the community.

The fire was started by a teenager who set off fireworks during a burn ban (Woolington, 2017). It burned approximately 50,000 acres over a three-month period. While the fire did not burn any structures in Upper Hood River Valley, eight interviewees mentioned that the Eagle Creek Fire was a *"wake-up call."* Other local impacts from the fire included poor air quality due to smoke and evacuation alerts in some neighborhoods. Interviewees also noted that the Forest Service made efforts to specifically engage the Parkdale community during the fire, including hiring local vendors to supply food to firefighters and suppression support staff.

Interviewees (n=7) thought that the Forest Service managed previous wildfires as best they could with limited resources. Interviewees also commented that they thought the Wildfire Crisis Strategy designation in the area was a result of the *"recognition about this area being a bullseye"* for wildfire mitigation needs. Although interviewees generally had favorable opinions about the Forest Service response to wildfires, some were more negative. These community members believed the agency inappropriately let acreage burn rather than suppressing fires.

Interviewees also mentioned that they felt that the area is now *"sort of a tinder box."* As a result, more Upper Hood River Valley residents had begun home hardening projects, and local programs like Firewise were gaining popularity. Eleven interviewees (including agency interviewees) mentioned fire mitigation actions in the community, including work by the local electric co-op, the Oregon Department of Forestry, the Soil and Water Conservation District, and local fire districts. Interviewees also noted that there were Community Wildfire Protection Plans and that some neighborhoods were pursuing Firewise designations. As one interviewee put it, *"the community as a whole has upped their game a little bit"* with respect to wildfire mitigation.



Mt. Hood Forest Products and Restaurant

Interviewees also mentioned that the local Forest Service office had been involved in conducting fire mitigation activities. While seven interviewees thought the activities were not at a sufficiently large pace and scale, interviewees were generally aware of Forest Service fire mitigation activities including thinning (n=10), fuel breaks (n=3), roadside clearing (n=2), and prescribed burns (n=2). Some of these fire mitigation activities were associated with the designation of the Mt. Hood Forest Health and Fire-Resilient Communities priority landscape under the Wildfire Crisis Strategy, which allowed the district to *"hire more staff, to basically increase the pace and scale of the projects that we were already implementing,"* according to one agency interviewee.

Community futures

When asked about the next ten years, interviewees noted that they anticipated the following: increased wildfires (n=7), increased recreation (n=4), changes in housing (n=3), potential changes in agriculture (n=3), continued impacts of climate change on water and temperature (n=3), and changes in the Forest Service (n=2).

Interviewees were insistent that Parkdale specifically would retain its strong community identity by resisting efforts from outsiders and newcomers to change the area. However, some did see possibilities for change, especially in areas that were not restricted by the limitations of Parkdale's wastewater treatment system.

Interviewees saw fire and climate change as driving local ecological change moving forward. As one put it, *"[the next ten years] are gonna be really fire-driven."* Interviewees did see some hope in fire mitigation efforts, as one mentioned that they hoped they would see a *"nice, lovely mosaic of landscape—trees that'll be resilient [to fire]."*



Downtown Parkdale

Conclusions and case study highlights

Our results align with previous social and economic monitoring of the Upper Hood River Valley (Kay et al. 2007). For example, Charnley et al. (2006) reported that their interviewees noted that a declining timber supply and litigation against the Forest Service since the implementation of the NWFP had negatively impacted the community. Interviewees from the ten-year monitoring also believed that if the NWFP had functioned according to plan, sawmills in the Upper Hood River Valley would not have closed in the 1990s. However, interviewees also thought that competition from regional and international markets had negatively impacted local mills during that decade (Charnley et al., 2006).

At the same time, the study area's economy was buffered from the declining forestry sector by revenue from its robust county forest, its agricultural industry, and its potential for further developing tourism. Despite local resistance to development, the study area remains attractive to tourists and amenity migrants such as retirees and teleworkers who contribute to the local economy and tax base.

Upper Hood River Valley key forest management takeaways

- Prior to the NWFP, the timber industry in the study area was highly dependent on federal timber. NWFP harvest cutbacks and shifts in markets contributed to local decline in the timber industry.
- The study area has a strong agricultural sector based on fruit orchards, which buffered the impacts of the NWFP and absorbed some displaced workers.
- The scenic and aesthetic qualities of the national forest were unanimously important to interviewees. Forest managers may want to avoid activities that detract from the scenery or otherwise conflict with those values.
- Wildfire resilience was an increasing concern to community members and some interviewees thought that the Forest Service was not working at an appropriate pace and scale to mitigate the potential severity of wildfire.
- Given the popularity of recreation on the Mount Hood National Forest, community members were interested in seeing more maintenance of forest roads and trails.
- Some community members were not interested in developing an economy centered on tourism or amenity migration.

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Orchard in Parkdale

For full report, visit:
https://hdl.handle.net/1794/31412

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Ecosystem Workforce Program

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Chapter 6: Southern Tillamook County, Oregon


Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns, Naomi Serio

Case study facts

Population (2020): 5,893

Location: Tillamook County, Oregon

Federal forest lands (35% of study area): Hebo Ranger District, Siuslaw National Forest

Climate:
Average Annual High: 59.7 °F/Low: 42.3 °F
Annual Precipitation: 89.93 inches;
Snowfall: 0.2 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<15,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 6.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Southern Tillamook study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

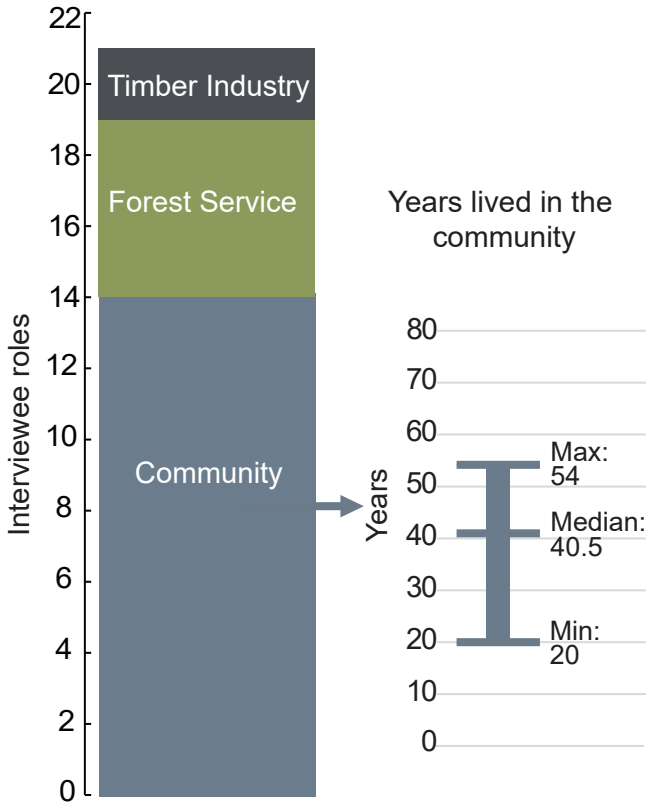

Figure 6.1. *Graph of interviewees by role and number of years lived in the community. Our sample included 14 community members, five Forest Service employees, and two timber industry representatives. Community interviewees lived in the study area for a minimum of 20 years, a maximum of 54 years, and a median of 40.5 years.*

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Study area and geography

The Southern Tillamook County case study focused on the Hebo Ranger District of the Siuslaw National Forest. We defined the Southern Tillamook County community spatially as the Neskowin and Beaver census county divisions (CCDs). The CCDs include the southern portions of Tillamook County, which includes the census-designated places (CDP) of Beaver, Hebo, Cloverdale, Pacific City, and Neskowin (Figure 6.2). These unincorporated communities are along US 101 or short spur roads off the highway. Tillamook is the county seat, which is approximately seven miles north of the study area boundary. The Hebo Ranger Station is located in the Hebo CDP.

National forest lands comprise 36,000 acres (35 percent) of the study area, and the US Department of Interior Bureau of Land Management (BLM) manages 15,000 acres (12 percent of the study area) of federal forestlands. In addition to national forest and BLM lands, the Tillamook State Forest and private industrial forest (primarily owned by Stimpson Lumber Company) are significant to the area's timber industry comprising 6 percent and 19 percent of the study area, respectively. Forests in the study area are comprised of coastal temperate rainforests including Douglas-fir, western hemlock, Sitka spruce, and red alder.

The distribution of the population across unincorporated census-designated places within the study area was variable. For example, in the 2020 census, the population of Pacific City was 1,109, Hebo was 207, Cloverdale was 267, Beaver was 163, and Neskowin was 205 (Rynerson, 2026).

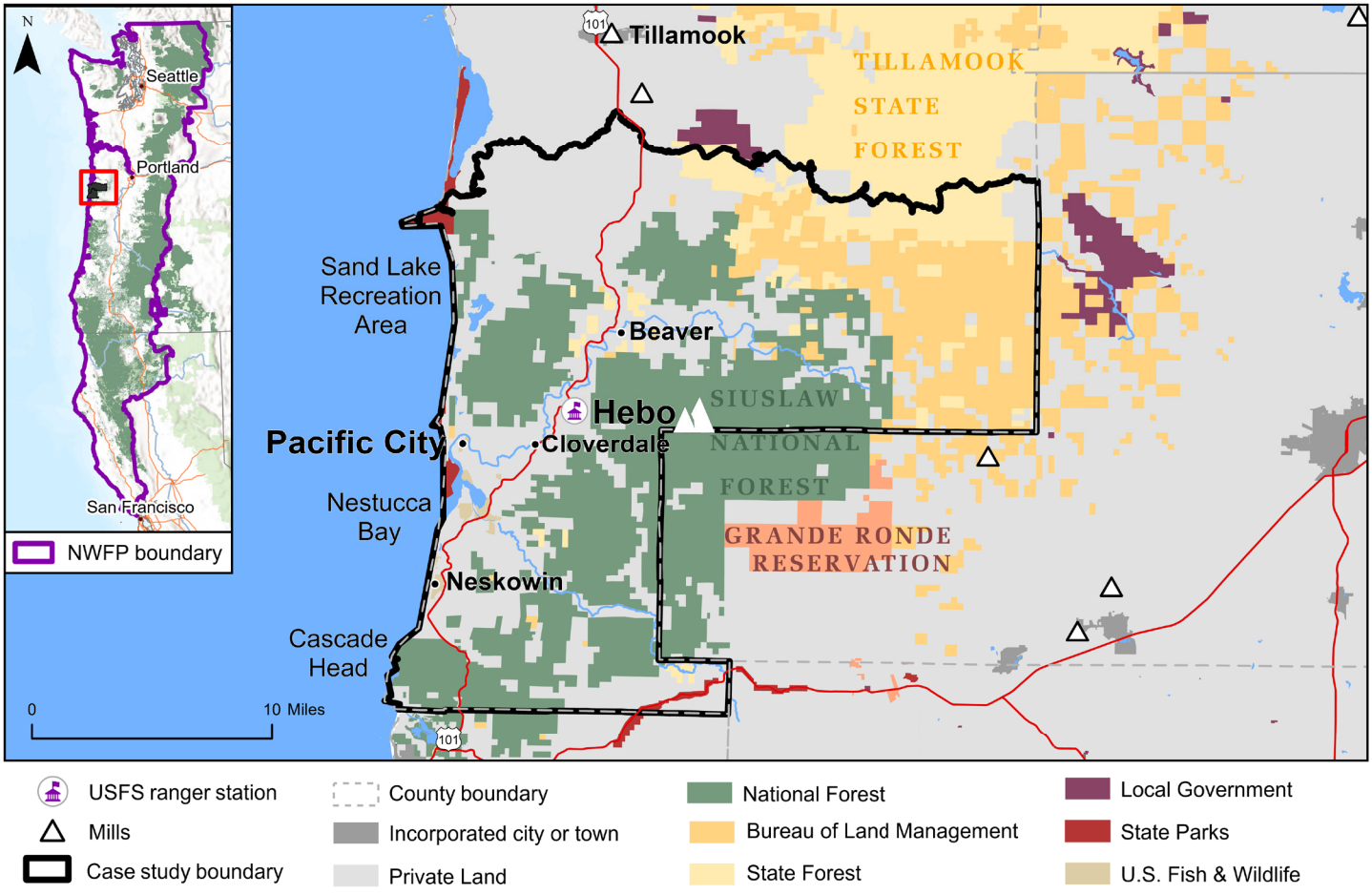

Figure 6.2. *Southern Tillamook case study area*

Interviewees described Neskowin and Pacific City as the "destinations" of the area, whereas other areas like "*Cloverdale, Hebo, Beaver, Blaine...are not [destinations].*" They described Pacific City as a tourist destination because of its proximity to the beach. According to interviewees, it was never a "*big timber hub.*" One interviewee noted that Pacific City was one of the most populated unincorporated communities in Oregon. Many thought that Pacific City was a second home community for people from Portland and the Willamette Valley, and that comparatively few people lived in Pacific City full-time.

Interviewees described Neskowin as primarily a summer town that lacks a strong economic relationship to natural resources. As one interviewee put it, "*Neskowin is not a timber town...it's pretty much residential … a place for people to come in the summer.*"

Interviewees described the inland towns of Beaver, Hebo, and Cloverdale as lacking services. Referencing Hebo, for example, "*I think there's a lot of potential there because of the location—that's right on Highway 101 and a major intersection, where you have traffic coming from the valley...and there's not a reason in the world to stop there [in Hebo]. You just keep going.*" They stated that Beaver and Cloverdale similarly lack services, "*so you have a stretch of about 15 miles [where] you can't find a public restroom or a place to get a cup of coffee or soda.*" Interviewees thought that residents of these towns mostly worked in the woods (for example, for the Forest Service) and were less involved in the service industry. Historically, locals knew Hebo as "*a timber and military town.*" It has experienced population and business losses since the closure of the military station in 1980 and, later, following the implementation of the Northwest Forest Plan (NWFP) in 1994.

Points of interest

Sand Lake Dunes and Cascade Head

A unique aspect of the Forest Service lands in the Hebo Ranger District are the coastal sand dunes at Sand Lake, north of Pacific City. This area became popular with off-road vehicle users beginning in the 1970s, leading to the development of a management plan in 1980 (Tonsfeldt, 2010).

On the southern end of the Hebo Ranger District is Cascade Head, which was designated in 1934 as an Experimental Forest. A portion of this was designated in 1974 as a Scenic Research Area (Tonsfeldt, 2010). The area is primarily a Sitka spruce and hemlock forest, and the entire area was designated as a Biosphere Reserve in the United Nations Biosphere Reserve system in 1980 (Tonsfeldt, 2010). This area has been managed by the Northwest Forest and Range Experiment Station (USDA Forest Service, 1977).

Pacific City Beach

Pacific City Beach is located south of Cape Kiwanda headland. The beach features the scenic Haystack Rock (also known as Chief Kiwanda Rock), sandy dunes, a wide sandy beach, and is known for good surfing and fishing. Traditional dory fishing boats offer an additional cultural attraction. The beach draws in seasonal residents and tourists alike.

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forests in Northern California, western Oregon, and western Washington. This section provides a summary of direct impacts of these events on the social and economic wellbeing of the Southern Tillamook County study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and on-going changes in the community's wellbeing following 30 years of the NWFP.

Annual timber harvest on the Siuslaw National Forest fell from 424 million board feet (mmbf) in 1988[1] to 15 mmbf in 1994 (Figure 6.3) (USDA Forest Service, 2025). This drop followed 30 years of harvest volumes consistently exceeding 300 mmbf annually (Tonsfeldt, 2010). Annual harvest on the Siuslaw National Forest reached its lowest point at just under 5 mmbf in 1997, a level similar to pre-World War II volumes (Tonsfeldt, 2010). Since 1998, harvests have averaged around 19 mmbf (USDA Forest Service, 2025). The Siuslaw National Forest budget was also halved because of the decline in timber sale receipts (Tonsfeldt, 2010).

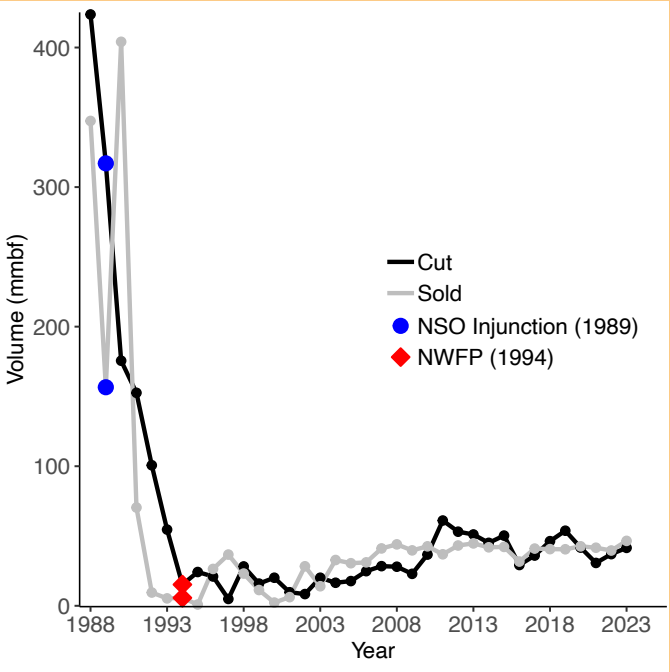

Figure 6.3. *Line graph showing timber harvest and sales ("cut" and "sold" volume in million board feet) for the Siuslaw National Forest, federal fiscal years 1988-2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the NWFP indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

Interviewees had disparate views about the NWFP's impact on the study area. Previous monitoring suggested that in 1990, federal forest lands had high importance to the economy in Tillamook County relative to other counties in the NWFP area (Adams, 2025). However, historically, the study area lacked timber processing capacity. Logs from the Hebo Ranger District were transported to mills[2] in nearby Tillamook and elsewhere. While millworkers could have easily commuted to Tillamook and independent logging operators were certainly based in the study area, local economic impacts of pre-NWFP timber harvest are difficult to estimate.

However, as one interviewee explained, the NWFP came at a time that was right for transitioning timber harvest from federal lands to state lands because of the age of the forest. As one interviewee noted, "*that [State Forest] wood*

1. USDA Forest Service cut and sold data reported in federal fiscal years.
2. The term "mill(s)" is used throughout to indicate any wood processing facility, including, for example, dimensional sawmills, shake mills, plywood and particleboard facilities, and paper mills.

was just becoming merchantable at the same time that the Northwest Forest Plan was enacted. And so, the infrastructure for logging was able to somewhat transition off of a steady diet of federal timber sale programs into the state forest [timber]." Consequently, impacts from the NWFP likely buffered employment in the timber industry as local loggers and mills turned to the Tillamook State Forest for sales.

With the decline in harvest from federal forest lands in the period leading up to the NWFP, the Tillamook State Forest became increasingly important for compensating losses in county revenues from the decline in timber sale receipts (TCFC, 2003). In 2020, timber revenues from the State Forest provided over $22 million to Tillamook County (Egener, 2021).

Our interviewees also conveyed broad variability in community knowledge of the NWFP in Southern Tillamook County. Only four community interviewees claimed to know about the NWFP, while six said they knew it a little, and two reported that they were unfamiliar with it. One interviewee mentioned that they thought local awareness of the NWFP was low, unless they or a family member were involved in the timber industry. "*I would bet that most people don't even know what the Northwest Forest Plan is or does for them.*" Some interviewees thought that forest management practices changed under the NWFP, transitioning from prioritizing timber harvest to managing late successional forest and restoration. Under the NWFP, the Hebo Ranger District was designated as an Adaptive Management Reserve and Adaptive Management Area, both of which are designations that do not prioritize timber harvest. Two interviewees mentioned the scientific basis of the NWFP as being important to them, and that local ecological concerns were essential to determining what should be cut.



Old timber railroad in Tillamook

One interviewee believed that under the NWFP, the Forest Service was "*looking for different ways to improve the habitat and the forest that wasn't being done before*," including non-traditional harvest strategies like restoration thinning. Interviewees noticed the decline in timber harvest in the area, noting that "*three quarters of it is not being harvested these days.*" Two interviewees recalled strong local opposition to restrictions related to spotted owls, including one local group that made hats criticizing owl protections. Interviewees also noted that the loss of logging on federal lands impacted county budgets for local roads and education: "*[logs on federal lands] were a bunch of high-value logs, and the County lost out [on timber receipts].*"

Pre-NWFP history

Settlement

Indigenous Tillamook people, known as the Nestucca, lived since time immemorial along the Nestucca River, which flows through the study area (Tonsfeldt, 2010). Tillamook peoples first contacted Europeans– or at least their trade goods - through shipwrecks and coastal trading activity as early as the late 17th century (La Follette et al., 2018). By the late 18th century, European and Euro-American traders were trading with the Tillamook, bringing with them diseases that severely impacted local populations (Tonsfeldt, 2010).

To the north of the study area, Euro-Americans established a trading post at Astoria in 1810, and Tillamook was founded in 1853 (Tonsfeldt, 2010). However, settlement in the study area remained limited. As late as 1860, fewer than 100 Euro-Americans resided in Tillamook County (USDA Forest Service, 2001). In an 1855 executive order, President Franklin Pierce established the Coast Reservation consisting of an approximately one-million-acre reservation and including most, if not all, of the study area (Lewis, 2022). The U.S. government intended to confine western Oregon's Indigenous populations to this reservation and actively prohibited Euro-Americans from settling or gaining title to reservation lands. Over the next two decades, the Coast Reservation was reduced in size through various acts. By 1875, Southern Tillamook County was returned to the public domain and opened to Euro-American settlers and industrial interests (Tonsfeldt, 2010).

Filing of fraudulent homestead claims ("land fraud") was a widespread tactic used by industrial timber interests to convert forests in the study area (and in the Western U.S. broadly) from public domain to private ownership (Tonsfeldt, 2010). Partly in response to these thefts, President Theodore Roosevelt established the Tillamook Forest Reserve in 1907 on what would become the Hebo Ranger District. A year later, the Tillamook Forest Reserve was combined with the Umpqua Forest Reserve to form the Siuslaw National Forest. However, timber-related land fraud continued as the forest was alternatively opened and closed to homesteading through various acts and policies. The Forest Homestead Act of 1906, for example, caused the Forest Service to reopen the national forest to land claims in 1908. In the first two decades of the 20th century, individuals filed 1,115 homestead claims within the Siuslaw National Forest. While some of these homestead claims were legitimate, many fraudulently attempted to gain land titles that they would later sell to timber interests. Applicants who were denied their land claims sometimes set fires on forest lands. A main occupation of the Forest Service during this time concerned the investigation of land claims and protection of the new national forest from fires and unlawful entry and occupation (Tonsfeldt, 2010).

Apart from Pacific City, which initially focused on the fishing industry and tourism, most of the unincorporated settlements within the study area were established as dairy farming communities (Rissel, 2009). Oretown (between Pacific City and Neskowin) and Meda (southeast of Oretown) also had cheese processing facilities, but the last of these closed when they consolidated with the Tillamook Cheese Factory beginning in 1909 (TCFC, 2003).

Many farmers also worked in the fishing industry, providing seasonal labor in local fish canneries (Taylor, 1991; Hall and Murphy, 2012). In 1886, the Linewebber and Brown Packing Company built a salmon cannery on the east side of the Nestucca Bay, approximately three miles south of Pacific City (Rissel, 2009; Taylor, 1991). This cannery was opened partly because of the fishing industry's expansion in the Pacific Northwest following the collapse of fisheries along the Sacramento River in California (Taylor, 1991). The cannery employed Chinese workers (Rissel, 2009; Taylor, 1991). While the cannery initially opened in 1887 and closed in 1889, it reopened in 1899 as the Astor Packing Company. The cannery was purchased in 1905 by

the Elmore Packing Company and closed again in 1918-1919 following several bad fishing years. When the cannery closed, many of the Chinese workers left the area to work at canneries elsewhere (Rissel, 2009).

Coastal tourism and recreation also played a role in the study area's settlement and development. By the early 1900s, Sand Lake (north of Pacific City in the study area) was publicized as the closest beach to the Willamette Valley (Rissel, 2009; Tonsfeldt, 2010). In 1909, a banker acquired much of the beach front area of Neskowin and made plans to subdivide it (NCAC, 2025). Following the subdivision, a beach resort was opened in 1912, and summer homes were soon built on other parcels along the beach.

Starting in 1904, Pacific City's businesses included popular Brooten Baths, a health spa that promised the healing powers of kelp ore, mineralized kelp in blue-shell shale (La Follette, 2022). One historian has argued that the primary impetus for settling Pacific City was the success of the Baths (Lemery, 2023). Another competing health resort, the Kiwanda Sanatorium, was one mile up the road from Pacific City in nearby Woods (Lemery, 2023). After a tuberculosis outbreak and associated court cases, the Baths closed in the 1940s (La Follette, 2022; Rissel, 2009). During this time, spas were declining more broadly, as recreation was becoming more widely democratized across the United States (Horowitz, 1973).

Between 1910 and in the mid-1920s, Pacific City's main industry—aside from summer tourism—was fishing (Taylor, 1991). Fishermen of Southern Tillamook County developed what became known as the Cape Kiwanda dory, a specialized boat form used for ocean fishing (Taylor, 1991). However, in the 1920s, commercial salmon fishing on the Nestucca River was prohibited, causing fishermen to turn to the ocean for fishing or leave the industry (Rissel, 2009). Those who remained continued to fish illegally or turned to other local areas and sold their catch elsewhere (Taylor, 1991). Others decided to turn to commercial fishing in the summer and fall, working as river guides for recreational fishermen in the winter. By the 1930s, during the Great Depression, the population of Pacific City dwindled (Rissel, 2009).

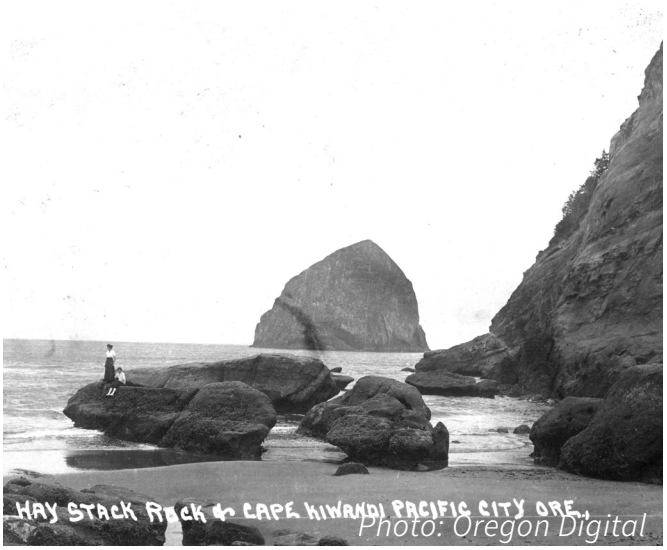

Photo: Oregon Digital

Cape Kiwanda, 1920

In the 1940s and early 1950s, mink farming became very popular in Pacific City (Rissel, 2009). In 1940, there were 80 mink farms in Tillamook County, and the industry was described as the third largest sector of Tillamook County's economy during this time (Rissel, 2009). Because of bans on salmon fishing, ocean fishermen remaining in the area focused on bottom fish, which were used as feed at local mink farms (Taylor, 1991). However, by the 1950s, mink prices dropped, and the occupation lost favor.

In the 1950s and 1960s, the fishing industry and tourism intensified in Pacific City as road access improved, and a small plane airport was constructed (Rissel, 2009). New subdivisions in Pacific City offered vacation homes. A more-than-tenfold increase in coho catch in 1967 also spurred a rush to the fishery, and the local dory fleet grew from about 20 in 1966 to several hundred over the next decade (Taylor, 1991). At this time, Pacific City also began its now well-known "Dory Derby" (Rissel, 2009). However, in the 1970s, regional canneries and a local salt house began to close because of overfishing and lower fish quotas (Rissel, 2009). In 1976, the Forest Service estimated that the Hebo Ranger District—through its management of the watershed—contributed approximately $4.65 million in net economic value to salmonid fisheries in the area (USDA Forest Service, 1977). Despite the economic boon of fishing, few residents relied solely on

fishing for income (Taylor, 1991).

Interviewees also described the history of Pacific City as being rooted in summer tourism: "*most of the houses along the ridge here were… just small cabins and no insulation....They [residents] would come in the spring—it was Memorial Day to Labor Day...and that's the way it was here, until probably the 1970s, [when] some people started moving here permanently.*" A socioeconomic analysis conducted in the 1970s noted that during the summer season, the population in the area more than doubled as second-home owners and vacationers came to the area (USDA Forest Service, 1977).

Early timber industry

In the first few years following the dissolution of the Coast Reservation, timber harvests in the Tillamook area primarily served local markets due to difficulties in extracting and transporting timber. For example, in 1885, investors from Forest Grove built a small mill at Hoquarten Slough (a few miles north of Tillamook) to meet local building needs. The mill was sold in 1891, and new investors incorporated as the Tillamook Lumber Company, processing 5,000 board feet daily by 1892 (Levesque et al., 1985). However, around this time, the timber industry on the Oregon coast began using steam power and constructing logging railroads and "cargo" mills to process timber for export by sea. A cargo mill operated at Netarts Bay around 1890. A larger cargo mill at Hobsonville on the Tillamook Bay exported as much as 10 million board feet a year by the early 1900s (Tonsfeldt, 2010). Almost all the timber processed by Tillamook mills at this time came from private lands. A branch of the Southern Pacific arrived in Tillamook Bay in 1911, facilitating industrial expansion.

By 1913, the A.F. Coats Lumber Company purchased the Tillamook Lumber Company mill at Hoquarten Slough. During World War I, the operation rapidly expanded production to meet the war demand. Sitka spruce, supplied from the Siuslaw National Forest and milled in Tillamook, supported the production of airplanes for the war effort (Tonsfeldt, 2010). By this time, the A.F. Coast Lumber Company mill reported a milling capacity of 100 thousand board feet per day. Nonetheless, the timber harvested and processed in the study area was still relatively small in comparison to the "milltowns and logging centers" north of Tillamook County (Erickson, 1987).

Between 1933 and 1951, a series of wildfires collectively known as the Tillamook Burn significantly impacted the timber industry in the study area and northwest Oregon broadly. The fires burned approximately 350,000 acres (primarily north of the study area) on private and county timberlands in Tillamook, Clatsop, Washington, and Yamhill Counties (Oregon Department of Forestry, 1997). After these devastating fires, the state obtained approximately 255,000 acres of burned forest lands to form the Tillamook State Forest (Decker, 2024; Wells, 2004). In return for giving lands to the State Forest, the counties were assured a portion of timber revenues from the lands (Decker, 2024). Upon taking ownership of the land, the State undertook a salvage program and a replanting and reseeding program (Wells, 2004; Erickson, 1987). The Tillamook Burn salvage program ran from 1934 to 1955, yielding almost $100 million in revenue for approximately 7.5 billion board feet of timber (Wells, 2004).

Post-World War II timber industry

Demand for natural resources during World War II followed by the post-war housing boom ended a Depression-era slump in timber harvest in northwest Oregon and initiated the era of truck logging (Erickson, 1987, Tonsfeldt, 2010). Between 1943 and 1953, the Hebo Ranger District increased its allowable cut from approximately 5 to 52 mmbf (Tonsfeldt, 2010). After 1945, timber sale contracts required road building

and some contracts specified clear cutting. However, salvaged logs harvested from the Tillamook Burn dominated timber supply in northwest Oregon until the mid-1950s, producing approximately 55% of the region's logs (Erickson, 1987). Log production in Tillamook County, relative to the four other northwest Oregon counties, peaked around 1951. By the late 1950s, Georgia Pacific, Crown Zellerbach, and Publishers Papers mills in Tillamook were turning to "green" timber from southwest of the burn as truck and tractor logging made timber on the Siuslaw National Forest more accessible (Erickson, 1987; USDA Forest Service, 1977). By 1958, the annual harvested volume of Douglas fir, western hemlock, and Sitka spruce species exceeded 300 mmbf in the Siuslaw National Forest. The national forest maintained this volume of cut timber into the mid-1980s (Tonsfeldt, 2010).

In the 1970s, the Forest Service reported that the Hebo Ranger District sent approximately 15-20 million board feet per year to mills in Tillamook County, 90-120 million board feet to mills in the Willamette Valley, and 5-15 million board feet to mills in Lincoln County (USDA Forest Service, 1977). Approximately 59% of the timber was set aside for small mills in the Willamette Valley under the Small Business Administration set-aside program. In the mid-1970s, the wood products industry produced greater employment in Tillamook County than tourism, unlike neighboring Lincoln County (USDA Forest Service, 1977).

The 1970s was also a tumultuous time for the local timber industry in Tillamook as individual mills closed and reopened. The Northco Lumber Mill closed in 1970 and in 1973, Crown Zellerbach completed retooling and reopened its mill ("CZ Plans Mill Opening; Leon's Changes Managers," 1974). The retooled mill's annual capacity was 20 million board feet per year, but it closed indefinitely after operating for only 2 years (Knowlton, 1975).

Despite the significant harvest volume in the Hebo Ranger District, The Daily Astorian described the timber industry as "beleaguered" when a lumbermill closed in 1975. They suggested that the mill closures were responsible for a 22.8 percent county unemployment rate (Knowlton, 1975). In 1979, Louisiana-Pacific closed their plywood mill because of the high costs for materials and low demand for plywood (AP, 1979). With the recession in the early 1980s, lumber and wood manufacturing jobs in the county dramatically declined and remained approximately level between 1985 and 2000 (TCFC, 2003).



Tillamook Mill, 2024

Mount Hebo Air Force Station

The Hebo Ranger District was strategically important during World War II and the Cold War because of lookouts that were used for military surveillance of the coast (Tonsfeldt, 2010). Lookouts in the Hebo Ranger District were located at Buzzard Butte, Bell Mountain, Mt. Hebo, Little Hebo, and Cougar Mountain. In 1956, the Army opened the Mt. Hebo Radar Station, which was part of the Air Force Semi-Automatic Ground Environment (SAGE) system to warn against enemy aircraft (Adams, n.d.; Dorsey, 2019). The station had a "radome" (radar dome)—used as a weather station and for air defense— that operated from approximately 1965-1968 until it was destroyed by wind and replaced by newer technology (Weatherly, n.d.; Fowler, n.d.). The station closed in 1980 when it became technologically obsolete (Adams, n.d.; "Living Under Swords," 1978). The Radar Station employed about 150-250 people, and approximately 150 families lived in or near Hebo to support the base (Dorsey, 2019). Interviewees suggested that the Air Force station closure significantly affected the town of Hebo, reducing local school enrollment by approximately 20 percent.

Southern Tillamook County after the NWFP

Employment and industry

Interviewees' opinions varied on whether employment opportunities have changed over the last 30 years. Two interviewees thought employment opportunities increased, four thought they decreased, four thought they both increased and decreased, and two thought there was no change. Interviewees characterized the traditional, "*bread and butter*," industries in the study area as dairy, timber, and fishing.

Some interviewees, however, suggested that the economy transitioned in recent decades from "*farming, timber, fishing, to more of a service industry and recreation destination.*" One interviewee explained, "*When I first moved here, I would say that a lot of the industries around here were...what you would call resource extraction [forestry, fishing, farming]…[but] It's just not economically feasible to be a small fisherman or a small farmer, really, anymore.*" Interviewees further suggested that newer employment opportunities in the study area were mostly low-wage: "*In South County [Southern Tillamook County], there's not much you know, you have your dairy farms, you have your small businesses, you have your hotels and that require service workers. There is not much in the way of employment opportunities … but because of tourism, [the study area] has the opportunities for lower income wages.*" Another interviewee suggested that locals had to find "*niches of employment for themselves*" and be entrepreneurial because of the lack of job opportunities in the area.

Interviewees also noted variability across the towns' economies. The tourism industry in Pacific City and Neskowin was more developed, while Cloverdale, Hebo, and Beaver did not have tourism. As one interviewee explained, "*Neskowin and Pacific City, right, those are the destinations. And then you have all these outlying other little unincorporated towns like Cloverdale, Hebo, Beaver, Blaine, you know, that are not… [in those communities]. People … are driving places to work, and it might be to the woods to work, or they might work for the Forest Service, or the Bureau of Land Management, and it's not service industry.*"

Dairy

Between 1987 and 1997, Tillamook County lost or converted 4,300 acres of farmland to other uses,

representing a decline of 10% of its farmland (TCFC, 2003). However, the dairy industry remains very important to the study area, with the Tillamook Creamery—a nationally significant brand —still operating in the area. Interviewees noted that the nature of dairying changed, as farms now depended on labor outside of the family. In 2024, interviewees thought that the dairies were supported largely through the work of Mexican American families who have moved to the area and found opportunity working in the industry. Mexican Americans have also started local businesses (e.g. Mexican grocery store, taquerías) and work in the service industry.

Timber

In 1990, in the face of economic losses felt across the Pacific Northwest, WTD Industries built a $7 million "modern, high-efficiency" sawmill on the Trask River (the "Trask River Lumber Stud Mill") approximately one mile north of the study area ("WTD Industries", n.d.). Despite its large private forestland holdings in the area, the Trask River mill competed for timber supply with the neighboring Tillamook Lumber company due to market constraints arising from injunctions against federal timber sales in the early 1990s. WTD filed for bankruptcy in 1991. However, the mill stayed in operation over the next decade as WTD liquidated other assets. In 2002, Stimson Lumber purchased the Trask River mill from TreeSource Industries (a subsidiary of WTD). As of 2024, the mill employed over 100 people and produced studs and hardboard from Douglas-fir (45%), hemlock (45%), and spruce (10%) logs primarily sourced from nearby private lands (Oregon Department of Environmental Quality, n.d.). According to one interviewee, the mill's processing capacity was limited by workforce availability and by log supply and product demand.

Since the NWFP, the Tillamook State Forest and private industrial forestlands have continued providing timber sales for the local industry, filling the gap created by the decline in Forest Service and BLM sales. However, interviewees stated that "*a lot of people switched—went into other fields,*" described the current state of the local mills as "*a shadow of what they used to be,*" and that opportunities for "*men without college degrees*" dramatically decreased over the last few decades. Additionally, interviewees voiced concern that fewer young people were going into logging careers, and that the industry was experiencing dwindling numbers as loggers retired.



Tillamook Log Yard, 2024

Fishing

Between 1992 and 1998, wild coho salmon populations experienced a dramatic decline in Oregon; but since 1998, populations have improved (TCFC, 2003). A fishing profile of Pacific City in 2012 (Hall and Murphy, 2012) found that most fishing was recreational, with some limited commercial fishing. Fishermen were mostly middle-aged and older, reflecting the popularity of the area for recreational fishing, particularly among retirees. The 2012 study found that there was one small commercial processor and one person who did minor boat repairs who resided and worked in Pacific City, though other services like major boat repair and fishing gear were lacking. However, the area did retain a strong Dorymen's Association, which organizes events and is a social group for fishermen (Hall and Murphy, 2012).

Interviewees thought that local fishing remained mostly recreational, and that it was more competitive than it was in the past. One fisherman noted that there were over 100 boats on the river, and that competition increased as fish populations declined. Because of the growth in recreational fishing, several businesses now offer chartered fishing trips for salmon and bottom fish. As one interviewee stated, "*the fishing is not commercial [now], it's charter boats for people to take a recreational trip.*" Some interviewees noted that recreational fishing (including crabbing) was a strong draw for new residents, stating that it was, "*why [new residents] moved here.*"

Tourism

Interviewees characterized coastal Southern Tillamook County as the "*Willamette Valley's backyard*" and noted that both the state and national forests attracted off-road vehicle and horseback use. Pacific City and Neskowin have long been summer resort communities (Rissel, 2009). At the same time, interviewees noted that tourism in Pacific City began to pick up in the 1990s or early 2000s, when a brewery was established there. Because of this dramatic increase in tourism, there have been changes in the community. Some interviewees complained that the beaches were no longer quiet. Interviewees also noted that there was conflict within communities like Neskowin and Pacific City between "*people who are either dependent or want to make money off of tourism versus retirees...who moved here and are really invested in community as a permanent thing.*"

In comparison to the coastal areas, interviewees perceived more inland areas like Hebo and Cloverdale as not benefiting from tourism. Accordingly, residents in these towns were noted to be "*angry about an increase in [tourism-related] traffic*," and interviewees thought that they would prefer to "*keep tourism out*." Another interviewee described: "*Tourism*," the community members "*Hate. It. Capital H.*"

Demographic and community changes

U.S. Census data shows that between 2000 and 2010, the population of Southern Tillamook County decreased slightly, but then increased by 24 percent between 2010 and 2020 (Table 6.1). Low-income populations increased by five percent during this time. While the population aged 25 to 44 remained relatively stable, the percentage of the population aged 65 and older increased by five percent.

Table 6.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	4,831	4,769	5,893	Increased overall, but variable
Low-income population*	1,412	1,883	1,986	Increased overall, but variable
% Low-income population	29%	39%	34%	
Population aged 25-44	991	890	1,101	Increased overall, but decreased as a percentage
% Population aged 25-44	21%	19%	19%	
Population aged 65 or older	978	1099	1,565	Increased
% Population aged 65 or older	20%	23%	27%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

Interviewees' opinions varied on whether local demographics changed. Four interviewees mentioned that families with children decreased, two mentioned that they increased, one mentioned both an increase and a decrease, three mentioned that there was no change, and the remainder were unsure or did not respond. One interviewee who tracked the change over time noted that the school district shrunk in population after the Air Force base closed in Hebo. This decline continued following changes in the timber industry. However, over the last decade, there has been an increase in enrollment, which the interviewee linked to new residents and an increased interest in attending small schools. Interviewees also described how schools were highly dependent on timber revenues because of the Tillamook State Forest revenues to the county.

Interviewees mentioned that new people were moving to Southern Tillamook County, referencing "retirees" (n=6), "wealthy people" (n=3), "teleworkers" (n=3), and "immigrants" (n=2). Interviewees noted that immigrants moving to the area supported the dairy industry. Additionally, interviewees tended to think that the opportunities for high-income jobs were limited, and that many young people only stayed in the area for family reasons. As one interviewee mentioned, "*the people that tend to stay are the ones that ...[are] doing the service jobs or are doing the logging and the fishing.*"

Housing

Interviewees almost uniformly thought that the availability and affordability of housing in the area decreased, with only one stating that housing availability and affordability increased. Interviewees thought that the quality of housing varied dramatically between communities in the case study area. Hebo was described as having "*a lot of low-quality housing*" that was more affordable for people with lower incomes, while housing in Pacific City was too expensive for new working residents. As one interviewee put it, "*there's no housing that even they [teachers or doctors] can afford…. service workers, they're, most of them now are*

Hispanic, and we know that they live together in, you know, like three or four families in a rental because there's nothing available. It's a real crime, you know." Forest Service interviewees also noted that a large percentage of their employees "*have quite long commutes*" and frequently come from areas like Sheridan and Willamina because they cannot find local housing.

The coastal towns of Pacific City and Neskowin have long been summer vacation communities, and many residences have been handed down over multiple generations. Interviewees in Pacific City noted that 60 percent of homes in the area were second homes rather than full-time residences, and that short-term rentals have become increasingly popular and more common. An online search revealed 357 short-term rental homes in the study area as of October, 2024.

Interviewees thought that short-term rentals caused additional problems for new renters, including working professionals. To address these concerns, the county has limited the number of short-term rentals in the area to prevent additional conversion of long-term rentals into short-term ones. Although these regulations were controversial, they withstood scrutiny in the courts. Additionally, interviewees noted that although new housing was being constructed in Pacific City, it was high-end housing "*built as rentals for tourism*" rather than for full-time residents.

Community services

Interviewees were divided as to how services (including restaurants, health care, gas stations, grocery stores, pharmacies, and other small businesses) changed in the area, likely because of the large differences between each of the unincorporated communities. Four interviewees said that services in the area decreased, two said that it increased, four said that it did not change, and two said that it both increased and decreased.

Interviewees in Pacific City thought that services increased due to its growth in popularity for its natural amenities, as a retirement and resort community. Some interviewees thought that amenities increased regionally first, and that retirees, vacation homeowners, and tourists came to Pacific City after they were priced out from Lincoln City, Seaside, and Cannon Beach. As one interviewee noted, "*That's when the new restaurants came in, and that's when the new hotels came in, as the tourism picked up.*" However, some interviewees pointed out that new services were tourist-oriented and less valuable to residents. As one interviewee put it, "*the businesses [that] have come...might not have value for me living here, but, if I'm somebody visiting here, they might be something I might be interested in purchasing.*" Interviewees also noted that the seasonality of tourism made it more difficult for businesses to stay open in the slow season between October to March, when it is "*almost impossible to maintain a small business down here.*"



Pelican Brewery, Cape Kiwanda, Pacific City, 2024

One interviewee discussed the closure of a restaurant and gas station as a negative change in Cloverdale. Some service closures related to retiring businesses that were not replaced with new small businesses. In Hebo and Beaver, interviewees noted declines in quality or closure of markets, restaurants, and gas stations. Interviewees shared that this is "*rural towns everywhere: that local market goes away, people move on to the regional area for variety of services.*"

In Neskowin, the services have not changed dramatically. As one interviewee put it, "*We have one restaurant. We have one store. It's been that way for almost 100 years.*" Because of the original town platting, ownership, and zoning, the town has limited family-oriented services. Many of these services remain unchanged, except for the post office which closed in the early 2020s (Neskowin Citizen Advisory Committee, 2025). Community amenities in the Southern Tillamook County case study are summarized in Figure 6.4 below.



Figure 6.4. *Community amenities in the Southern Tillamook County study area. Includes one full-service supermarket (other locations that accept SNAP benefits such as gas stations or convenience stores, not included), one Forest Service ranger station, zero timber processing facilities, zero community health clinics, three post offices, and one library.*

Community capacity

In Pacific City, community members spoke to the exceptional support of the community, referencing events and programs like the Christmas basket program and the Dory Fleet Trick or Treat. Interviewees also described a broad set of programs run by different groups, including CARE, Food Roots, and the Dorymen's Association. Interviewees also mentioned natural resource-oriented organizations like the Nestucca Watershed Council and the Tillamook Estuaries Partnership. Interviewees described the benefits of Pacific City being a retirement destination, with one stating, "*the money is here.*"

In Neskowin, interviewees described a strong sense of community among full-time residents. One interviewee mentioned how town residents joined together to volunteer and raise money to complete pavement projects in the town. The Neskowin Community Association was also mentioned as a "*community-*

oriented fundraising social group that raises money for local nonprofits." Another group, the Citizen Advisory Committee, took up other community issues and was completing a plan as of 2025 for its unincorporated area.

Hebo was described as an area that "*lacks a critical mass to do much of anything, just not enough people to make things happen.*" Communities like Cloverdale were described as close communities where many families lived in the area for generations.



Cloverdale, 2024

Community relationship with Forest Service

Six interviewees described the relationship between the community and the Forest Service as positive, one described it as negative, three described the community as split in its relationship, and two described the relationship as non-existent. Five interviewees also suggested that the relationship worsened over the years with the revolving door of Forest Service employees in the community. Three interviewees noted that a decline in the number of staff at Hebo and staffing hours had negatively impacted the community relationship, and that this has been particularly pronounced since the Covid-19 Pandemic when the office shifted to having fewer open hours. One interviewee suggested that the Forest Service did not communicate well with the community and that there were frequent miscommunications, stating, "*The Forest Service is very knowledgeable, but not asked to communicate as much as they might like to.*" Two other interviewees thought that the Forest Service could do a better job reaching out to community organizations.

We asked community interviewees about their views on Forest Service management priorities (Figure 6.5). Half of interviewees thought that the socioeconomic well-being of local communities was a high priority for the Forest Service, with only 17 percent indicating that it was a low priority. Similarly, half of interviewees thought that incorporating public opinions into the planning process was also a high priority for the Forest Service. The other half was evenly split over whether the Forest Service was neutral or placed a low priority on considering public opinions in its planning. Interviewees mostly agreed (over 80 percent) that the agency was incorporating science into its planning process. Seventy percent thought that the Forest Service was prioritizing wildfire resilience, but only 50 percent thought that the agency was prioritizing management for climate change.

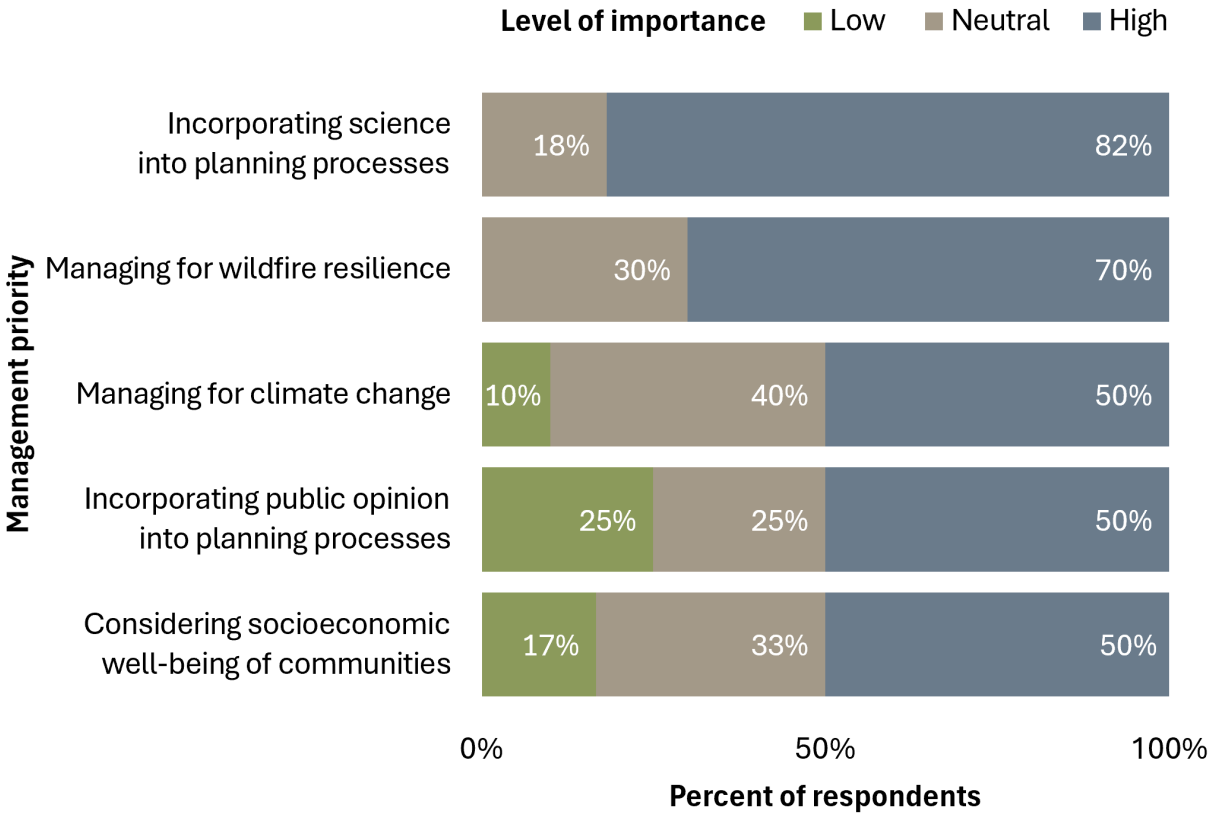

Figure 6.5. *Community perception of Forest Service management priorities (n=12). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

The Hebo Ranger District actively works with the Hebo Stewardship Group which was established in 2011 as a part of the Siuslaw Collaborative Watershed Restoration Program (USDA Forest Service, 2017). The group is now part of the Oregon Central Coast Forest Collaborative (OCCFC) which is administered and supported by the Cascade Pacific Resource Conservation and Development (Cascade Pacific RC&D, n.d.).

Community relationship with National Forest lands

Community interviewees ranked tourism followed by nature/aesthetics as the highest valued aspects of the use of national forest (Figure 6.6). However, water, hunting and fishing, recreation, and timber were also highly valued. The community valued non-timber forest products the least.

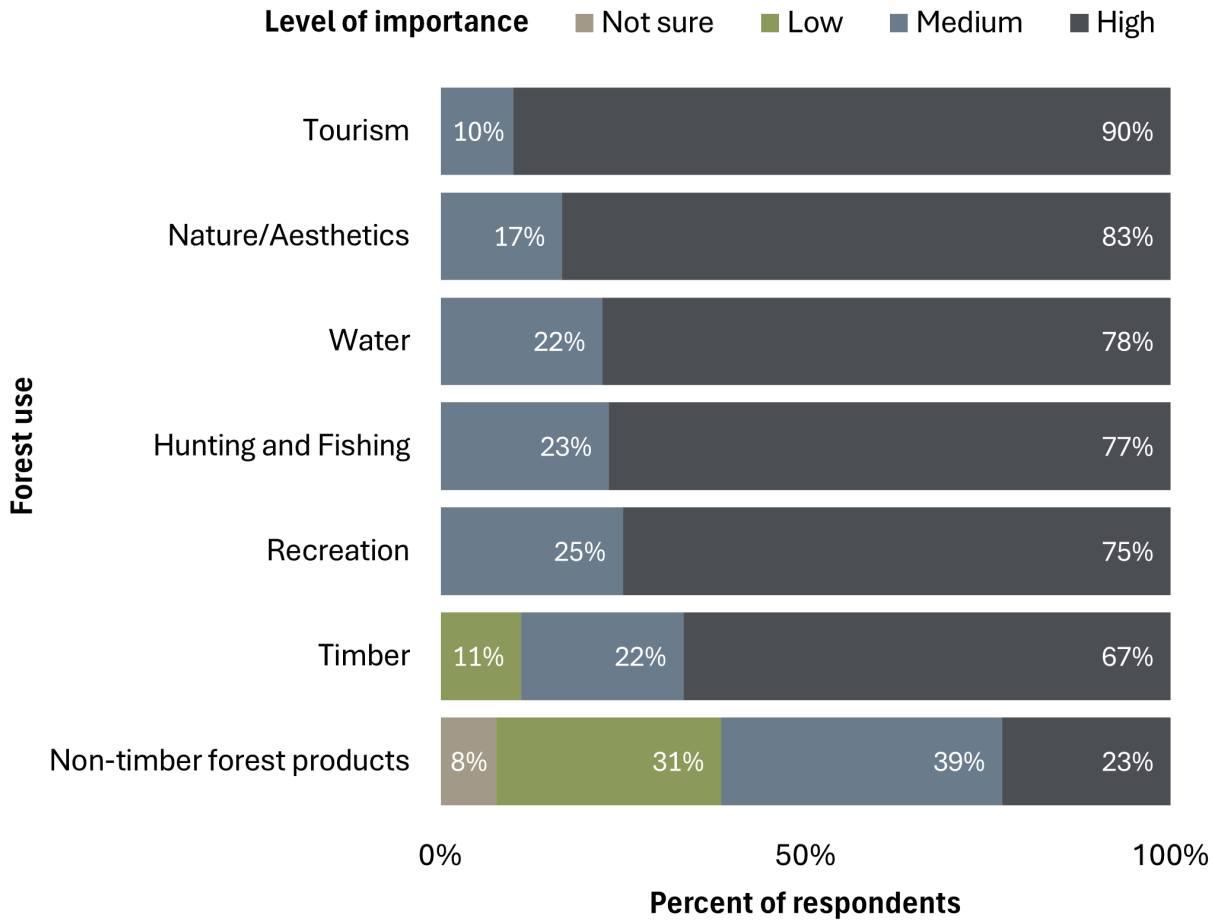

Figure 6.6. *Importance of national forest uses to the community (n=13). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Recreation

Interviewees noted that the most popular outdoor recreation activities in the study area included: hiking (n=8), off-road vehicle use (n=6), mountain biking (n=4), water recreation (n=4), camping (n=3), fishing (n=3), and hunting (n=2).

Road access to the national forest was a significant concern for some interviewees. One interview shared, "*When [the Forest Service] wants to decommission a road...people want to be able to Jeep back to places to then hunt...so they want to have access to getting places in a vehicle.*" Another interviewee explained the challenges to road access as both an issue of funding and staff perception, stating, "*The Forest Service...*

can't get money for the roads and then [they] assume that there is no reason why locals would want to go there."

Timber

Between 2013 and 2023, individual timber sales on the Hebo Ranger District averaged 4.3 thousand board feet with bid values averaging approximately $740 thousand (USDA Forest Service, 2023). Of the 31 sales during this ten-year period, most (n=18) went to a logging operator based in Philomath approximately 75 miles from the study area. Two sales were sold to Stimson Lumber Company based in Tillamook and one was sold to the Confederated Tribes of Grand Ronde based in nearby Grand Ronde, Oregon. Other sales went to more distant, larger timber processing companies such as Georgia Pacific West LLC in Toledo, Oregon, Boise Cascade Wood Products LLC in Monmouth, Oregon, and Seneca Sawmill Company in Eugene, Oregon.

Interviewees communicated that since the implementation of the NWFP, the Tillamook State Forest became the primary producer of timber in the region. Timber planted after salvage on the Tillamook Burn in the 1930s to 1950s reached maturity for commercial harvest by the mid to late 1990s. Sixty-seven percent of interviewees valued timber as a highly important use of the national forest.

Community interviewees familiar with the timber industry were generally more familiar with the Tillamook State Forest than the national forest. Of the 13 community interviewees, eight mentioned the important role of the state forest in the area's economy. As one interviewee stated, "*The timber receipts that are from the county are only from the Tillamook State Forest, not the Forest Service.*"

Some interviewees mentioned that while timber sales from state forest lands were more expensive, they moved faster through the bidding process. As one interviewee explained, "*Timber purchasers will put up with the feds because their timber is so underpriced...The [Forest Service] prices are really low, and they will always get bids.*" This interviewee also suggested that the quality of timber on the national forest was better than the Tillamook State Forest, in part because of the erosion that occurred after the series of fires comprising the Tillamook Burn. The timber types between the two forests were also perceived as different. Tillamook State Forest engaged in even-age management, while the Forest Service focused on stewardship-style projects.

Interviewees thought that there would be considerable community disagreement if logging on the national forest were increased in the future. Some interviewees thought that increased logging on the national forest would not necessarily bring economic benefits to the study area because it might not be purchased by local processing facilities. One interviewee thought that increased logging would be seen positively, while three explicitly stated it would be negatively perceived by the community. Two interviewees mentioned that community perceptions would depend on the type of logging activity. Another interviewee mentioned that there were still some residents who believed in unrestricted logging of public lands, stating, "*We should be able to cut down any tree we want to cut down whenever we want to cut it down.*"

Non-timber forest products

Interviewees described a variety of non-timber forest products including: mushrooms (n=10), firewood (n=2), woodland mosses (n=2), salal (n=1), and berries (n=1). Although interviewees did not rank non-timber forest products of high importance to the community, they do have an important history on the Siuslaw National Forest. In Neskowin, for example, some local farmers historically supplemented their income

by selling forest products, including berries, ferns, mushrooms, and cascara bark (NCAC, 2025). Farmers harvested cascara bark for sale to the pharmaceutical industry which marketed it as a laxative as early as the late 1800s (Buttolph and Jones, 2012). During this period, many households in the study area relied on cascara bark for cash income until the market collapsed in the 1920s (Tonsfeldt, 2010). Nevertheless, cascara continues to be permitted and harvested in the Siuslaw National Forest. Between 2013 and 2023, the forest sold an average of 2,800 pounds of cascara bark annually (USDA Forest Service, 2025).

Interviewees mentioned that mushrooming has recently become more popular. Mushroom-related programs through "Explore Nature" fill up within minutes of opening quite regularly. It is hard to know how many people engage in mushrooming for personal use, as harvesting mushrooms on national forest land for personal use (less than one gallon) does not require a permit. Commercial mushroom permits (for harvests over one gallon) on the Siuslaw National Forest have been declining over the past 10 years. Although variable from year to year, the value of permits sold for mushroom harvesting decreased from $58,776 in 2013 to $38,530 in 2023 (USDA Forest Service, 2025).

Commercial moss harvest has also been popular in the Siuslaw National Forest (Muir et al., 2006). Although moss was not specifically reported from 2019 onward, annual harvest ranged from 252,000 pounds in 2013 to 94,000 pounds in 2018 (USDA Forest Service, 2025). In 2006, the Hebo Ranger District accounted for most of the moss harvest in the Pacific Northwest (Muir et al., 2006). The ranger district regularly sold out of permits each year, and there were widespread reports of moss poaching (Peck and Christy, 2006). Beginning in 1996, the district started administering commercial moss harvest through stewardship contracts under the NWFP's Adaptive Management Areas. Stewardship contracts for moss harvest within designated areas are awarded to the highest bidder (Peck and Christy, 2006).

Commercial foliage harvest (i.e. salal, ferns, and other greenery) was the most lucrative special forest products permitting program on the Siuslaw National Forest. Non-moss, miscellaneous foliage permits on the Siuslaw National Forest netted over $1.4 million between 2013 and 2023 with an annual average of $130,000.



Siuslaw National Forest, 1993

Wildfire and other forest disturbances

Interviewees who knew about disturbances in the local forest mentioned wildfire (n=10), landslides (n=8), ice and windstorms (n=4), and insect-induced tree mortality (n=3).

There is a significant history of large fires in the Siuslaw coast region, with most fires occurring in the hot summer months (Tonsfeldt, 2010). In 1853, there was a 320,000-acre fire in the Nestucca area (Tonsfeldt, 2010); and in 1849, a large fire occurred in the forests that would become the Hebo Ranger District (USDA Forest Service, 1977). In 1910, there were several significant fires on the Hebo Ranger District, which destroyed trees and resulted in the growth of alder and brush in the area around Mt. Hebo (USDA Forest Service, 1977). While the Tillamook burns mostly impacted private forestlands, one of the "re-burns" in 1939 impacted 1,700 acres on the Hebo Ranger District. The Forest Service noted that, in the 1930s and 1940s, they often tried to convince locals to not burn their own property or adjacent lands in the summer and fall to clear out fern and salal patches (Tonsfeldt, 2010).

In 2024, interviewees noted increased fire activity in the area, including a devastating Echo Mountain Fire in nearby Lincoln County. Fanned by strong east winds, the fire burned about half of the structures in the town of Otis, including 288 homes (Denis, 2020). Interviewees mentioned that the fire was a wake-up call for residents stating, "*People just did not think that this rain forest that we live in could burn.*" Some Neskowin residents evacuated during the fire. There were also local air quality impacts along the coast. Despite the negative impacts of the fire, interviewees thought that firefighting in the area was as good as it could have been given the windy conditions, which one interviewee described as a "*100-year wind event*".

Forest Service staff viewed themselves as "*underserved in the positions [they] have*" because of a lack of fire-related staff. One interviewee mentioned that this understaffing was exacerbated by the lack of a district ranger, which made it more challenging to fill lower-level positions.

Storms and slides

Significant wind and rainstorms are also relatively common in the Siuslaw because of its location along the Pacific Ocean (Tonsfeldt, 2010). For example, the Columbus Day storm of 1962, with wind gusts up to 170 mph, downed approximately 740 million board feet of timber and damaged over 1,000 miles of forest roads. Much of the downed timber was salvage logged.

Along the waterways, these storms exacerbate erosion and impact water quality. As one interviewee said: "*[After a storm], you definitely see a lot more debris in your watersheds and in your estuaries and a lot of that is trees.*" These storms also have significant impacts on the area's infrastructure, including washed out roads and downed power lines.

Community futures

Interviewees anticipated the following changes in the future of their communities: climate change impacts (including wildfire) (n=5), increased tourism and recreation (n=4), and increased housing issues (n=1). Results from interviews in 2024 contrasted with results from research conducted in 2012 about residents' perspectives on the future of Pacific City with an emphasis on fishing (Hall and Murphy, 2012). Residents expressed that "*Pacific City has already hit rock bottom, and change is inevitable,*" and that commercial fishing would likely not return. However, many thought that the city would grow and hoped there would be better services along the beach, and that recreational anglers would potentially increase.

In 2024, interviewees viewed Pacific City as a rising vacation destination and thought that tourism would continue to drive the local economy. One interviewee thought tourism would become an increasingly important driver of the local economy, and that the community would become "*more and more dependent*" on it. Interviewees also thought that the type of people recreating in the area may change as activities like mountain biking and other active pursuits have become more popular. Interviewees anticipated that, with climate change, more visitors would come during the hottest part of summer and expressed concern that more visitors could become a problem with the city's currently limited infrastructure, including housing. One interviewee commented that they would like to see more housing development locally, specifically for "middle" housing. One interviewee commented that housing and infrastructure needs might lead to incorporation of one or more communities in the county.

Five interviewees commented on climate change and wildfire as being increasingly important in this area moving forward. Some thought that change was already coming more quickly to the area than anticipated, particularly when looking at forest health and wildfire. Some voiced concern that the combination of climate change and wildfires might lead to vegetation type conversion of the forest where a significant fire might lead to different vegetation types. One interviewee also commented on the role that coastal hazards could have in the area, including sea level rise and increased storms.



Beach at Pacific City, Cape Kiwanda, 2024

Conclusions and case study highlights

Despite dramatic declines in timber harvests on the Siuslaw National Forest, impacts of the NWFP on the Southern Tillamook County study area appear to have been relatively mild. Harvest cycles, the historical contingency of the Tillamook Burn, the Tillamook State Forest and its salvage and replanting program, the historical placement of the timber industry in Tillamook proper rather than in Pacific City or Nestucca, and a diversified economy all contributed to buffering the study area from the most significant impacts of the NWFP. Further, the study area experienced negative impacts to its well-being from other social and economic changes that pre-date the NWFP. For example, the decline of fisheries in Pacific City in the 1970s and the closure of the U.S. Air Force Station in the 1980s forced demographic and economic realignments within the study area.

Southern Tillamook County key forest management takeaways

- Tourism followed by nature and aesthetics were important forest uses to the community.
- Despite mixed opinions on the social effects of tourism, tourism will be an economically important industry moving forward.
- Housing stock in Hebo was aging and low quality while vacation homes and short-term rentals exacerbated existing tight housing stock issues in Neskowin and Pacific City.. These factors present challenges for housing Forest Service staff and season workers in forestry and tourism industries.
- Community members were concerned about increasing wildfire risk and other impacts of climate change.
- The community perceived negative impacts from Forest Service staffing policies, including those that encourage staff turnover.

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Beach at Pacific City, Cape Kiwanda, 2024

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Ecosystem Workforce Program

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We extend our thanks and appreciation to interviewees from Southern Tillamook County who shared their experiences with us.



Chapter 7: Butte Falls-Prospect, Oregon

Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns, Naomi Serio

Case study facts

Population (2020): 2,631

Location: Jackson County, OR

Federal forest lands (48% of study area): Rogue River-Siskiyou National Forest, High Cascades Ranger District

Climate:
Average Annual High: 67.8 °F/Low: 39.5 °F
Annual Precipitation: 33.07 inches;
Snowfall: 1.3 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<15,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 7.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Southern Tillamook study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

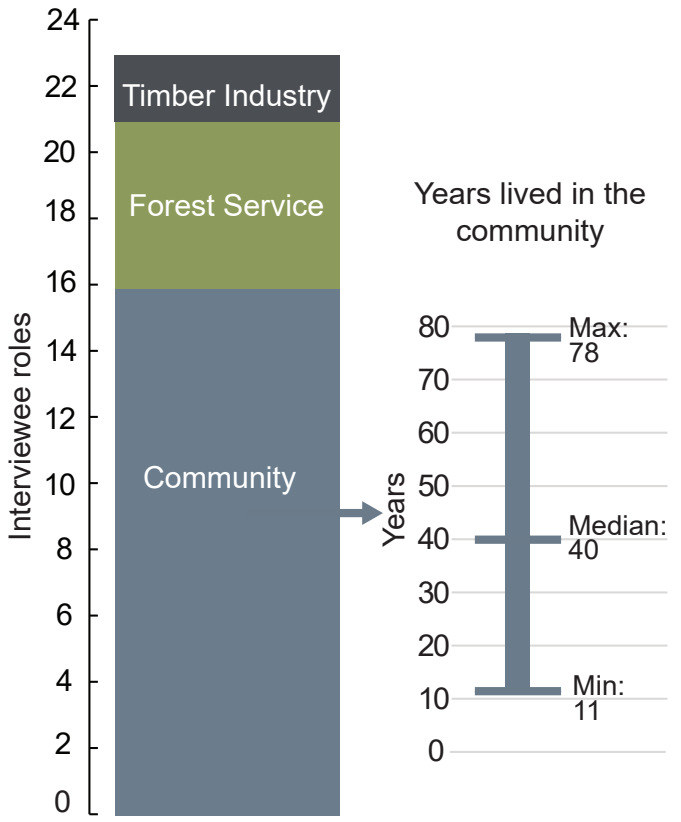

Figure 7.1. *Graph of interviewees by role and number of years lived in the community. Our sample included 16 community members, five Forest Service employees, and two timber industry representatives. Community interviewees lived in the study area for a minimum of 11 years, a maximum of 78 years, and a median of 40 years.*

Sizek, J., Coughlan, M., Huber-Stearns, H., & Serio N. (2025). Chapter 7: Butte Falls-Prospect, Oregon. In M. Coughlan, H. Huber-Stearns, & S. Schneider (Eds.). *The Northwest Forest Plan: 30 years of social and economic change in rural forest-based communities (1994–2024)* (Working Paper No. 125). Ecosystem Workforce Program. Institute for Resilient Organizations, Communities, and Environments, University of Oregon. https://hdl.handle.net/1794/31412

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Study area and geography

The Butte Falls-Prospect case study focused on the High Cascades Ranger District of the Rogue River-Siskiyou National Forest.[1] We spatially defined the Butte Falls-Prospect community as the Butte Falls-Prospect Census County Division (CCD), comprising the northeastern part of Jackson County (Figure 7.2). The city of Butte Falls and the unincorporated settlement of Prospect are not directly connected by a major road and are effectively isolated from one another by forest lands. Prospect is located along the Rogue River and is reachable via Oregon State Route 62, (OR 62), also known as the "Crater Lake Highway," that links Medford with Crater Lake National Park. Butte Falls is located along Big Butte Creek, a tributary of the Rogue River, and is reachable via the "Butte Falls Highway," a Jackson County highway. Butte Falls is surrounded by a checkerboard pattern of community foest land (26 percent of the study area) and Oregon and California Railroad Revested Lands (O&C Lands) managed by the US Department of Interior Bureau of Land Management (BLM) (14 percent of the study area). Most of the land south and east of Butte Falls and north of Prospect is national forest (48 percent of the study area). Forests in the study area are dominated by diverse mixed conifer communities including Douglas-fir, white fir, Oregon white oak, ponderosa pine, and western hemlock, grading to mountain hemlock and red fir at higher elevations. The High Cascades Ranger Station is located in Prospect.

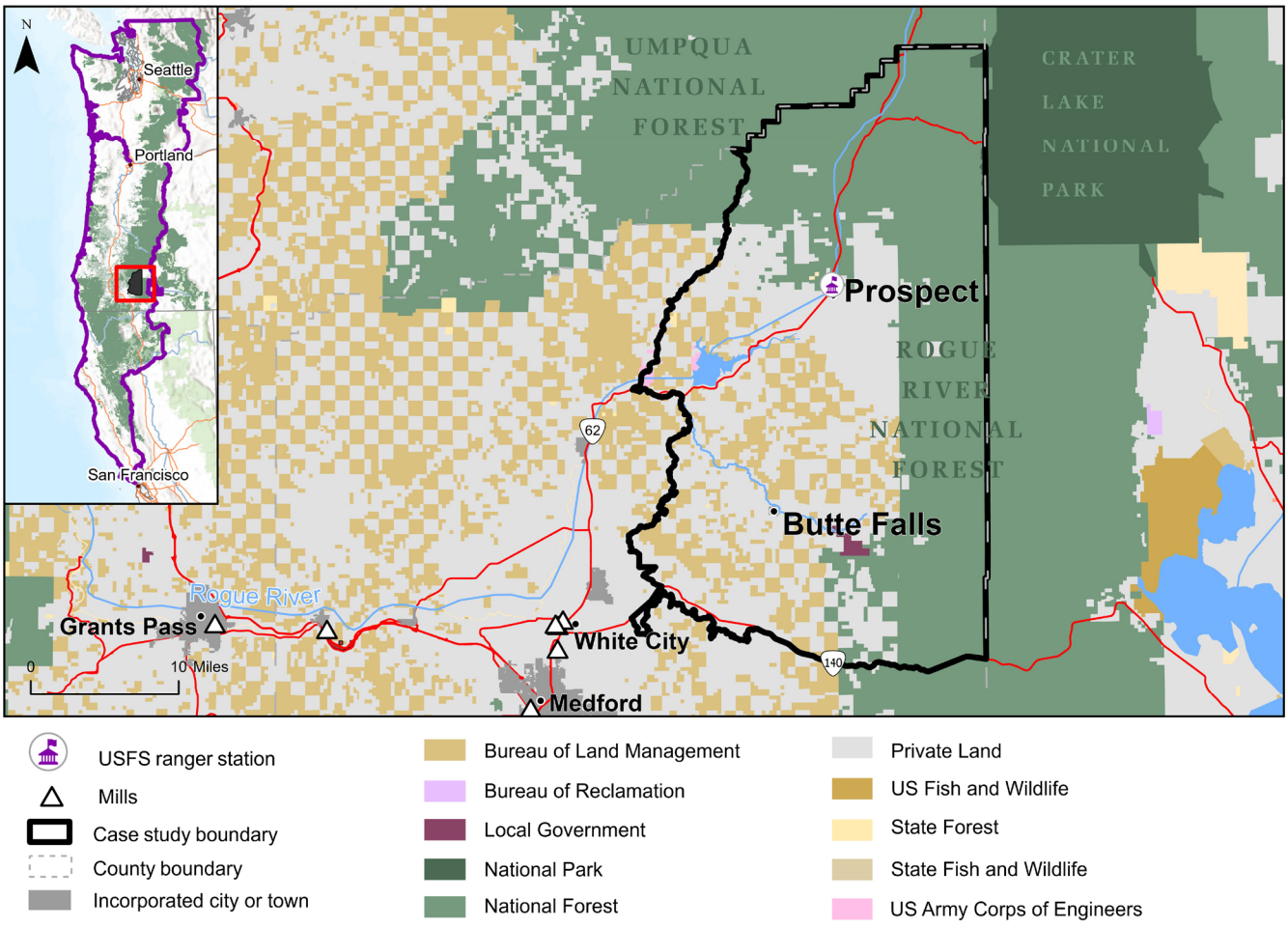

Figure 7.2. *Butte Falls-Prospect study area.*

1. *The Rogue River and Siskiyou National Forests were merged in 2004 to form the Rogue River-Siskiyou National Forest. The High Cascades Ranger District is located in the Rogue River portion of National Forest and is comprised of the two districts formerly known as the Butte Falls and Prospect Ranger Districts.*

Shared sense of place

Interviewees saw both Butte Falls and Prospect as small, isolated, and distinct communities. They have long been 'rival communities,' as one interviewee put it, describing how their high schools competed against each other in sports. Interviewees identified the study area as rural, with one Prospect resident joking: *"End of the world: nine miles. Prospect: 11 miles."* Because of the rural location of Butte Falls and Prospect, interviewees also thought that the study area was more insulated from broader social changes, and that, in some cases, locals resisted new changes or developments. Interviewees felt that a lack of local employment opportunities negatively impacted the study area. Reasons for this include younger working-age people not moving to the area and a lack of opportunity related to broader social problems (like drug addiction and homelessness).

Points of interest

Crater Lake National Park

Crater Lake National Park is located to the northwest of the study area along the Cascade divide. The park was established in 1902 and is the only national park in Oregon. Known for its scenery, unique geology, and water clarity, the park consists of a caldera created by the eruption of Mount Mazama approximately 7,700 years ago. Fed entirely by snow and rain, Crater Lake is the deepest lake in the United States. The most popular feature of the park is the Rim Drive which circumnavigates the caldera. Hiking, biking, and cross-country skiing are popular in the park.



View of Crater Lake, 1908

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forests in Northern California, western Oregon, and western Washington. This section provides a summary these events' direct impact on the social and economic wellbeing of the Butte Falls-Prospect study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and on-going changes in the community's wellbeing following 30 years of the NWFP.

Timber harvest volume on the Rogue River National Forest dropped from approximately 230 million board feet (mmbf) in 1988 and 1989 to 47 mmbf in 1994 (Figure 7.3). With the exception of 1997 at 31 mmbf, annual harvests continued to drop on the Rogue River National Forest until 2001 where it bottomed out at 2.5 mmbf. Between 1995 and 2008, annual harvests averaged 12 mmbf. Forest Service cut and sold data show an increase in harvest volume beginning in 2009, but its likely that this increase can be attributed to

the merger of the Rogue River National Forest with the Siskiyou National Forest. Harvests for the merged Rogue River-Siskiyou National Forest averaged around 38 mmbf for the years 2009 to 2023.

The timber industry played a significant role in the settlement and early development of the Butte Falls-Prospect study area. However, timber processing capacity in the Prospect portion of the study area significantly declined in the decades following World War II with the transition from railroad to truck logging. By 1994, when the NWFP was implemented, the timber industry had further diminished within the study area. One interviewee noted that, *"The Northwest Forest Plan didn't impact that [mill closures in Prospect] at all."* MedCo, which owned significant industrial timberlands around Butte Falls and operated the community's one remaining wood processing facility, had closed its facility and liquidated its timber holdings in the 1980s.

Interviewees characterized the NWFP as having significant impacts to the timber industry (n=5), local economies (n=4), forest health (n=2), and wildfire (n=1). One interviewee noted that the NWFP increased the length of planning processes and made it more difficult to complete timber sales.

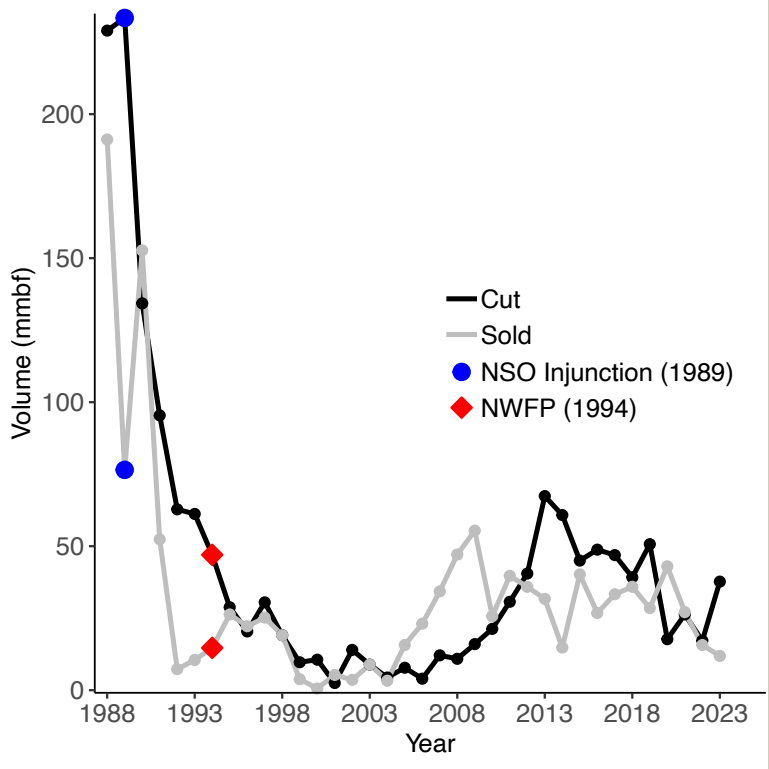

Figure 7.3. *Figure 3. Line graph showing timber harvest and sales ("cut" and "sold" volume in million board feet) for the Rogue River National, federal fiscal years 1988 to 2008 and the Rogue River-Siskiyou National Forest 2008 to 2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the Northwest Forest Plan indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

Interviewees described the NWFP as causing negative economic impacts to their communities, even as they thought that a transition away from traditional timber practices was needed: *"the economical impacts of the communities is really due to the [Northwest] forest plan. You can blame the forest plan, except for there's a reason why the forest plan happened."* Others saw the end of logging old-growth forests as unnecessarily detrimental to local communities: *"[If it weren't for the NWFP], we'd have vibrant timber and stream[side] logging and vibrant small communities where those forests exist."*

In addition to declining timber harvests from the NWFP, the community was also impacted in 2004 when the Rogue River and Siskiyou National Forests merged. During this consolidation, the Butte Falls Ranger District was combined with the Prospect Ranger District. The Butte Falls Ranger Station closed and staff were moved to Prospect (Grabel, 2025). As part of this consolidation, many agency personnel formerly stationed in Butte Falls either commuted to Prospect or left the agency. One former Forest Service employee noted that forest staffing dropped significantly

with these consolidations (Grabel, 2025). According to interviewees, this had significant impacts on the town of Butte Falls:

> *"when I first started working at the Forest Service here [in Butte Falls], there was probably 120 full-time employees there, and probably another 180...part-time seasonal employees... Family-wage jobs, government jobs with benefits...The Forest Service station is now closed. So ...[that is the] stark reality of what happened with the [Northwest] Forest Plan."*

Interviewees mentioned that the closure of the office and consolidation of the Rogue River-Siskiyou Forest led to changing priorities at the ranger district level. For example, staff no longer write grants for the local community to support local planning or attend city council or other meetings, because *"they just don't have the luxury of having enough people and time to do it."* When considering the role of the Forest Service in Butte Falls today, interviewees noted a greater BLM presence in the area: *"[the BLM] actually gave us a person...[who] was looking for ways to help the community,"* whereas no similar position existed in the Forest Service.

Interviewees saw Butte Falls-Prospect historically as being heavily dependent on the Forest Service and the local timber industry, and saw local changes as strongly related to changes in federal policy: as one interviewee noted, *"it used to be you were either a logger or you worked for the Forest Service. And there's not much of either anymore."* Some linked NWFP-related decline in timber harvest to the decline and outsourcing of services (for example, campground hosting and maintenance) formerly performed by the Forest Service. As one interviewee from Prospect put it, *"what the Forest Plan [NWFP] did is it stopped almost all the timber sales... We had a number of campgrounds, and they [the Forest Service] just keep[s] closing them."* Some interviewees thought that increasing the Forest Service presence in the area could have a positive impact on the community. As one Prospect resident stated, *"The Forest Service actually kind of has a huge effect [on the community]...if they get less [funding], we're gonna get less [economic activity]. If they get more, we're gonna get more."*

Bureau of Land Management O&C Lands

Prior to 2019, the NWFP applied to federal forest lands managed by both the Forest Service and the BLM. Harvests were dramatically reduced on lands managed by the BLM. Due to the large share of BLM O&C Lands near Butte Falls, the BLM management change was more significant to Butte Falls than Prospect.

While the NWFP initially impacted both the BLM and Forest Service, interviewees in 2024 saw the two agencies distinctly and often compared their actions. For example, interviewees thought that the BLM was more active in conducting fuels management than the Forest Service, in part because of agency culture: *"The Forest Service has a more ecological heart than the BLM will ever have, but they're not exactly bold and willing to see how managing landscapes at a reduced density would be more resilient and improved... They're not willing to upset any conservationists and get stopped."*

Between 2013 and 2023, BLM timber harvest data (US DOI Bureau of Land Management, 2025) show 16 contracted projects within the study area footprint. Sale volume associated with those projects totaled 92 mmbf with an annual average volume of nearly 12 mmbf (US DOI Bureau of Land Management, 2026). Although the BLM O&C lands represent only 14 percent of the study area's land base at 70,000 acres, its harvest volume roughly matched that of the Forest Service harvest volume for the entire 460,000 acre ranger district. BLM sales during this time were purchased by businesses in Eugene, Springfield, Cave Junction, Medford, and Eagle Point.

Pre-NWFP history

Settlement

The Butte Falls-Prospect study area includes traditional homelands of the Takelma, Southern Molala, Klamath, and Umpqua peoples. Many descendants from those communities are today members of the Grand Ronde, Siletz, Klamath, Warm Springs, Cow Creek, and Yakima Tribal communities (Zenk, 2024).

Euro-American trappers, and later settlers, passed through the study area in the early to mid-1800s. Around 1851, the arrival of mineral prospectors in the Rogue Valley resulted serious conflicts between the Takelma and other Native American people (Schwartz, 1997). In 1853, the Table Rock Reservation was established temporarily, but conflict continued. There were fewer conflicts in the Butte Falls-Prospect study area than in the lower Rogue River Valley. However, the Upland Takelma were affected by settler encroachment on their lands, and many of them joined Molala and Umpqua who were forcibly removed by the US Army to the Coast Reservation in 1856 (LaLande, 1980). Molala who remained in the study area after 1856 likely moved to the Klamath Reservation in the 1860s and 1870s, perhaps due to increased encroachment of gold prospectors, and the surveying of new areas (LaLande, 1980; Sargent, 1921).

The study area was first opened to Euro-American development in 1864, when investors improved the John Day (or Rogue River) Trail, opening a wagon road that connected southern Oregon with new mines in eastern Oregon and Idaho (LaLande, 1980). The road, which ran through Prospect, was used for driving stock and traveling to mining areas. Toward the end of the nineteenth century, this wagon road became known as the Crater Lake Highway and was eventually named OR 62 (LaLande, 1980).

Logging began near present-day Prospect in the 1870s. Early logging efforts focused on sugar pine, which was processed into shakes. During this decade, a mill was constructed along a tributary to the Rogue River (aptly named “Mill Creek”), and a community grew around it. In 1882, the new community took the name of its first post-master, “Deskins.” In 1889, the name was changed to Prospect in anticipation of the “prospects” a proposed Southern Pacific Railroad branch would bring. However, this rail line was never constructed (LaLande, 1980). Shakes were instead taken to Medford by horse and wagon where they could then be transported by rail from the Central Point railhead as early as 1887 (Historical Research Associates, 2011; LaLande, 1980).

In the 1880s, tourism on federal forest lands was more important than small-scale lumbering to the area around Prospect and Union Creek (LaLande, 1980). Along the Rogue River, trout fishing was relatively popular. The Forest Service developed campgrounds and leased summer home tracts at Castle Creek, Woodruff Meadows, and Union Creek to encourage this trend. By 1923, Union Creek had a campground, store, and service station (LaLande, 1980). It was by far the most popular area to visit on the Upper Rogue River, accounting for more than 25,000 out of 38,233 visitors on the district (Brown, 1985). During the Great Depression, Civilian Conservation Corps projects supported the construction of Forest Service buildings and campgrounds near Union Creek (LaLande, 1980).

Butte Falls developed a bit later than Prospect, commencing when the Butte Falls Sugar Pine Company built a sawmill there in 1906 (LaLande 2022; Stringer 2023; Lundgren, 2006). The town grew further after a spur railroad—the Pacific & Eastern Railroad—connected it to Medford in 1910 (Lundgren, 2006). As the region’s timber economy grew, many individuals saw the 1906 Homestead Act as a way to fraudulently claim valuable timber lands around the study area. These “homesteaders” left the area by 1920 realizing

profits either through sale of the timber or the land to timber companies such as the Rogue River Timber Company (LaLande, 1980; Lundgren, 2006).

Agriculture and ranching were also historically important to the study area. When the Forest Service began managing the National Forests in 1905, two of their biggest priorities were implementing grazing and wildfire policies (LaLande, 1980). Overgrazing and conflict between large and small stockowners in the early 1900s prompted the Forest Service to regulate the range through a permitting system. In 1916, the Forest Service reported that over sixty percent of fires had been intentionally set by ranchers to maintain rangelands. Through the 1920s, the Forest Service concerned itself with reducing these rangeland fires. The agency hired fire detectives and created a public relations program to encourage ranchers to stop burning (LaLande, 1980).

In the 1920s, two small mills operated in the Prospect area, but timber harvesting was limited by local mill capacity and a lack of good access roads (LaLande, 1980). Proposals to build railroads floundered during the Great Depression. At this time, tourism along the Crater Lake Highway was so important that locals opposed timber harvest activity along the roadway. This public pressure to preserve the scenic beauty of the forest along the highway, led the Rogue River Timber Company to exchange 8000-acres of roadside timberland for more interior Forest Service lands (LaLande, 1980).



Crater Lake Highway Bridge, 1925

In the mid-1920s, the Owen-Oregon Lumber Company (which became Medford Corporation, “MedCo,” in 1935) acquired much of the area’s timberland and purchased the Pacific & Eastern Railroad spur line (LaLande, 1979). Railroad-logging camps soon followed. The Forest Service opened a ranger station in Butte Falls, and the agency opened the national forest to railroad-logging (LaLande, 2022). Because of improved access to transportation, timber harvests expanded, and Butte Falls became heavily invested in the timber industry (LaLande, 1979). Although the town was not formally a company town, MedCo was the largest and most important employer.

During World War II, timber harvesting expanded dramatically around Prospect to support wartime needs (LaLande, 1979). By 1945, there were eleven small sawmills and eight tie mills within and near the Prospect Ranger District, many of which were harvesting from federal lands.

Post-World War II timber industry

In the late 1940s, timber processing began to leave Butte Falls-Prospect, consolidating in the Rogue River Valley. Approximately 40 sawmill operators formed an association to create a new lumber manufacturing facility in the valley now known as White City (LaLande, 1979). The new facility at White City focused on the post-World War II expansion of the plywood, fiberboard, pulp and paper industries (LaLande, 1979). In 1950, there were only three mills left in Prospect, a result of both reducing timber cutting on the National Forest (LaLande, 1980) and the rise of truck logging, which enabled loggers to take loads to the mills in White City.

In the 1960s, the timber industry around Prospect continued to decline. OR 62 was rerouted and no longer passed directly through the town of Prospect. The “new” highway still looms large in local memory. As one

interviewee noted, *"We still call it the new highway. It got started in '62."* One interviewee attributed the timber industry's decline to 1966, when demand for local lumber dropped: *"They didn't need the trees in the [Rogue River] valley to cut into two by fours and two by sixes because there was no demand."* This loss led to changes in the local community. As one interviewee explained:

> *"When the timber industry started to die, which was back in [19]66, you could see things change. The big grocery store we had closed. It was the first to go. Then, Chevron moved their bulk plant out. We had a bulk plant right up here that had oil for logging trucks, kerosene, and that sort of stuff. And, of course, the gasoline."*

One interviewee noted that when they first arrived in Prospect in the 1970s, the mills had already been closed. Another interviewee noted that loggers that they knew personally moved to the Medford and the Rogue River Valley to centralize their business operations: *"[This logger] was in Prospect for years. I can't remember what year they moved, but he said, 'I've gotta centralize myself,' so they moved to Central Point. He's one of them that goes out every direction from the [Rogue River] Valley to find work. He couldn't stay here and earn money."* An interviewees from Butte Falls also noted a similar trend, *"when I was a kid [in the 1970s], there's lots of log trucks that would just be parked in houses around Butte Falls. And now there's only one that I can think of around, the rest of them live down in the [Rogue River] Valley and will log, take logs from wherever."*

Despite the closure of local mills, timber harvest remained high. In 1980, the Prospect Ranger District accounted for the highest allowable timber harvest of any district within the Rogue River National Forest (LaLande, 1980). One interviewee noted that the *"Prospect [Ranger District] was making three-quarters of the K-V [Knutson-Vanderberg] funds out of the forest [Rogue River National Forest]"*[2] and *"there was a lot of hate and discontent"* from employees on other ranger districts who were jealous of the high harvest volumes.

As one interviewee knowledgeable of the Forest Service office put it, employee evaluation criteria included whether they exceeded timber harvest:

> *"The guy who's the boss over there at the Forest Service, if he didn't reach the PSQ [Planned Sale Quantity], he probably wasn't the boss there any longer... So performance evaluations for upper, for upper management people were based on timber production, and when the spotted owl came around, and that's the restrictions that have changed things."*

Other interviewees thought that automation had impacted the timber industry in these communities and that harvest rates were unsustainable: *"They were timber communities, but they were already on the downslide because of automation... They were really beginning to run out [of large diameter timber], and there wasn't much left of the old-growth [timber]."* In this case, the interviewee thought that the decline was only accelerated by the NWFP.

Butte Falls and MedCo

During World War II, MedCo's operations greatly expanded as Camp White was set up ten miles northeast of Medford (LaLande, 1979). MedCo sold almost all of its timber to the government to support the war effort.

2. The Knutson-Vandenberg Act required timber purchasers to contribute to timber stand improvement treatments (Corts 1976, 65). Though it was passed in 1930, it was not widely used until after World War II.

At this time, the company also reoriented its production from pine to Douglas-fir. As part of this transition, they began harvesting almost exclusively from federal lands, and using trucks rather than trains to transport logs, ushering in an era of truck logging (LaLande, 1979). Timber demand increased dramatically after World War II and MedCo expanded in response. In the 1960s, MedCo ended its railroad operations and switched entirely to truck logging. This entailed a transition from company-employed loggers to independent operators (known regionally as "gyppo loggers") who owned their own equipment, including trucks (LaLande, 1979).

In the 1980s, Harold Simmons (Amalgamated Sugar) acquired MedCo in a hostile takeover. The company liquidated its assets by harvesting virtually all the company's merchantable (i.e. commercially-sized) timber (LaLande, 2022; Duin, 1990a, b). The resulting clear cutting of MedCo lands spurred strong protest from locals. In response, the Butte Falls City Council negotiated an agreement, and the company agreed to limit its clear cutting to land outside of the city limits (Duin, 1990b).



Trainload of logs near Butte Falls, 1941

MedCo officially closed in 1992 (Battistella, 2020). For interviewees, the end of MedCo was linked directly to the decline of the town: *"when MedCo left...the whole community decreased, and the jobs decreased because there weren't all those logging jobs anymore."* Another interviewee mentioned that the forests around town no longer felt like they belonged to the town after MedCo left: *"back in the [19]80s and before, MedCo owned most of the land, the private land, and they hired lots of locals and everybody just felt like the forest belonged to everybody....And that's definitely changed."*

Since MedCo's closure, its land has been sold to a rotating set of timber industry owners (Battistella, 2020). These new companies have a different approach to timber harvest, including greater use of even-age management strategies, which MedCo had not used on their lands. As one interviewee put it: *"when MedCo went away...that's when these massive clear cuts started coming."* Another interviewee described the post-MedCo management as, *"private timber companies haven't stopped logging. Well, obviously they're stopping now because there aren't any trees left,"* intoning that the only decline in timber harvest was related to overharvesting. One interviewee reported that a parcel near their house had sold six times since its sale by MedCo, stating that *"the land pays the price"* for this high turnover, and blamed current timber management for the ecological degradation they had observed.

Butte Falls-Prospect after the NWFP

Employment and industry

Twelve out of fourteen interviewees agreed that local employment in the timber industry had declined since the implementation of the Northwest Forest Plan, although some also dated the decline in

employment to earlier events. Interviewees in Butte Falls mentioned the hostile takeover of MedCo (described above) and the closure of the Forest Service office (2004) as events that precipitated the local timber industry's decline. The Butte Falls Ranger Station closed as part of a broader reorganization and consolidation of the Rogue River-Siskiyou National Forest. One agency employee commented that the agency downsizing had significant impacts for Butte Falls: *"In Butte Falls alone, when I started working there, there were over 110 people in the reforestation department alone."* With the closure of the office in 2004, many of these employees either transferred elsewhere or lost their jobs. In Prospect, interviewees laid as much blame for the local decline of the timber industry on the mid-20th-century advent of truck logging and the centralization of the timber industry in the Rogue River Valley as they did on the decline in harvest on federal lands under the NWFP.

Without the timber industry, interviewees thought that people had limited local employment options. As one interviewee stated about Prospect: *"There's the power company. It probably employs 10. The [Army] Corps of Engineers [at Lost Lake] is within a half hour. They probably employ 40. There's the Forest Service. Other than that, you're pumping gas at the gas station or serving at the bar. There's not much else."* Similarly, in Butte Falls, the loss of MedCo and the Forest Service office meant that only one major employer was left in town: *"[In the 1980s], the three large employers, so there was Medco, Forest Service, and the school. So today, the largest employer is the school."*



Former Butte Falls Forest Service office

As early as the mid-1950s, tourism was considered the third-biggest industry in Jackson and Josephine Counties, behind timber and agriculture (Dolan, 1958). In 2024, interviewees noted that, in comparison to neighboring counties, the area has many summer tourism opportunities with its lakes, trails, and the Rogue River. However, interviewees did not identify their community as a "tourist town," nor did they believe their communities were dependent on tourism. Rather, interviewees saw the communities as federal lands-dependent economies and government-dependent towns with few employment options once mills left the area. One interviewee from Prospect noted: *"We didn't have a lot of industry, except we had logging. We had the cafe, school system, State Highway... Crater Lake Park didn't play a big role in any of that."* Further, some interviewees thought that residents did not like outsiders coming to the area. One Butte Falls resident stated, *"I think the local perception of tourism is [that it is] scary...There's a lot of pushback we have [against tourism]."*

However, two interviewees did think that tourism kept local businesses afloat. This is especially true in the area around Prospect because it is on the way to Crater Lake: *"I think [tourism]...keeps the stores and restaurants alive."* These interviewees did not think that tourism had replaced the timber industry.

Demographic and community changes

According to US Census data, the population of the Butte Falls-Prospect CCD remained stable between 2000 and 2020 (Table 7.1). The data show very slight decreases in low-income populations and in populations aged 25 to 44. However, sampling methods used by the US Census render these changes highly uncertain. By contrast, populations 65 years and older more than doubled from 15 percent to 32 percent of the CCD's population.

Table 7.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	2,629	2,645	2,631	Stable
Low-income population*	970	911	866	Decreased
% Low-income population	37%	34%	33%	
Population aged 25-44	632	481	550	Decreased overall, but recovering
% Population aged 25-44	24%	18%	21%	
Population aged 65 or older	395	589	849	Increased
% Population aged 65 or older	15%	22%	32%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

Five interviewees noted the trend toward an aging population in Butte Falls-Prospect: *"[Prospect]'s an aging community,"* as one interviewee stated. Interviewees also noticed that few new younger people came to these towns to replace the aging population, and that *"there's no incentive for [younger people] to move here."* As one interviewee noted, *"when I came to town, Butte Falls was like a typical community, but just on a small scale...There was seniors here, there were working families with kids."* This reflected broader quantitative analysis of census data between 2000-2020, in which a concentration of older adults grew and populations between 25-44 declined by 25% during the same period. Some attributed this demographic change to the loss of logging and the Forest Service office, as one Prospect interviewee noted: *"When I started [working here], everybody in it was either Forest Service or a logger."*

Eleven interviewees mentioned that new people were moving to the Butte Falls-Prospect areas and characterized them as follows: retirees (n=5), wealthy (n=2), low income (n=2), teleworkers (n=1), families (n=1). Interviewees thought that new people moved to Butte Falls-Prospect because of familial or social connections to the area, to get away from city life, and to find a less expensive place to live. Five interviewees explained that new people were attracted to the study area for its aspects of rural living, including *"less law enforcement"* and the desire to *"slow down a little bit."*

K-12 school districts in the study area have converted to charter schools (Butte Falls Charter School and Prospect Charter School). Charter school status enabled these schools to bolster their numbers by attracting students from outside of the school district boundaries. Five interviewees attributed the need to transition to charter school to the decline in families with children living in the district. This decline in families was, in turn, thought to be related to the timber industry's decline in the study area. Between the 1978-79 and 1992-1993 school years, Prospect lost 36% of its students, with enrollment declining from 232 to 170 (Jackson County, 2004). In comparison, Butte Falls lost only 6% of its students between 1978-1979 and 1992-1993 school years, moving from 251-236 during this time (Jackson County, 2004). However, as early as 1990, the Butte Falls school district was struggling to

maintain sufficient enrollment, and residents feared that it may have to be closed (Oregon Economic Development Department, 1990).

Prospect began operating as a charter school in the 2009-2010 school year (Achen, 2008). Its 2023-2024 enrollment totaled 215 students (Oregon Department of Education, 2025a). In 2011, Butte Falls also chartered a school (Town of Butte Falls, n.d.). In the 2023-2024 school year, Butte Falls enrollment totaled 146 students (Oregon Department of Education, 2025b). Residents of both school districts expressed concern about the charter schools' continued existence because of low enrollment. However, they also thought it was unlikely that the two schools would combine districts, as the schools had historically been rivals.

Housing

Five interviewees thought housing in the study area had become less available, and three interviewees thought that it had become less affordable. Three interviewees thought that housing prices in Butte Falls-Prospect had increased on par with, or even below, the national average.

Interviewees noted that some housing in Butte Falls-Prospect was substandard or dilapidated, and that the area was much less expensive than neighboring Medford. As one Prospect resident noted, *"I've got a house across the street from me and one on each side of me: both of them were built in the late [19]40s or early '50s. There are no foundations under them, and they have single pane windows."* Some of this housing had originally been constructed as temporary housing for loggers but was converted to serve as full-time homes for families after the logging camps closed. One interviewee noted that some houses designed as single-family homes were being overcrowded: *"There's a lot of, I wouldn't say multi family, but you know, they're flop houses. There's 15, 20, people living out of one house."*

In cases where numbers of houses had increased, some interviewees thought that this was because manufactured homes had been squeezed onto preexisting tracts. Aside from these additions, interviewees thought that new housing was not being built in the area.

Community services

Interviewees had mixed responses on how the number of services (including restaurants, health care, gas stations, grocery stores, and personal or business services) in Butte Falls-Prospect has changed over the last 30 years (Figure 7.4). Some interviewees noted that services had declined prior to the implementation of the NWFP, and that services had remained more stagnant since then. Five interviewees mentioned how individual businessowners changed the quality of hotels, restaurants, and businesses, but they did not associate these changes in local businesses to the NWFP. As one interviewee said of the local auto repair shop in Butte Falls, *"it comes and goes."* Some interviewees associated changes to services with other factors, such as MedCo's dissolution or the rerouting of OR 62 that bypassed Prospect's business district.



Downtown Butte Falls



Figure 7.4. *Community amenities in the Butte Falls-Prospect study area. Includes: zero full-service supermarkets (other locations that accept SNAP benefits such as gas stations or convenience stores, not included), one forest service ranger station, zero timber processing facilities, one community health clinic, one post office, and one library.*

Community forest

In 2023, Butte Falls completed the Butte Falls Community Forest purchase, which is composed of approximately 430 acres surrounding the town (Frost, 2023). The idea for the community forest originated as community members watched wildfires burn in California, and as Weyerhaeuser (the previous owner) was considering cutting down trees in the area around the town (Stringer, 2023). The community initiated the effort specifically to gain local control over forest management (rather than relying on a large timber corporation) and to reduce catastrophic wildfire risk through fuels management.

Interviewees familiar with the acquisition process noted that the Rogue Valley League of Cities, the Trust for Public Lands, the BLM, and the Forest Service supported the city in securing grant funds to purchase the land. Interviewees noted that the community forest is a local initiative and that it has been run through the mayor's office and a group of forest commissioners: *"[people in Butte Falls] do see that [for] the Butte Falls Community Forest, the buck stops in Butte Falls...they feel like that is more within their control."*

Another benefit of the community forest is that it creates recreation opportunities for the local community and tourists and boosts hope that the downtown area will be revitalized. In addition to acquiring the land, the Community Forest has begun work on fuels reduction and improving safety around the Butte Falls waterfall by putting in a new fence.

Community economy and capacity

In the early 1990s, Butte Falls undertook several studies to assess the town's economic strengths and weaknesses. Many of the weaknesses identified in these studies remain relevant in 2024: in 1990, Butte Falls did not have a bank, and the town's industry was still dominated by MedCo (Oregon Economic Development Department, 1990). At that time, the school district was "financially vulnerable" despite "heroic efforts"

to strengthen it (Oregon Economic Development Department, 1990). The town also faced challenges in maintaining its sewer system, and residents feared that they lacked emergency services in ways that may discourage future residents from relocating there (Oregon Economic Development Department, 1990). The area also lacked basic tourism services, including a motel, restaurant, and retail facilities (Oregon Economic Development Department, 1990). By 1990, there was already an expectation that the local Forest Service office would close (Oregon Economic Development Department, 1990).

The 1991 Butte Falls Strategic Plan (Butte Falls Community Response Team, 1991), recommended the community transition toward a more diverse economy that involved tourism, a water bottling plant, a community-owned forest, and smaller locally-owned businesses. In 2024, Butte Falls did have a water bottling plant and a community-owned forest, but it had not substantially increased tourism.

One interviewee thought that the Butte Falls-Prospect did not have the community capacity to manage federal grants that could benefit the study area, *"because they're too cumbersome."* Interviewees in Prospect noted that their community had even less capacity than Butte Falls because the area is not incorporated. As one interviewee put it, *"Butte Falls is a real town [that is incorporated], but Prospect never was. We lost a lot of opportunity through that. When Clinton [Administration] was in [office], we got three grants, and Butte Falls partnered with us because we couldn't hold a grant, but they could."*

Some interviewees in the study area thought that the community well-being depended on a small percentage of engaged volunteers who coordinated through institutions, like the Lions Club, the Prospect Community Club, the fire department, or the Sheriff's substation. As one interviewee put it, *"It's usually the same volunteers that do everything."* However, one interviewee suggested that these institutions were fading: *"When we were kids, the Lions Club was huge. They funded everything. ….They still try to do things, but they're poor and ancient. Nobody joins."*

Community relationship with the Forest Service

Interviewees variously described the community relationship with the Forest Service as positive (n=1), negative (n=3), and non-existent (n=5). Two interviewees characterized the community as divided in its relationship with the Forest Service. Seven community members additionally thought that the relationship had become more negative over time. In contrast, only three thought that there had been a positive change in the relationship over time. Four others thought that the relationship between the community and the Forest Service depended on the local agency leadership.

Some interviewees explained local dissatisfaction with the Forest Service as being related more generally to anti-government sentiment:

> *"There's definitely distaste of any government telling me what to do, and the Forest Service...and the BLM, or whoever is very good at being able to tell people what to do, and they don't want to be told what to do."*

Another interviewee noted that, *"some of those [local community] folks are really pissed [at the federal government]...[they think] Look what you [the US Forest Service] did to our community."*

Other interviewees thought that the negative or non-existent relationship was related to a loss of staffing due to the closure of the Butte Falls Ranger Station which in turn led to a lack of communication and a lack

of agency integration with the community. As one interviewee from Butte Falls put it, *"they're not here anymore...it wasn't like the Forest Service was handing out money here, but they were here, and if there was a fire that started in town, you can bet your life the Forest Service engines would have been the first ones on."* Today, by contrast, the Forest Service has no presence in Butte Falls.

We asked community interviewees about their views on Forest Service management priorities (Figure 7.5). Most interviewees (73 percent) thought that the Forest Service was prioritizing wildfire management. Most interviewees (58 percent) also thought that the Forest Service prioritized the incorporation of science into their planning processes. However, there was considerable disagreement among interviewees on whether the Forest Service was prioritizing climate change or incorporating public opinion into planning. Most interviewees (82 percent) thought that the socioeconomic well-being of the community was a low priority for the Forest Service.

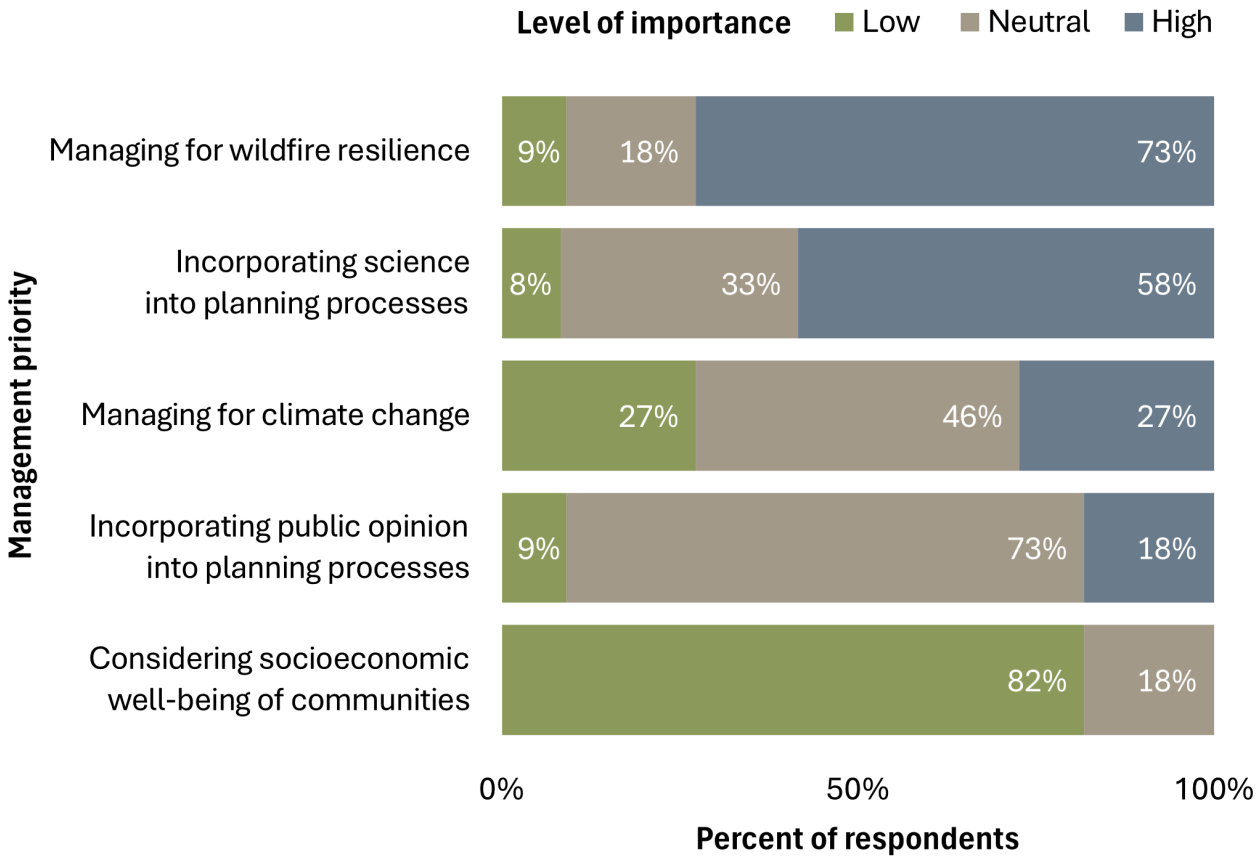

Figure 7.5. *Community perception of Forest Service management priorities (n=12). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

Community relationship with national forest lands

Interviewees ranked hunting, fishing, and other recreation on the national forest as a high level of importance for the community (Figure 7.6). Half of interviewees thought that non-timber forest products were important while timber was of least importance to the community.

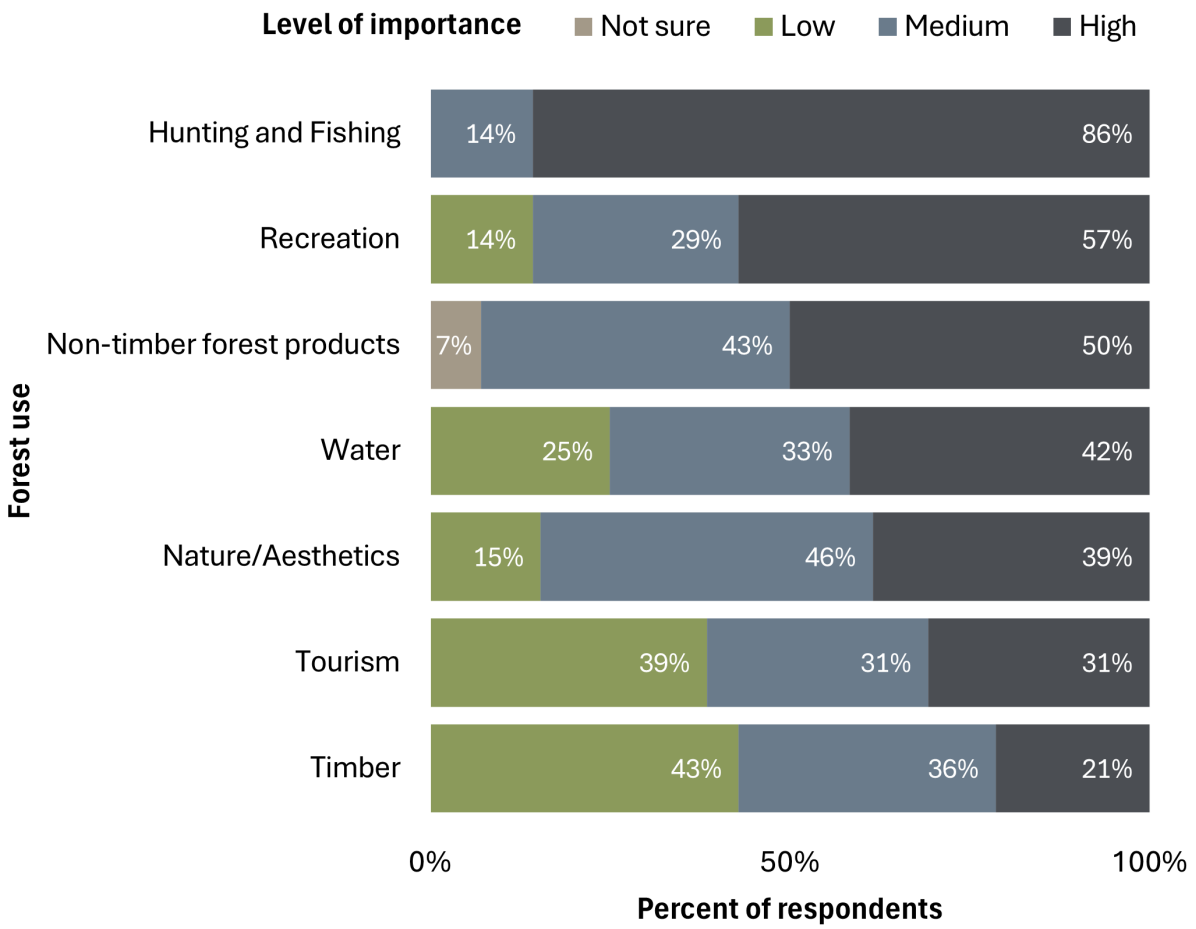

Figure 7.6. *Importance of national forest uses to community (n=14). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Recreation, roads and maintenance

Interviewees mentioned that, in 2024, the most popular recreation activities were: off-road vehicle use (n=6), hunting (5), hiking (3), camping (1), fishing (1), and water recreation (1). Popular recreation areas included: Lost Creek Lake, Butte Falls, and the Rogue River.

Four interviewees mentioned that roads and other maintenance were important to members of the local community. Interviewees noted that road maintenance had declined and that it was now more difficult to access national forest system lands: *"A lot of our forest roads that are usable and drivable—not only for hunters and fishermen, but for people camping and for fire equipment to get up and down—are overgrown with brush. They're not usable anymore. There's no money from the federal government for the Forest Service to go up and brush these roads back."* Hunters also have commented that increased stand density decreased the quality of wildlife habitat and has resulted in population declines while also making deer and elk harder to hunt.

Interviewees also noted that access to forest areas, including areas managed by timber companies, had become more limited. Some of this was attributed to increased fire risk and the increase in nonrecreational camping on Forest Service lands, as well as to turnover in private timber owners.

Non-recreational camping

Four interviewees noted that there had been an increase in nonrecreational camping and homelessness on public lands in the study area. They associated this development with an increase in homelessness and a decline in socioeconomic status in the study area over the last ten years. Interviewees noted that some agencies, like the U.S. Army Corps of Engineers, had taken action to remove nonrecreational campers or make it more difficult for them to remain on their lands. However, these actions also closed off access to the public. Interviewees also noted that significant law enforcement capacity was spent on dealing with nonrecreational campers, noting that *"the BLM basically funds one deputy, and 95% of what he does is [deal with] squatters."* Interviewees also associated nonrecreational camping with meth labs and an increase in drug use in their community.

Non-timber forest products

The most important non-timber forest products cited by Butte Falls-Prospect interviewees were mushrooms (n=10), huckleberries (6), firewood (6) and Christmas trees (2). Between 2013 and 2023, the Rogue River-Siskiyou National Forest sold an average of 11,000 gallons of mushrooms per year resulting in a total revenue of over $322,000 in permitting fees (USDA Forest Service, 2025). However, cut and sold reports data from 2007 and 2008 prior to the merger of the two forests, the Siskiyou National Forest accounted for over 90 percent of the mushroom permit sales suggesting that commercial mushroom harvest may be less important on the Rogue River portion of the forest.

The Rogue River-Siskiyou National Forest does not report fruit berries sales or harvest in its cut and sold reports (USDA Forest Service, 2025). However, huckleberries are a culturally important First Food for local tribes and are also popular with non-Indigenous locals. There are significant patches of huckleberries occurring on Forest Service land, including Huckleberry Mountain (Richards and Alexander, 2006; LaLande, 1980). Early roads had led to increased tourism in the Huckleberry Mountain area, where tourists went to berry pick, traveling there by wagon road and setting up a tent city (LaLande, 1980). In the summers, so-called Huckleberry City hosted a dance hall and was a social resort until the Depression, when recreational berry-picking declined.

Seasonal use of the Huckleberry Mountain area continues to be important for Klamath peoples today, and Tribes historically managed huckleberry patches through periodic burning (LaLande, 1980). In 2024, the Forest Service approved a multiweek closure of the Huckleberry Mountain area for use by Tribes from August 16-26 for ceremonial purposes. This was controversial among some interviewees, as Prospect residents mentioned that they did not feel adequately forewarned of the closure and felt that the closures meant that *"the community and the taxpayers of Jackson County are not allowed to go pick huckleberries."* Others mentioned that they thought there was non-permitted huckleberry-picking in the area.

Water

In 1912, the Rogue River was first used to generate electrical power (LaLande, 1980). In 1967, the U.S. Army Corps of Engineers, in collaboration with the Bureau of Reclamation, began construction on the Jess Dam for the completion of the Lost Creek Reservoir in 1977, and manages both the land around the reservoir and the reservoir itself (U.S. Army Corps of Engineers, n.d.). In 2024, it had a campground and recreation opportunities, some of which are run through the federal government and others of which are run through Jackson County State Parks. Interviewees commented that there was some local employment created by the Army Corps of Engineers.

Water from the High Cascades Ranger District, including both Big Butte Creek and the Rogue River, supplies the City of Medford and other towns in the Rogue River Valley. The Medford Water Commission owns much of the land around its water source, which is southeast of the town of Butte Falls. Interviewees noted that water provision was a key forest element, and that the water systems in use today could use modernization, including upgrades to irrigation ditches and the water system.

Butte Falls also has an active water bottling plant, Cascade Mountain Spring Water. According to interviewees, the plant *"pumps a lot of money into the town,"* leading townspeople to see them as a force for good. However, some interviewees were concerned about how the drought conditions in the area might impact the forests and fires, as well as how it could impact water sources. A Douglas-fir die-off in the area has already been "directly related to drought." Southwestern Oregon was in an extreme drought from 2020-2022 (O'Neill et al., 2023), which impacted not only the forest, but also popular recreation sites at areas like Lost Lake reservoir.



Rogue River near McLeod

Timber

Forest Service timber information manager data (TIM) show that the High Cascades Ranger District sold a total volume of nearly 100 mmbf at a value of nearly $18 million between 2013 and 2023 (USDA Forest Service, 2023). Timber sales were purchased by a variety of different businesses based in Eugene, Roseburg, Grants Pass, Gold Hill, Medford/Central Point, White City, and Butte Falls. Three sales purchased by a local Butte Falls operator were very small (totally less than 50 thousand board feet). Five sales purchased by two different businesses in nearby White City were slightly larger with a total of 9.5 mmbf.

Wildfire and other forest disturbances

Interviewees thought that fires had become much larger in scope and scale in recent years, leading to significant changes in the ranger district. As one interviewee said, *"Fire is the Forest Service right now."* Interviewees thought that the recent increase in fires in the region had led to a lot of local debate: *"How they get put out, when they get put out, whether for safety or because they don't have enough resources—it's all pretty controversial."*

In 2020, the South Obenchain fire started during what became known as the Labor Day fires and came within a quarter mile of the town of Butte Falls (Frost, 2023). The fire burned approximately 32,671 acres and destroyed 33 single structures and 56 minor structures (Boom, 2023). Another fire, the Almeda Fire, had started at around the same time and was in a more urban area between Medford and Ashland, drawing resources away from the Butte Falls area and the South Obenchain Fire. Several loggers and community members worked together, and, according to some, *"saved our town."* Interviewees mentioned how the South Obenchain, and other fires, impacted the study area, noting that the most significant impacts were:

local evacuations (5), tourism (4), smoke (4), housing (2), mental health (2), private land burning (2), and timber lands burning (2). Four interviewees mentioned that the Forest Service and other firefighting agencies were not prepared for the fire, and three other interviewees mentioned that the extreme wind conditions made it too difficult to fight fires. As one interviewee put it, *"we were largely dealing with climate-change-induced fire behavior in country that had always been very challenging to fight fire."* Two interviewees also cited that there was little pre-fire preparation for wildfire, and two thought that the scarcity of resources during firefighting led to the spread of the fire.

Interviewees compared Forest Service suppression with fires managed by the Oregon Department of Forestry (ODF). The BLM contracts its fire suppression through ODF, and interviewees thought that this meant the BLM's firefighting capabilities were better than the Forest Service's: *"BLM is better off than the Forest Service because they utilize somebody else [ODF] for firefighting."* Five interviewees compared the Forest Service firefighters with the Oregon Department of Forestry. Interviewees thought that ODF, which is a full-suppression agency, was the better firefighter: *"Oregon State Fire [ODF] down here fights much more aggressively and better than the Forest Service anymore."* Interviewees also mentioned that they thought the quality of Forest Service firefighting had declined, and that this could have been related to the Northwest Forest Plan.

When asked about wildfire mitigation efforts in their area, eight interviewees noted that they had seen wildfire mitigation efforts in the area, including thinning (n=5), prescribed burns (n=4), and roadside fuels reduction (n=1). Interviewees near Prospect mentioned the success of thinning in the Union Creek campgrounds as a fire risk reduction project led by the Forest Service. Two interviewees mentioned that they had not seen Forest Service-led wildfire mitigation. Ten interviewees mentioned that they had seen wildfire mitigation efforts in the community, including Firewise programs (n=5), other fire department or community initiatives (including the community forest) (n=7), and efforts from individual property-owners (n=4). These efforts included a mobile woodchipper that would chip green material collected by landowners near Prospect, as well as the Butte Falls fire district subscriber program.



Thinning project east of Butte Falls

Air quality

The Rogue River Valley has historically had significant air quality issues, which are exacerbated by wildfire smoke. In 1990, the Rogue River Valley established the Medford-Ashland Air Quality Maintenance Area, which is a state-designated Smoke Sensitive Receptor Area (Jackson County GIS, 2024; Oregon Administrative Rules § 629-048-0140, 2019). The area was established because of non-attainment air quality for PM10 in 1990 which was related to the use of the wood-burning stoves and smudge pots (Jackson County, n.d.). These air quality issues have recently impacted prescribed burns and firefighting efforts, as the county has adopted a full suppression strategy for wildfires to prevent smoke impacts during the summer. There is also an agreement between the county and the Rogue River-Siskiyou National Forest not to conduct prescribed burns during fire season.

Community futures

When asked to predict how the study area and the neighboring Forest Service lands would change, interviewees predicted that wildfire (n=5), recreation (n=4), and climate change (n=3) would increase. Three interviewees also suggested that the Butte Falls community forest (n=3) would also be a significant change for study area.

Interviewees in Prospect saw their fate as tied to the still-present Forest Service office, which still provides some employment and opportunities in the town despite its downsizing. Interviewees also mentioned that they could imagine large changes to the Forest Service, including the Forest Service no longer managing the lands that they had historically managed.

In Butte Falls, interviewees most often commented on the community forest, and thought that the next ten years would reveal whether the community forest would be successful or not: *"Either the biggest change is going to be really developing this forest and having that have an impact on the town, and having had an impact on Jackson County, and sort of a showcase, a model of how nature and small community can be together, or it's all going to fizzle and not work."* Some interviewees were optimistic that the community forest would lead to positive change in Butte Falls: *"what I see in the next 10 years is a fire resilient community, a community that has recreation potential and actual, recreation ongoing and better job opportunities, recreation where people can recreate and become healthier, mentally and physically."*



Lost Lake

Conclusions and case study highlights

Despite the historical significance of the timber industry in the early development of the Butte Falls-Prospect study area, the economic importance of the timber industry in the study area had drastically declined by 1994, when the NWFP was implemented. Residents of Butte Falls-Prospect noted that the decline in Forest Service staffing and the changes in forest management that accompanied the NWFP were more significant to them than the decline in timber harvests. Indeed, when asked to rank aspects of national forest use, the contemporary Forest Service timber program had the least importance to the community.

Butte Falls-Prospect key forest management takeaways

- Timber processing capacity in the study area declined prior to the NWFP because of the transition from railroad to truck logging and, later, financial consolidation within the timber industry.
- Forest management capacity within the study area did experience negative impacts from the NWFP as Forest Service staffing decreased and independent "Gyppo" loggers relocated to better centralize their operations as the decline in local timber sales translated to increased work-site distances.
- Recreation and tourism offer viable options for improving the social and economic well-being of the Prospect portion of the study area given its proximity to Crater Lake National Park and the national forest.
- Although Butte Falls has fewer options for developing business around tourism and recreation, as an incorporated community, it had organizational capacity advantages over Prospect.



BLM land near Butte Falls

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Rogue River near Farewell Bend

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Ecosystem Workforce Program

UNIVERSITY OF OREGON

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Chapter 8: Gold Beach, Oregon


Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns, Naomi Serio

Case study facts

Population (2020): 5,881

Location: Curry County, Oregon

Federal forest lands (4% of study area):[1]
Rogue River-Siskiyou National Forest, Gold Beach Ranger District,

Climate:
Average Annual High: 61.2 °F/Low: 46.9 °F
Annual Precipitation: 75.2 inches;
Snowfall: 0.0 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<15,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 8.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Gold Beach study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

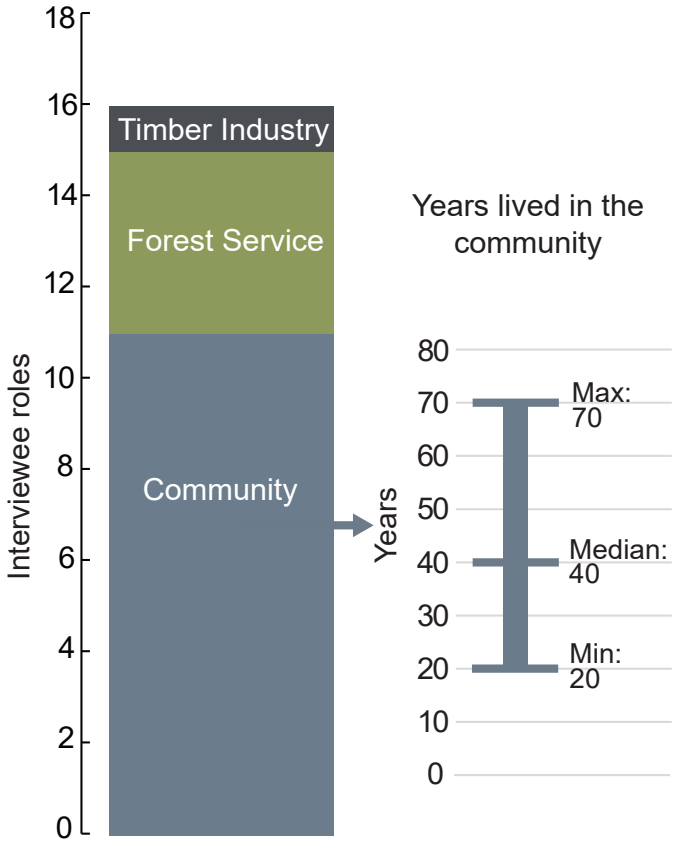


Figure 8.1. *Graph of interviewees by role and number of years lived in the community. Our sample included 11 community members, four Forest Service employees, and one timber industry representative. Community interviewees lived in the study area for a minimum of 20 years, a maximum of 70 years, and a median of 40 years.*

1. Curry County is comprised of 59 percent national forest. Only 4 percent of the national forest falls within the Gold Beach CCD boundary.

Sizek, J., Coughlan, M., Huber-Stearns, H., & Serio N. (2025). Chapter 8: Gold Beach, Oregon. In M. Coughlan, H. Huber-Stearns, & S. Schneider (Eds.). *The Northwest Forest Plan: 30 years of social and economic change in rural forest-based communities (1994–2024)* (Working Paper No. 125). Ecosystem Workforce Program. Institute for Resilient Organizations, Communities, and Environments, University of Oregon. https://hdl.handle.net/1794/31412

Study area and geography

The Gold Beach community case study focused on the Gold Beach Ranger District in the Rogue River-Siskiyou National forest. We spatially defined the study area as the Gold Beach census county division (CCD) of Curry County (Figure 8.2). The study area includes the City of Gold Beach as well as the unincorporated communities of Orphir, Nesika Beach, Wedderburn, and Pistol River along US 101. Wedderburn and Gold Beach are located north and south (respectively) of the mouth of the Rogue River. The City of Gold Beach is the county seat and is where the Gold Beach Ranger Station is located. National forest land comprises less than four percent of the Gold Beach CCD, however, the study area is circumscribed on the east (inland) by the national forest and the Pacific Ocean to the west. Curry County is comprised of 59 percent national forest. The study area also includes fragmented private forest as well as public forestlands managed by the US Department of Interior Bureau of Land Management (BLM). Forests in this region are comprised of diverse mixed evergreen forests including Douglas-fir, western hemlock, and Sitka spruce.

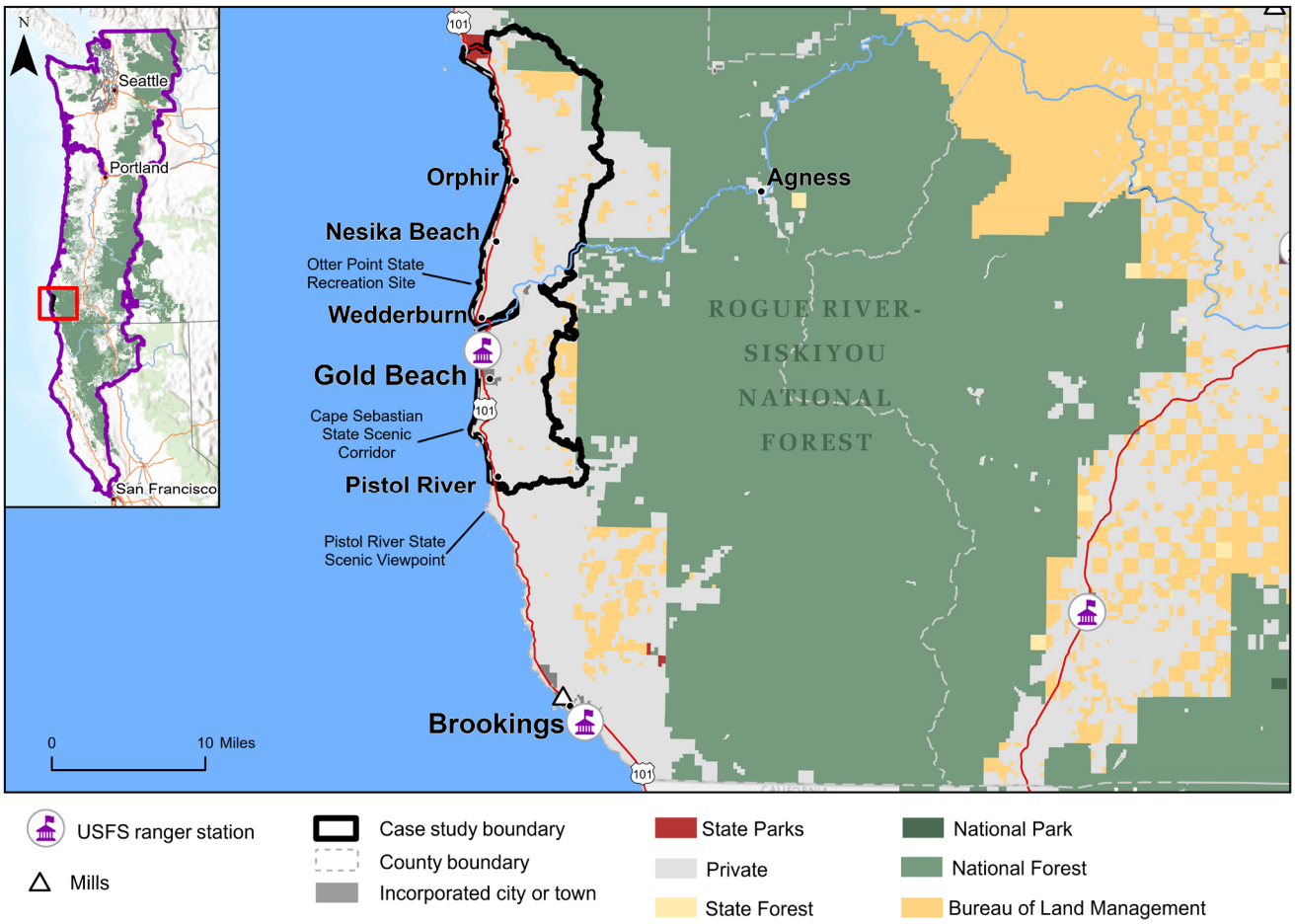


Figure 8.2. *Gold Beach case study area.*

Shared sense of place

Many interviewees characterized the study area as a retirement community. One interviewee suggested that "we have a lot of people that are old here, and so that means we have a lot of people who are not really in the job phase of their life." Residents also noted that Gold Beach felt far removed from the rest of Oregon. As one interviewee put it, *"We are out of the loop here ... so that's a big factor ... on whether people will live here or not."* Most residents of Curry County live within two miles of the coastline (Quinn, 1987).

Points of interest

Coastal State Parks

The 362 miles of publicly managed Oregon coastal beaches remain the most popular destination within the Oregon State Parks system. Coastal state parks saw a record-breaking total of 32.5 million day-use visitors in 2024 (Oregon Parks and Recreation Department, 2026). Coastal state parks within the Gold Beach study area include, from north to south, Humbug Mountain State Park, Sisters Rock State Park, Orphir Wayside State Park, Otter Point State Recreation Site, and Cape Sebastian State Scenic Corridor. Cape Sebastian State Scenic Corridor is a well-known spot for its scenic views and includes a walking trail started by the Civilian Conservation Corps in the 1930s that is still maintained today (Oregon Parks and Recreation Department, n.d.). Harris Beach State Park, just a 30-minute drive south from Gold Beach, was the coasts' most popular day-use area in 2023 with almost 1.8 million visitors (OregonLive, 2024).



Coast near Cape Sebastian

Rogue River

The Rogue River meets the Pacific Ocean just north of Gold Beach, Oregon. This area is popular for jet boating and fishing. Some commercial companies offer jet boat tours during recreation season. Fishing is also important to the region both culturally and economically.

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forests in Northern California, western Oregon, and western Washington. This section provides a summary of the direct impacts of these events on the social and economic wellbeing of the Gold Beach study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and on-going changes in the community's wellbeing following 30 years of the NWFP.

Between 1989 and 1993,[2] timber harvest on the Siskiyou National Forest fell from a maximum of 242 million board feet (mmbf) to a minimum of 11 mmbf representing a 95 percent decline (Figure 8.3) (USDA Forest Service, 2025). Harvest rebounded slightly in the mid- to late 1990s, peaking at 56 mmbf in 1996, but continued to oscillate. In 2009, the Siskiyou National Forest merged with the Rogue River National Forest, but even after the merger, mean annual harvest volumes failed to exceed 38 mmbf.

2. *USDA Forest Service cut and sold data reported in federal fiscal years.*

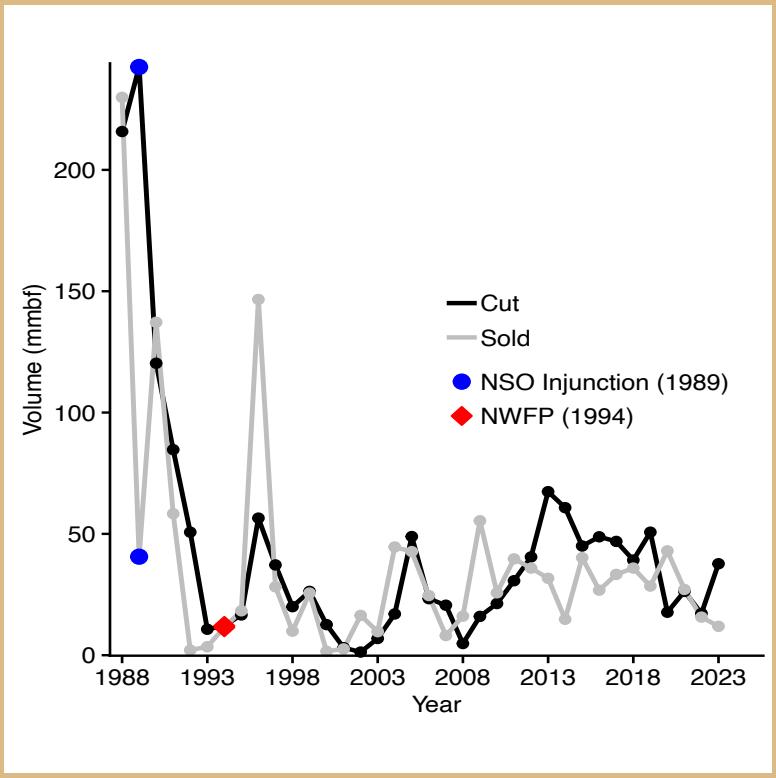


Figure 8.3. *Line graph showing timber harvest and sales ("cut" and "sold" volume in million board feet) for the Siskiyou National Forest, federal fiscal years 1988 through 2008 and the Rogue River-Siskiyou National Forest, federal fiscal years 2009 through 2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the Northwest Forest Plan indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

Interviewees in Gold Beach viewed the NWFP as having a significant impact in their area, with four community members stating that there was a negative view of the NWFP in the area, four stating a more neutral view, and one stating that some had positive views of the plan. Interviewees typically associated the NWFP with the northern spotted owl (n=6), timber (n=6), and land use (n=4). Some interviewees saw the NWFP as negatively impacting work in the forest and mills:[3] *"I think there was an acute moment of contraction after the Northwest Forest Plan, because mills did close."* Others recalled that the local mill in Gold Beach closed in the 1980s: *"there used to be a mill right up the river, a big mill that closed down prior actually to the Northwest Forest Plan and it closed down in the mid-1980s."*

Interviewees did not associate changes related to tourism and housing with the Northwest Forest Plan. As one interviewee put it: *"I don't think any of that's [housing] tied to the Northwest Forest Plan, that's tied to, you know, larger economics having to do with coastal communities that are making our real estate costs extremely high and attracting, you know, [to] outside industrial investors."*

Pre-NWFP history

Settlement

Tututni people have lived in the Gold Beach area since time immemorial (Beckham and Hartmann, 1978). In the early 1850s, prospectors discovered placer gold in the sands of the Rogue River. As Euro-American settlers and miners encroached onto Tututni lands during this local gold rush, conflict ensued between the two groups.

3. This term is used throughout to indicate any wood processing facility, including, for example, dimensional sawmills, shake mills, plywood and particleboard facilities, paper mills.

In February 1856, resisting pressures to relocate to reservations, Indigenous Tututni attacked Americans in Ellensburg. Known as the Rogue River War of 1855-1856, the conflict resulted in numerous Indigenous and Euro-American deaths (Beckham, 1971; Schwartz, 2022; Barganski, 2022). By June of 1856, Tututni and other Indigenous peoples were removed by the US Army and relocated to the reservation at Siletz, Oregon, two hundred miles away from their homeland (Beckham and Harmann, 1978). Today, Tututni descendants are members of the Confederated Tribes of the Siletz Indians (Oregon), the Confederated Tribes of the Grand Ronde (Oregon), and the Tolowa Dee-Ni' Nation (California) (Lewis, 2023).

The community of Ellensburg (renamed Gold Beach in the 1890s) was incorporated in 1853. In the decades following the Rogue River War, the community of Ellensburg grew around the gold mining industry. However, gold supplies did not last. The timber industry, dairies, and other industries, developed first to supply local mine-related demand, then expanded. Around 1900, there were over 400 dairies operating in Curry County (Massingill and Hoogesteger, 2002). In the late 1800s, commercial fishing began to grow as an industry as gold mining declined (Barganski, 2022). The first cannery opened in 1876 ("Gold Beach History," n.d.). Salmon fishing peaked in 1908 before decreasing dramatically due to overfishing.

In response to diminishing fishing stocks, recreational fishermen in the Upper Rogue River succeeded in banning commercial fishing on the Rogue River in 1935 despite opposition from commercial fishing interests on the coast (Dodds, 1959). As a result, commercial fishermen on the Rogue River transitioned to ocean fishing. Although the fishing industry persisted for the next decades, it was greatly diminished. Gold Beach fishermen were highly susceptible to market fluctuations and changing local conditions in salmon and crab populations. These market downturns meant that many people left fishing for other livelihoods by the 1960s and 1970s ("Comprehensive Plan," 1982). In 1982, the fishery in Gold Beach was considered the least productive of the three ports in Curry County and remaining commercial fish processing facilities there closed that year ("Comprehensive Plan," 1982).



Boats near Gold Beach, 1940

The Siskiyou National Forest was established in 1907. Brookings, just south of the study area, was initially developed as a timber company town, constructed and designed in the 1910s by the Brookings Lumber and Box Company (Priester, 1994). However, the company focused its efforts on redwood timber in adjacent Del Norte County, California. In contrast to the rugged terrain of the Siskiyou National Forest and adjacent private lands, the redwood timberlands of Northern California were better suited to the railroad logging methods used at the time.

As early as 1925, municipalities and boosters saw tourism as part of the future of Oregon's South Coast. For example, zoning rules passed in Brookings restricted the placement of mills to protect tourism and retirement opportunities (although the city lifted this restriction after World War II; Priester, 1994). The completion of the Roosevelt (101) highway in 1927 also opened new possibilities for the tourist industry (Long Range Planning, 1969; "Comprehensive Plan," 1982).

By the 1960s, tourism was Curry County's second-largest industry behind timber (Priester, 1994). However, there were relatively limited facilities to support increasing tourism. For example, in the

late 1960s, the county lacked a golf course and had no tourism-oriented organizations (Long Range Planning, 1969). Despite this, tourism was "vital" to the county, as noted by a county sheriff tracking river rescues in 1971 (Boice, 1971 q. in Quinn, 1987).

In 1968, 84 miles of the Lower Rogue River were designated as Wild and Scenic, impacting management of the river and eliminating dredging (USDA Forest Service, n.d.b). In the 1960s and 1970s, sportfishing became a widespread use of the Rogue River. In 1973, approximately 12% of all recreation in the count was fishing, indicating its relative importance ("Comprehensive Plan," 1982).

Post-World War II timber industry

Logging had already begun to intensify in Curry County beginning in the 1930s (Massingill and Hoogesteger, 2002). After World War II, logging increased in the study area due to its vast stands of old-growth Douglas-fir (Priester, 1994). Between Pistol River, Gold Beach, and Orphir, there were at least 15 mills operating at some point during the mid-20th century (Massingill and Hoogesteger, 2002). As technologies such as trucks and chainsaws entered the industry, the social organization of timber harvesting transitioned from large, centralized operations (often tied to rail lines and large logging camps) to smaller, independent businesses, most often family owned. Known as "gyppos," these independent loggers and small milling operations proliferated along the Oregon coast in the 1940s-1950s (Wells, 2006), logging old-growth timber in areas previously unreachable by railroad. One family-owned business was the Tamco mill, built in 1957 in Orphir, which specialized in veneer (Priester, 1994). Larger mill and plywood manufacturing operations also proliferated during the 1950s. In Gold Beach, for example, the California and Oregon Lumber Company (successor to Brookings Lumber and Box Company) opened a sawmill that operated from the 1950s-1970s (Boice, 2012).

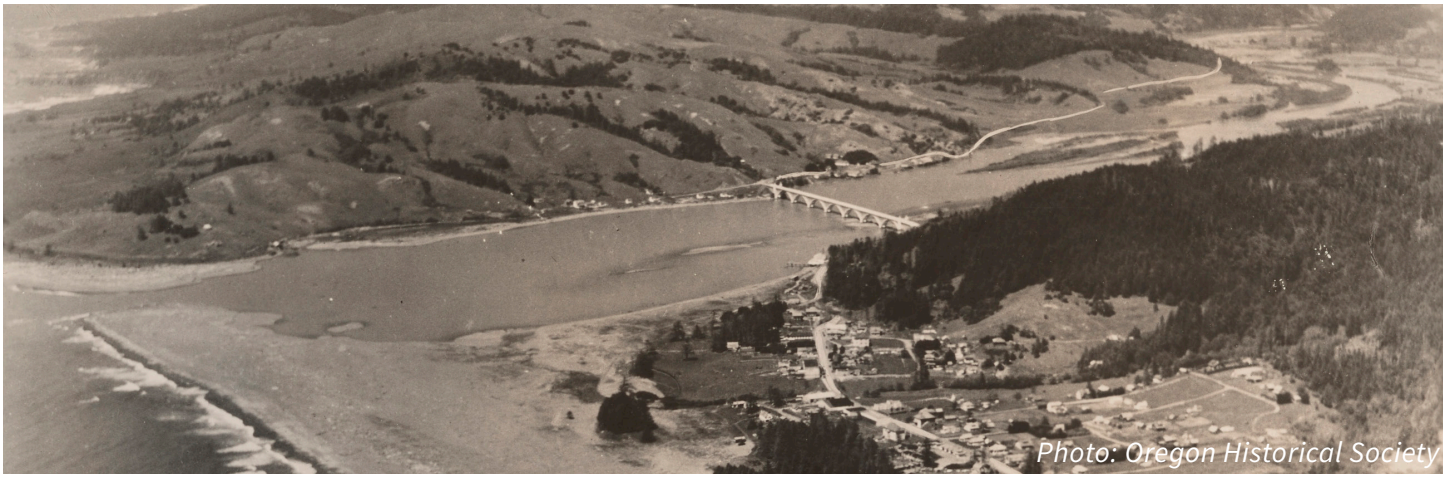
By the early 1960s, smaller timber processing facilities in the study area and in Brookings (south of the study area) began to close and larger operations bought out small, independent mills as harvesters exhausted timber supply on private lands and became more reliant on federal lands (Long Range Planning, 1969). The five wood manufacturing companies that remained in Curry County included the Tamco Mill in Ophir and U.S. Plywood in Gold Beach in the study area, and three operations in Brookings: Agnew Timber Products, South Coast Lumber, and Brookings Plywood Corporation (Priester, 1994). Efforts to maintain and develop timber processing capacity also faced setbacks. For example, the Camac Veneer Company mill in Gold Beach burned down in 1959 and again in 1960 (Associated Press, 1960), and a proposal to build a pulp mill in Gold Beach was defeated because of the project effects the mill would have on Rogue River water quality (The News-Review, 1961).

By 1969, a Curry County report predicted a decline in the industry, noting that mill capacity was much greater than the capacity of forestlands to produce wood (Long Range Planning, 1969). This forecast turned out to be accurate: by the 1980s, South Coast was the main timber operator in the region and the only dimensional lumber mill in Southern Curry County (Priester, 1994). At the time, the mill was 95% supplied by federal timber and considered themselves to be dependent on foreign markets. With financial consolidation of the mills, wages dropped dramatically to two-thirds of their previous amount.

In 1985, Agnew Timber purchased the U.S. Plywood-Champion mill in Gold Beach and closed it indefinitely, laying off 300 workers in the process (Priester, 1994). That year, for the first time, "trade and services" employment surpassed wood products and manufacturing employment in Curry County. This transformation was controversial in the county, in part because many residents viewed the local economy as synonymous with the timber industry (Priester, 1994). When the U.S. Plywood mill burned

down in 1989, the Tamco Mill in Orphir (approximately 12 miles north of the City of Gold Beach) was the last remining industrial-scale wood processing facility in the study area (Gold Beach CRT, 1993).

Mill closures were not a surprise to regional researchers, who had predicted a 35% decline in public timber production in the South Coast area as early as 1976 (Priester, 1994). Between 1963 and 1987, the Siskiyou National Forest reduced its annual allowable cut by 23.4 mmbf [4] (Priester, 1994). In 1982, the comprehensive plan for the City of Gold Beach stated that the timber industry was already in decline, due to "declining timber supply, improved technology, poor transportation, and a widely fluctuating market" ("Comprehensive Plan," 1982). Because extensive railroad lines were never developed in Gold Beach, mills historically shipped logs by sea. Approximately 90% of Rogue River commercial transportation consisted of log barges (Boice, 2012; "Comprehensive Plan," 1982). Gold Beach's port was also historically less active than the ports in Brookings and Port Orford, and usage declined when dredging ended on the Rogue River ("Comprehensive Plan," 1982).



Gold Beach and Rogue River Mouth, 1930s

Gold Beach after the NWFP

Employment and industry

Interviewees in 2024 agreed that there had been a decline in forestry-related jobs. Most cited mechanization rather than Forest Service policies as a primary reason for this decline. The last wood processing facility in the study area, the Tamco Mill in Ophir, burned down and closed in 2000 (The World, 2000).

According to interviewees, as of 2024, the largest private employer in the study area was Freeman Marine (marine equipment), while the hospital, school system, and county government account for the largest public sector employment. Freeman Marine was also listed as the largest private sector employer in Gold Beach in 1993 (Gold Beach CRT, 1993). Among interviewees there was a sense that tourism and recreation jobs had increased (six interviewees commented on recreation job increases, and five commented on tourism job increases). In 2024, tourism attractions included jet boating, the beaches and mild summer climate, and festivals (including the Curry County Fair, Rogue River Salmon Derby Competition, and Clam Chowder festival) (Barganski, 2022).

4.Rogue River and Siskiyou National Forests merged in 2004 (https://www.fs.usda.gov/main/rogue-siskiyou/learning/history-culture).

Other important employment sectors in the area noted by interviewees included government jobs, agriculture, and the prison in nearby Pelican Bay, California. According to interviewees, some residents commute to work at the prison in Pelican Bay. Six interviewees mentioned the economic importance of recreational or commercial fishing, and four mentioned the importance of jet boat recreation along the Rogue River. Five interviewees believed that fishing had declined over time due to overfishing and market conditions.

As outlined in the history section above, by the 1980s, the timber industry in Gold Beach began to decline well before the implementation of the NWFP. However, by that time, infrastructure and services in the area suggest that the economy was already reorienting to support tourism and retirees. For example, a 1982 report documented the following amenity-related facilities: Rogue Bay Cannery Trailer Court (RV), Jot's Resort (Jet Boat), Rogue River Mail Boat Service (boats), Port of Gold Beach (boats), Sandy Camp (RV hookups), Gold Beach City Park (picnic, recreation), Gold Beach Travel Park (RV), Rogue Autel (RV), Curry County Fairgrounds (ocean access), and Buena Vista Ocean State Wayside (ocean access) ("Comprehensive Plan," 1982).

While some interviewees bemoaned the loss of natural resource industries, others thought that the nature of employment and income in the county had changed: *"The employment has shifted from resource use, ranching, fishing, and timber to retirement. Pensions are the biggest income in this county, and that's been true for a long time."* In some ways, this influx of funds was viewed positively by interviewees: *"Oh, it [retirement money and tourism] is the heart that keeps these communities alive. Without retirement money and tourism, it's Appalachia with a view."*

In the late 1980s and early 1990s, Priester (1994) found that many locals complained about the role of retirees in local politics, as well as their impact on local housing prices. Many people thought that retirees were not contributing to the local community, as they would arrive and be involved briefly before either deciding to leave or becoming less involved in the community. In 2024, interviewees touted this demographic turnover as an asset: *"it's going to sound strange, one of our greatest renewable resources is people come and go."* Another noted that local governments *"should consider them [retirees] long-term tourists. They would stay for about seven years, and then they would get too old, and they would want to be someplace where there was better health care, or they'd want to live near their kids."*

Gold Beach has also made efforts to actively attract tourists. For example, interviewees commented that the transient lodging tax in Gold Beach supported tourism promotion in the area, including promoting local jet boat tours on the Rogue River. However, interviewees were divided as to whether Gold Beach had embraced tourism.

Interviewees noticed what they saw as positive changes in the community toward adopting a new identity:

> *Can I go back to the Northwest Forest Plan generally, and just say, I do feel like culturally, the communities have changed more towards, you know, adopting the identity of being like tourist, retirement communities, rather than being natural resource dependent communities.... there's a lot of common ground about ... wanting to protect the natural resources of our place, especially our rivers and our fish and things like that. And I have a sense that maybe 30 years ago, it would have been harder to find that common ground than it is now.*

Some interviewees saw this change as a result of changing attitudes among longtime residents as well as an influx of new residents.

Demographic and community changes

According to US Census data for the Gold Beach CCD, the total population for the Gold Beach study area increased by over one quarter between 2000 and 2020 (Table 8.1). Low-income populations also increased by nearly 18 percent. Adults age 25-44 decreased overall, comprising 22 percent of the population in 2000 and 15 percent of the population in 2020. Retirement age populations increased from 23 percent to 31 percent of the population.

Table 8.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	4,686	5,219	5,881	Increased
Low-income population*	1,695	1,924	1,998	No clear trend
% Low-income population	36%	37%	34%	
Population aged 25-44	1,013	811	903	Decreased
% Population aged 25-44	22%	16%	15%	
Population aged 65 or older	1,074	1,400	1,843	Increased
% Population aged 65 or older	23%	27%	31%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

Since the Northwest Forest Plan, Curry County has continued to attract retirees in a continuation of pre-NWFP demographic trends. Of eleven community interviewees, eight specifically mentioned retirees as a group of new people moving in, and two mentioned remote workers or otherwise wealthy people moving to Gold Beach. Eight interviewees agreed that there were fewer families with young children in the area than there used to be, and that the predominant group of people in the county were described as older people. Only one interviewee mentioned lower-income groups moving to the area. Interviewees suggested that new people chose Gold Beach because of its perceived isolation, its natural resources and recreational opportunities, temperate climate, or the small-town feel. Interviewees noted that there were positive elements to living in Gold Beach, and therefore that the area *"is experiencing slightly less emptying out of rural areas than the national [average] would suggest."*

With the influx of new retirees and other amenity migrants in the study area, some interviewees commented on how the composition of political views had changed, even though Curry County remains conservative overall. For example, one interviewee lamented the decline of what they described as a *"good old boy network"* way of doing business in the past: *"a lot of times, the people that move in …. they aren't in the timber industry, they're, I guess, they're more controlling, and they're not … as good [of a] neighbor."*

Another interviewee noted that they believed these demographic trends also negatively impacted votes on bonds and other county funding measures.

Housing

All community interviewees agreed that housing had become less affordable in the area and noted the likely causes as the influx of retirees and wealthy people, a lack of affordable and lower-income housing, and investment properties. Three interviewees noted that land use laws and Gold Beach's unique geography constrained opportunities for building in the area. Another noted that *"housing stock is low and has been low for decades."* Interviewees characterized the lack of affordable housing as *"a crisis" and "barrier"* to future growth and employment.

Seven interviewees noted the prevalence of vacation homes and second homes in the area, and they mentioned that this had a negative impact on housing and rentals. A common refrain was that property owners had converted long-term rentals to short-term vacation rentals, making it harder for lower-income residents to remain in the area. While many interviewees appreciated how short-term rentals increased the availability of homes for vacationers and tourists, they found that it did have a negative impact on availability and cost for long-term rentals. An online search revealed 265 short-term rental homes in the study area as of October 2024.

Both Curry County and Gold Beach have a permitting system for short-term rentals (STRs). In unincorporated Curry County, rentals are limited to areas zoned as residential or light commercial, and owners must have a permit and pay transient lodging taxes (Andrews, 2024). In Gold Beach, STR regulations are stricter, and new STR applications are limited in residential, non-ocean front areas, as city officials have determined that only ocean front areas do well enough to justify removing them from the rental housing pool ("Updated Regulations," n.d.). Similarly, STRs in Gold Beach are subject to transient lodging tax ("Updated Regulations," n.d.). One area, Sebastian Shores, has a particularly high concentration of vacation rentals, and has beachfront access ("Updated Regulations," n.d.).

Community services

Interviewees had mixed opinions as to how local services (including restaurants, health care, gas stations, grocery stores, and personal or business services) had changed. As one interviewee put it, *"restaurants come and go,"* but others noted that restaurant types were changing. One interviewee mentioned that local restaurants were shifting away from bars, likely because there are *"not as many loggers wanting to spend their paycheck at the bar,"* and another mentioned that new restaurants were *"tourism dollar-driven."* Interviewees did not notice big differences in grocery store access or quality, aside from closures and redistribution of services related to a Fred Meyer grocery store arriving in nearby Brookings. A county hospital (Curry General Hospital) was recently built in Gold Beach, replacing a 1950s-era facility that no longer met building codes (Foden-Vencil, 2015; McDuff, 2020). The new hospital was built on the site of the old hospital and lies within the tsunami zone, generating local controversy (Foden-Vencil, 2015). Current amenities are summarized in Figure 8.4.



Photo: Oregon Historical Society

Gold Beach post office, 1960



Figure 8.4. *Community amenities in the Gold Beach study area. Includes: two full-service supermarkets (other locations that accept SNAP benefits, such as gas stations or convenience stores, not included), one Forest Service ranger station, zero timber processing facilities, two community health clinics, three post offices, and one library.*

Community governance

Multiple interviewees discussed issues in county government, including county funding, management, and the relationship between local officials and other levels of government. For example, interviewees noted that the county-level government had difficulties moving away from natural resource revenues, and that the county suffered financially from the decline in federal timber targets and the associated loss of timber revenues:

> *"We in Curry County, you may have read about it in the news before, had struggles with funding their county government to sufficient levels to provide very basic levels of service. And so county commissioners, in particular, are very reluctant to forego any potential timber receipts that they might get that amount of cash might keep some central service running, right."*

Others suggested that the county had not yet fully adapted to a new funding model: *"the county still expects to be funded by timber receipts and hasn't really adjusted."* Except for a levy to fund the hospital, proposals to replace timber receipts in the study area have all failed to pass (Ackerman et al., 2016).

One interviewee commented that Curry County has been a region with *"a really anti-government sentiment due to some of the things from the Northwest Forest Plan,"* and anther noted that local officials were often at odds with federal officials: *"the governments in these towns, tend to mistrust the federal government."*

Community relationship with the Forest Service

Interviewees were divided when describing the relationship between the community and the Forest Service. Three interviewees described the relationship as positive, three as negative, and four described the community as divided—with some having positive relationships with the Forest Service and others having negative relationships. Additionally, three interviewees thought that much of the community did not have a relationship with the Forest Service. While the area was once *"dead center of the [spotted owl] situation,"* some interviewees noted that in 2024, attitudes toward the federal government and Forest Service were less contentious than they had been in the 1990s: *"When the Northwest Forest Plan first came into effect, people hated Forest Service people, and that's not the case anymore."*



Gold Beach Ranger District

Two interviewees suggested that Forest Service staffing policies had negatively impacted the agency's relationship with the community. For example, one interviewee suggested that because of lower staffing levels, it was difficult for Forest Service staff to contribute to the local community. As one Forest Service interviewee put it, *"I think we have like 25 permanent employees here in Gold Beach. And that number used to be much closer to 150."* Other interviewees noted that there has been high turnover in the district office more recently. One interviewee suggested that Forest Service employees were previously involved in the community, but high turnover had reduced the integration of Forest Service staff with the community. As a result, the agency had become a *"black box"* that the community no longer understood. For example, one interviewee stated that they'd had three different District Rangers in the last six years, and that this high turnover meant that *"by the time you know, develop that relationship, and they understand what's going on, then they're gone."*

Conversely, other interviewees commented that they felt that the staff at the local district were more involved in the community than before, and voiced optimism about current staff with longer tenure on the district. Two interviewees were optimistic about the current District Ranger, in part because she was *"born and raised here."* Agency employees also noted a recently improved relationship between the district and the community and attributed it to the efforts of the new ranger.

One community interviewee suggested that community members were often frustrated with the Forest Service, but for contrasting reasons:

> *"They're [community members are] super frustrated with them [the Forest Service], for different reasons, though. Like my frustration with them is because we're not getting enough recreation done, you know, or conservation is not as big of a priority as it should be, and they're spending too much money on fighting fires or logging or whatever. For other people, it's that they're not logging enough, and they're too focused on conservation, so they're frustrated there's not more timber coming out of the woods or something. So like, I think there's a ton of frustration with the Forest Service, but on both sides."*

Another interviewee characterized the different views of the Forest Service as a division between a *"loggers' mindset"* and an *"environmentalists' mindset."* Similarly, some interviewees noted that overall

attitudes in the community had shifted away from resource use toward conservation.

We asked community interviewees about their views on Forest Service management priorities (Figure 8.5). A vast majority of interviewees (91 percent) suggested that they thought that managing for wildfire resilience was a high priority for the Forest Service. Community interviewees also thought that the Forest Service was prioritizing the incorporation of science (65 percent) and the incorporation of public opinion (55 percent). Fewer interviewees (46 percent) thought that the Forest Service placed community wellbeing as a high priority. Most interviewees did not think that the Forest Service was prioritizing management for climate change.

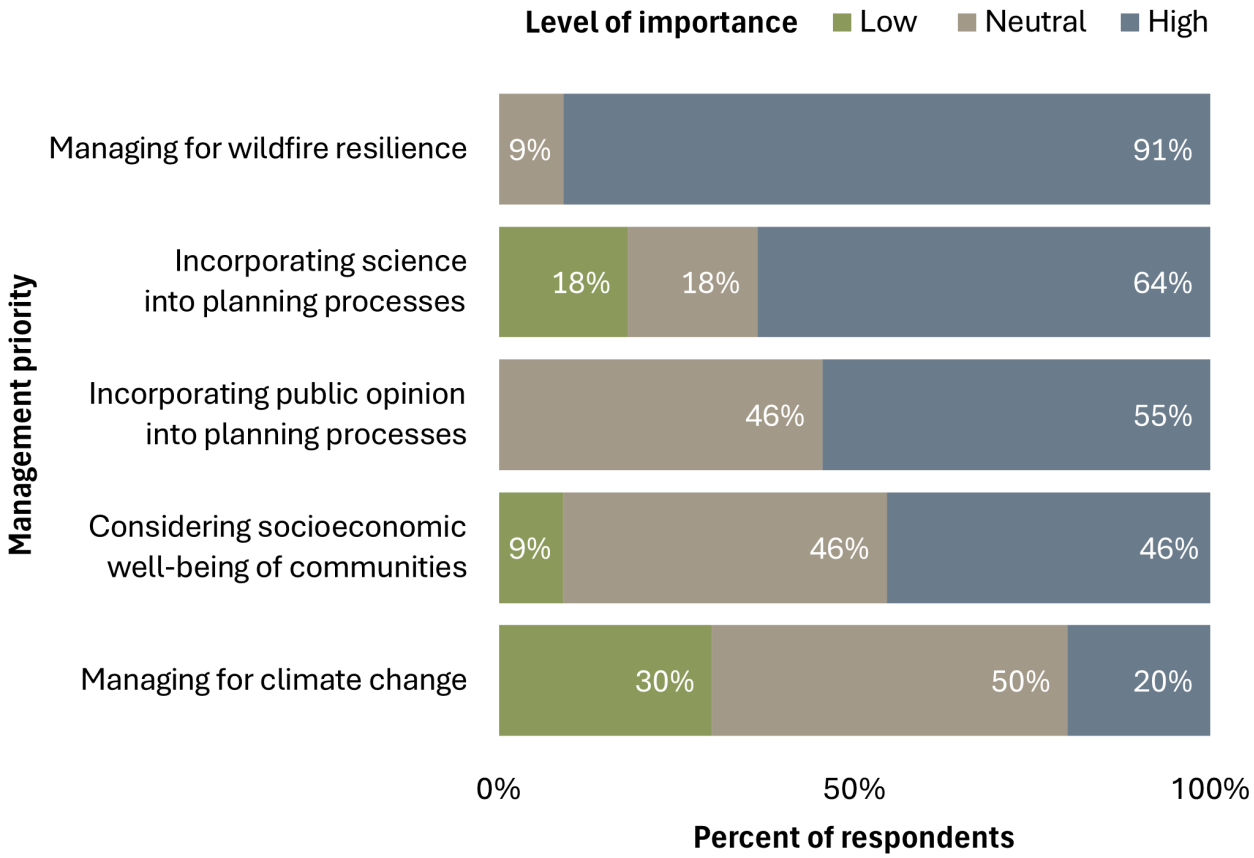


Figure 8.5. *Community perception of Forest Service management priorities (n=11). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

Community relationship with national forest lands

Interviewees mostly agreed (90%) that hunting and fishing were highly important uses of the national forest and they were nearly unanimous that recreation more generally was of medium to high importance (Figure 8.6). Nearly 90 percent of interviewees also thought that forest management related water quality was an important resource for the community. Interviewees had less agreement about the importance of timber and non-timber forest products.



Fishing on the Rogue River

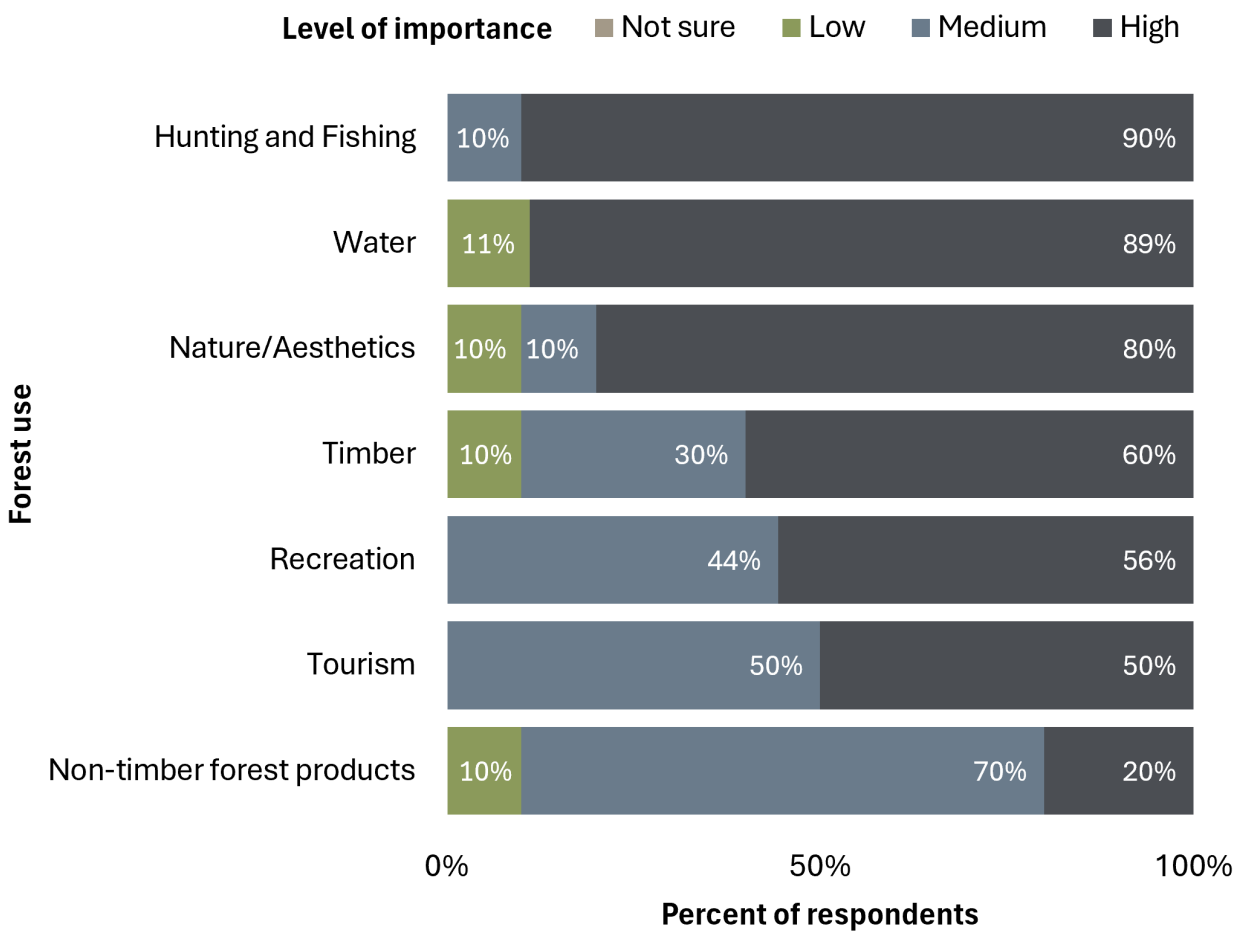


Figure 8.6. *Importance of national forest uses to community (n=10). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Recreation and roads

Interviewees saw recreation as a growing interest for locals. However, one interviewee mentioned that more new people were taking advantage of recreational opportunities, whereas they thought long-time residents did not participate in local recreation opportunities. The most popular types of recreation mentioned by community members and agency employees were mountain biking (n=7), hiking (n=6), water recreation (n=3), fishing (n=2), off-highway vehicle use (n=2), camping (n=2), and hunting (n=1). Popular recreation areas noted by interviewees included the Rogue River, the beach, and multiuse trails by Agness (Fritsche Cabin and Pine Grove). As one interviewee noted, *"Obviously, fishing is huge. …I mean, people live here because they like to recreate here…. there's always people swimming and out hiking and enjoying the woods. A lot of hunting."*

Both Forest Service staff and locals agreed that services at recreation sites, road maintenance, and Forest Service presence in the forest had declined. In turn, this caused frustration among long-time members of the community who recreate, hunt, and fish in the forest. Four community interviewees and an agency employee pointed to the need for road and trail maintenance as among the top issues for the community. As one interviewee noted, "to [take part in] recreation, to do hunting and fishing, like, we really need those roads and access to our forests, otherwise, we're not able to [do] those recreation activities on our forest." Lack of road maintenance was not only seen as a problem for community access but also understood

by the community to present risks for wildfire management. Finally, interviewees voiced that complaints about roads were often tied to complaints about a lack of timber harvesting, as timber harvest requires road improvements.

Timber

Between 2013 and 2023, a total of 15 timber sales on the Gold Beach Ranger District averaged around 3,000 thousand board feet (mbf) (excepting three small sales of less than 50 mbf) (USDA Forest Service, 2023). Bid values for those sales totaled nearly $3.4 million. Although these timber sales were not purchased by operators based within the study area, 10 out of the 15 sales went to a business based in nearby Brookings. Other sales went to businesses in Myrtle Point, Coos Bay, and Roseburg, Oregon.

Ninety percent of interviewees suggested that national forest timber was of medium to high importance to the community. However, when asked about how increasing timber harvest on the national forest might impact the community, one interviewee noted that, *"most of the [local] mills are closed so they can only process so many logs. So even if they were allowed to go get more, I don't think they could do that much more than they're already doing. …So unless someone builds a new mill, there's no point in cutting more trees down."* Another interviewee suggested that *"there's a thought prevalent in a lot of the community, that logging is the answer … but it's used as code … to say that the Forest Service hasn't managed the forest."*

Non-timber forest products

Most interviewees ranked non-timber forest products as having a medium level of importance to the community. However, as one interviewee stated, "there's definitely a lot of people that … forage for [their] families. And then also the industry that is around foraging, both for food products and for the floral industry". Interviewees reported that the most common non-timber forest products were mushrooms (n=6), pine boughs (n=1), and sword ferns (n=1).

Between 2013 and 2023, the Rogue River-Siskiyou National Forest sold an average of 11,000 gallons of mushrooms per year resulting in a total revenue of over $322,000 in permitting fees (USDA Forest Service, 2025). Cut and sold reports data from 2006 to 2008, prior to the merger of the two forests, show that the Siskiyou National Forest accounted for approximately 95 percent (total $358,000 over three years) of the mushroom permit sales between the two forests, suggesting that commercial mushroom harvest may have been more important on the Siskiyou portion of the forest. As one interviewee told us, *"mushrooms are a pretty big deal in the fall,"* and another interviewee noted that *"people value their mushrooms."* However, another interviewee suggested that things had more recently changed for commercial mushroom harvest, *"the value in the mushrooms is gone. They were shipping them overseas, and that's where they were making their big money. But that's [no longer the case], so the value has is severely decreased."*

Sword ferns were not reported in the 2013 to 2023 cut and sold reports for the Rogue River-Siskiyou National Forest. However, the 2013-2023 total for limbs and boughs was over $22,000. The previous decade saw total limbs and boughs proceeds of $34,670 for the Siskiyou National Forest. One interviewee noted a decline in the collection of non-timber forest products, *"You know it used to be, you would see little Toyota trucks with like this mound of cedar boughs and moss that would have been picked, and you would see people just staggering out of the forest with, like this gargantuan backpack filled with [special products]- you don't see that much anymore."*

The fuelwood program on the Rogue River-Siskiyou National Forest is the most lucrative of the non-timber forest products (USDA Forest Service, 2025). For the 2013-2023 year period, the forest sold $154,000 worth of fuelwood permits. Christmas trees are also popular. The national forest sold $107,000 worth of Christmas tree permits during the 2013-2023 period.

Wildfire and other forest disturbances

The increasing prevalence of large fires in southern Curry County has worried community members. When prompted to discuss recent disturbances in the forest, ten of eleven interviewees mentioned wildfires, including the Biscuit Fire (2002, nearly 500,000 acres), Chetco Bar fire (2017, over 190,000 acres), Klondike Fire (2018, over 175,000 acres), and the Flat Fire (2023, 34,000 acres). Interviewees also saw wildfire playing an increasingly significant role in the agency management priorities and the community perception of the agency's mission, as one agency interviewee stated: *"we're probably looked at as firefighters or an agency managing fire more than at any point in our history."* A community member added that they saw this as a fundamental change in the agency's mission: *"I would probably argue that's their highest priority that they have right now.... They've gone from an agency that sells logs to an agency that is trying to keep a forest from burning up."*

Of these recent fires, the Chetco Bar Fire (2017) stood out to interviewees. Community members thought that it *"rattled people and ... had people worried about the Forest Service."* The fire started in wilderness, and its approach toward Brookings was driven by the Chetco effect, a weather phenomenon where easterly winds push drier air toward the ocean (Urness, 2017). Because of poor access, firefighter danger, and wilderness regulations, little suppression was conducted early in the Chetco Bar Fire (Urness, 2017). Community members felt that *"when a forest fire starts here, ... the Forest Service doesn't move fast enough."* Because of the poor conditions and winds, however, other community members did not blame the Forest Service for their inability to suppress the fire in earlier stages. Many interviewees thought that Curry County residents were lucky not to lose Brookings in the fire. One elected official stated that: *"The loss is frankly incalculable, and we want our government to tell us what happened"* (Urness, 2017).

One of the largest issues of the Chetco Bar Fire was communication, which has been improved in more recent fires. As one interviewee stated, *"I don't think they talked about their tactics enough with the community for the community to feel comfortable with the way the fire rolled out."* In comparison, the same community member stated that the more recent fires (Flat Fire and Anvil Fire, 2023) went more smoothly for the Forest Service, both because of the improved firefighting conditions as well as better communication. During the Flat and Anvil Fires, the Forest Service held community meetings and discussed specific tactics they were using, rather than general assurances that they were fighting the fire. As one community member said: *"[It] wasn't just like, we're fighting this fire, it was like, we're gonna go over to this road and we're gonna back burn down here."* The Forest Service also focused on protecting areas in the Wildland-Urban Interface near Agness: *"I know that they were visiting people's houses, making sure that they were prepared, that they had defensible space, putting ... little portable water tower kind of things on properties, so they could help fight fire and stuff they needed to."* These two strategies—focusing on communities and individual property-owners, and communicating specific fire strategies—were seen as key to building community trust.

Other concerns listed related to wildfire on federal forests included: a desire for salvage logging, concern about smoke impacts, concern that firefighting had overtaken other parts of the agency's mission, and desire for increased fire suppression.

Community futures

In terms of the relationship between the community and the National Forest, community members saw certain current trends continuing. For example, most interviewees envisioned increasing tourism and recreation alongside more dramatic impacts of climate change and severe wildfires. Moving forward, community members wanted to see more maintenance and fire-related work done on the forest and more engagement between the Forest Service and the community. One interviewee said: *"I hope to report back in 10 years that we've been more successful in protecting old-growth and providing resilience on the landscape, maybe through active management."* One way community members saw a possible future was through increased community participation in planning and working with the Forest Service: *"It has to be local. It has to be the tribes. There has to be a wide range of people who are familiar with the forest, who have knowledge of the forest, to know 'this is what we need to do here,' and 'this is,' you know, 'the plan for it.'"*

Conclusions and case study highlights

Throughout the post-WWII era, the timber industry dominated the economy of Gold Beach and the national forest supplied the majority of timber to local industry. Geographical constraints imposed by the Ocean and the Oregon Coast Range as well as the growing scarcity of old-growth timber forced local industry to compete for timber supply. In the 1980s, capital consolidation and losses imposed by external events (e.g., the early 1980s recession) and local mishaps (mill fires) severely diminished processing capacity with the study area and surrounding communities. By the time the NWFP was implemented, logging and wood processing were no longer the primary industries in Gold Beach. Nevertheless, some residents considered the NWFP to be a major obstacle to recovering timber processing capacity in the area. Interviewees also blamed the NWFP on Forest Service staffing changes that additionally impacted community well-being.



Boats along the mouth of the Rogue

Gold Beach key forest management takeaways

- Most mills in the study area closed due to market conditions even before the implementation of the Northwest Forest plan. Consequently wood processing capacity is limited to existing infrastructure in adjacent communities.
- Road access remains important to residents of the Gold Beach area. Residents value forest access for hunting and other recreational activities such as biking or hiking.
- Non-forest products such as mushrooms remain moderately important culturally and economically.
- The Forest Service could focus on improving their relationship with the community through better communication. Residents appreciated outreach and improved communication in the most recent Flat and Anvil fires. Offering specific, accessible information to residents can increase trust.
- Reduced Forest Service staffing and high turnover has strained agency-community relationships.
- The community has struggled to replace funding for public services that was lost due to NWFP-related reductions in federal timber harvest and associated receipts.



Gold Beach, Oregon, 1935-1945

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Near Cape Sebastian

For full report, visit:
https://hdl.handle.net/1794/31412

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Ecosystem Workforce Program

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Chapter 9: Mt. Shasta-Weed, California

Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns

Case study facts

Population (2020): 14,479

Location: Siskiyou County, California

Federal forest lands (47% of study area): Shasta-McCloud Management Unit, Shasta-Trinity National Forest

Climate:
Average Annual High: 62.7 °F/Low: 37.2 °F
Annual Precipitation: 42.6 inches;
Snowfall: 89.3 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<10,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 9.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Mt. Shasta-Weed study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

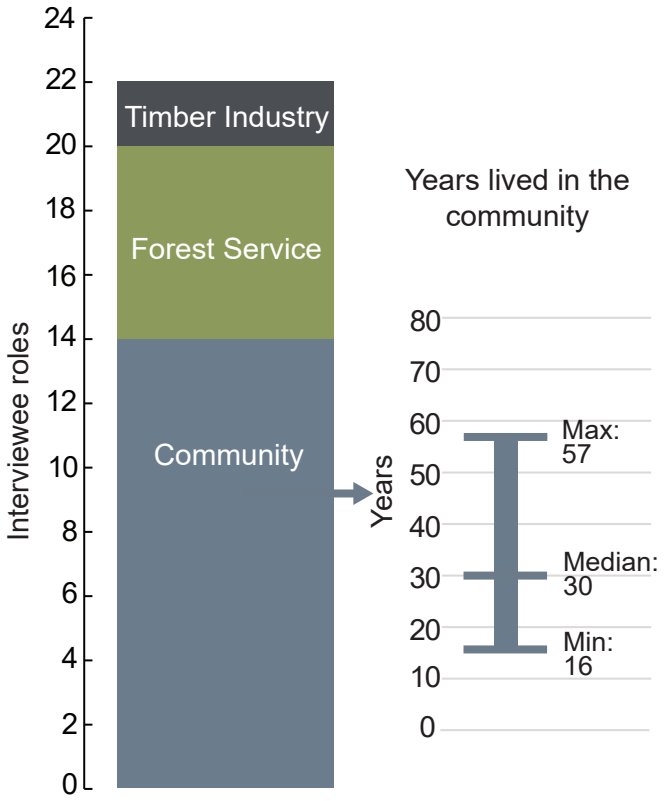

Figure 9.1. *Graph of interviewees by role and number of years lived in the community. Our sample included fourteen community members, six Forest Service employees, and two timber industry representatives. Community member interviewees lived in the study area for a minimum of 16 years, a maximum of 57 years, and a median of 30 years.*

Sizek, J., Coughlan, M., & Huber-Stearns, H. (2025). Chapter 9: Mt. Shasta-Weed, California. In M. Coughlan, H. Huber-Stearns, & S. Schneider (Eds.). *The Northwest Forest Plan: 30 years of social and economic change in rural forest-based communities (1994–2024)* (Working Paper No. 125). Ecosystem Workforce Program. Institute for Resilient Organizations, Communities, and Environments, University of Oregon. https://hdl.handle.net/1794/31412

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Study area and geography

The Mt. Shasta-Weed case study focused on the Mount Shasta Ranger District portion of the Shasta-McCloud Management Unit (SMMU) in Northern California. We spatially defined the community as the Mount Shasta and Weed Census County Subdivisions (CCDs) of Siskiyou County, California (Figure 9.2). These CCDs include the City of Mount Shasta (referred to here as Mt. Shasta City to avoid confusion with Mount Shasta the mountain) and City of Weed, as well as unincorporated areas Carrick, Edgewood, and Lake Shastina. Both Weed and Mt. Shasta City are located along the US Interstate 5 (I-5) corridor, which is the major north-south interstate on the West Coast. Mt. Shasta City and Weed are two of the largest communities in Siskiyou County (along with the county seat, Yreka, which is located outside of the study area approximately twenty-eight miles north of Weed). National forest comprises 47 percent of the study area. Forests in this region are diverse and include mixed-conifer communities including white fir, incense cedar, ponderosa pine, sugar pine, white oak, and Douglas-fir grading to red fir at higher elevations. The Mt. Shasta Ranger Station is located in Mt. Shasta City.

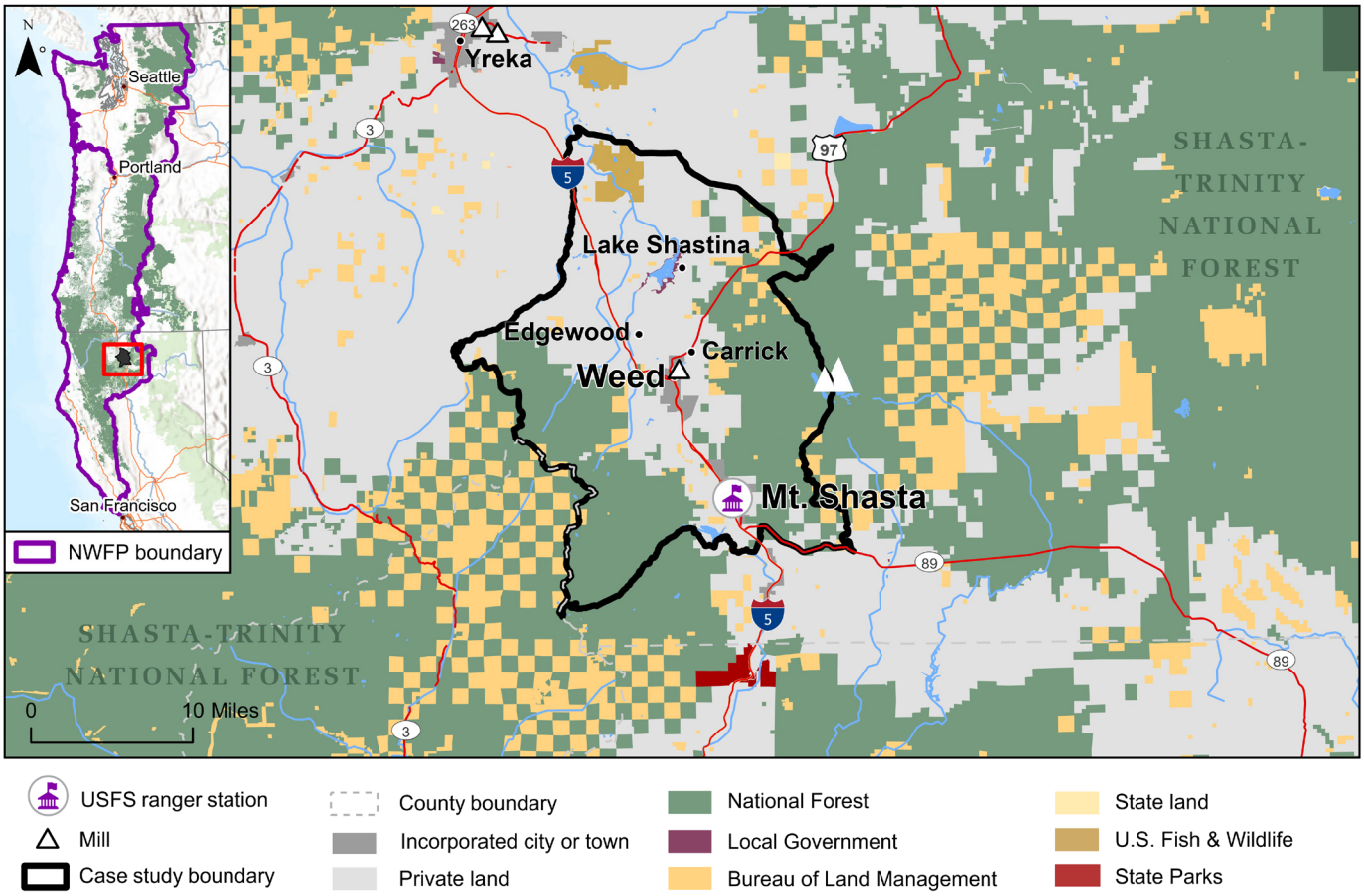


Figure 9.2. *Mt. Shasta-Weed community case study area. At the time of data collection, the Roseburg Forest Products veneer plant in Weed was operational. It closed in December 2025.*

Shared sense of place

Interviewees suggested that the population of the study area was culturally diverse. As one interviewee put it, *"There's people who describe the area as being one-third New Agers, one-third religious fundamentalists, and one-third ranchers and cowboys. There's some truth to that."* Interviewees noted that although the communities of Mt. Shasta City and Weed were similar historically, today they are significantly different.

As one interviewee described,

> *"[In the 1960s and 1970s], There were signs in the windows [that] would say, 'No Hippies Allowed.' This [Mt. Shasta City] was a logging town. People talk about this town and the transformation from a logging town to a tourist town. Weed never was able to do that: turn into a tourist town."*

One reason for this divergence is that the main road up to Mount Shasta (Everett Memorial Highway) goes directly through Mt. Shasta City. As one interviewee explained, Mt. Shasta City benefits from the fact that the nearby Mount Shasta is a popular international attraction for outdoor recreationists and *"New Age"* spiritual tourists. Weed, by comparison, was disadvantaged because it is farther away from Mount Shasta and has no direct route to access the mountain.

Speaking about Mt. Shasta City, one interviewee stated, *"We're a retirement community and we're a recreation community."* Mt. Shasta City is also popularly known for its crystal shops and as a tourist destination for people interested in New Age spiritualism.

Although interviewees indicated that Mt. Shasta City had changed dramatically since the 1960s, they also discussed division within the community between some of the newer and older residents. For example, some older, long-term residents strongly identified with the community's history as a logging and industrial timber town, whereas newer residents had adopted the identity of a tourist town.

By contrast, interviewees described Weed as *"having more lumber industry and working-class people."* Some Weed residents wished that their City Council was as proactive as Mt. Shasta City in attracting tourism to the town: *"Cities like Mount Shasta are having a resurgence. Whatever they're doing right, the City Council of Weed needs to go down there and pick their brain."* Interviewees suggested that Weed's downtown area posed challenges, since many storefronts were vacant, and in the words of one interviewee, *"really bad slumlords"* owned much of the commercial district. In comparison to Mt. Shasta City, residents of Weed felt that their town was not as vibrant, though they noted some attempts by civic groups to revitalize parts of the town.

Points of interest

Mount Shasta

Mount Shasta is a stratovolcano and officially a "Natural National Landmark" on the southern edge of the Cascade Range. The peak is 14,179 feet above sea level. The mountain is culturally significant to the area's Indigenous peoples and has been a popular climbing destination since the 1850s.

Ski Park

Mount Shasta Ski Park offers 1400 vertical feet of ski trails. The ski area is located on the south side of the mountain and accessed by Highway 89. It is operated through a Forest Service lease, and was still operating in 2024 (Siskiyou County, 1996; LaFever, 2025). By 2024, the resort also offered mountain biking during the summer months.



Mt. Shasta

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forests in Northern California, western Oregon, and western Washington. This section provides a summary of the direct impacts of these events on the social and economic wellbeing of the Mt. Shasta-Weed study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and on-going changes in the community's wellbeing following 30 years of the NWFP.

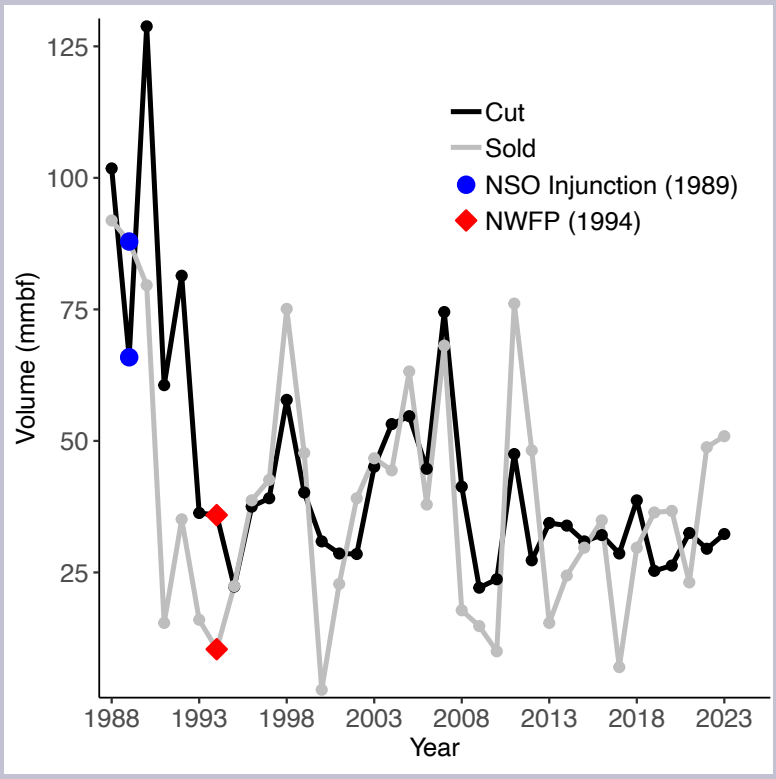


Figure 9.3. *Line graph showing timber harvest and sales ("cut" and "sold" volume in million board feet) for the Shasta-Trinity National Forest, federal fiscal years 1988 through 2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the Northwest Forest Plan indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025a).*

Following the end of the recession in the early 1980s, timber harvests on the Shasta-Trinity National Forest averaged approximately 125 million board feet (mmbf) annually. Between 1990 and 1995[1] timber harvest fell from a maximum of 129 mmbf to 22 mmbf (Figure 9.3) (USDA Forest Service, 2025a). Harvests recovered slightly over the next few years, but averaged approximately 37 mmbf between 1996 and 2023, representing a 70 percent decline from annual harvests during the 1980s.

Most interviewees in the study area did not believe that the NWFP was the primary cause for the decline of the timber industry in the area. While some interviewees thought that there was local *"resentment about the [Northwest] Forest Plan from a political lens"* in the community, others thought that the spotted owl *"wasn't the only thing"* that caused the local decline. Four interviewees who had moved to the area in the early 1990s thought that the major period of decline for the timber industry was before they had arrived, noting that, by that time, *"the timber industry... already was pretty much gone."*

1. *USDA Forest Service cut and sold data reported in federal fiscal years.*

In the broader region, interviewees thought that a decline in federal timber harvest may have impacted the industry as a whole. As one interviewee mentioned: *"the big shift was... from the late [19]80s through the mid [19]90s. And that was the big reduction in federal timber supply... That volume just fell off a cliff with the listing of the spotted owl and the Northwest Forest Plan."* This interviewee also noted that the impacts of this decline were greater in Yreka and Happy Camp than Mt. Shasta City: *"Mount Shasta is a little different community. It was not as heavily dependent on timber and logging."*

Pre-NWFP history

Settlement

Mount Shasta is a territorial boundary and culturally significant for the Indigenous Shasta, Wintu, Pit River, Modoc, and Karuk peoples who inhabited the area since time immemorial. Although the study area may have been visited by Spanish explorers or Mexican colonists between the late 1700s to early 1800s, the first historically documented visit by Euro-Americans was in 1826 by Peter Skene Ogden of the Hudson Bay Company (Jensen, 2015). Fur trappers, military expeditions, and other explorers followed in the next decades using a major north-south Native American trail known as the Siskiyou Trail or the California-Oregon Trail (Mazariegos, 2007).

In 1851, the discovery of gold in Yreka brought a significant group of Euro-American settlers to the Mt. Shasta City area (Duntley, 2015). Miners, settlers, and the United States Government soon violently dispossessed native peoples of the use of their land, actions, which culminated in the 1873 Modoc War which resulted in the incarceration of 163 Modoc warriors in Oklahoma (McNally, 2017). Today, Indigenous peoples of the Mount Shasta are members of federally recognized tribes with various reservations, including the Modoc Nation in Oklahoma and Klamath Tribes in Oregon (which include Modoc peoples), the Pit River Tribe, the Quartz Valley Indian Reservation (which includes Shasta and Karuk peoples), as well as non-federally recognized tribes such as the Wintu tribes.

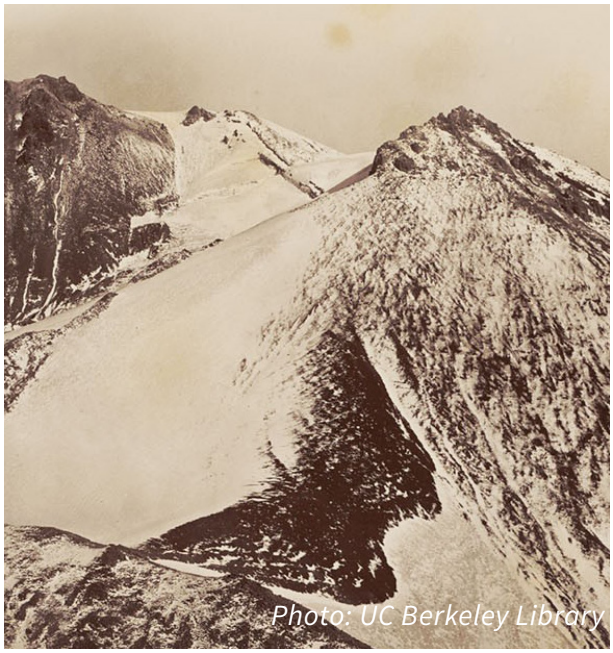
By the early 1850s, pack trains traveled through present-day Mt. Shasta City (then known as Berryvale) as prospectors flooded into the Yreka area (Siskiyou County, 1996). In 1852, William Nobles pioneered a new route connecting the Applegate-Lassen emigrant trail to Berryvale (National Register of Historic Places in Shasta County, n.d.). The Nobles Trail soon became a heavily used east-west wagon route connecting the study area with gold fields in Neveda.

In the 1860s, roads were improved and the North Old Stage Road connected Berryvale with other areas of Northern California. During this period, local businessman, Justin Sisson, ran a stagecoach and established an inn and tavern at Berryvale (Wolf and Orlove, 2008). Sisson also opened a mineral spring resort and founded a fish hatchery. Sisson's efforts and a donation of land led the Southern Pacific Railroad[2] to build its railroad through the newly laid out townsite of Sisson (previously known as Berryvale and later renamed Mt. Shasta City). In November 1886, the railroad reached the Sisson railhead and by December 1887, the railroad was transporting passengers between Portland, Oregon and San Francisco, California (Mazariegos, 2007). The train brought an increase in tourism and a new wave of settlement (Miesse, 2005).

2. *Technically the railroad started as the Southern Pacific, was acquired by the Central Pacific Railroad in 1868 which then leased it to the Southern Pacific Railroad in 1885. The Southern Pacific Railroad operated the line until it was acquired by Union Pacific in 1996.*

Early tourism

During the mid-1800s, Mount Shasta gained a reputation among intrepid explorers and mountain climbers as a significant and inspiring climbing destination. By the 1870s, author and conservationist John Muir and Grand Canyon explorer John Wesley Powell, among others, had climbed and publicized Mount Shasta (Miesse, 2005). The earliest economically significant tourism was linked to visits to local mineral springs, both hot and cold (Livingston, 2021). Further development of the study area occurred after the construction of state highways began in 1919. In that year, the Klamath River Road connected the area to the coast and soon after, the forerunner of US 97 connected Weed with Klamath Falls in Oregon (Siskiyou County, 1996). In the late 1920s, roads connecting Mt. Shasta City to Mt. Lassen and Redding were completed (Chapman, 2017; Siskiyou County, 1996, 166).



Mt. Shasta Summit, 1870s

In the 1930s, cultural movements based on mysticism laid the groundwork for an economy in Mt. Shasta City built around spiritual tourism. As mineral springs lost popularity and Shasta's mineral spring resorts closed between 1940s through 1960s (Livingston, 2021), this new wave of tourism proved important for the area's economy. For example, in 1987, New Age spiritual practitioners held a gathering called the Harmonic Convergence at Mount Shasta. The event attracted between 3,000 and 5,000 visitors to the area and is of continuing interest to spiritual tourists.

Winter sports have also been a key part of tourism in the Mt. Shasta area. As early as 1930, Mt. Shasta City created a toboggan slide and ski area (Siskiyou County, 1996). The Mount Shasta Ski Bowl opened in 1958 on the west side of the mountain (Siskiyou County, 1996). This ski area closed in 1978 after long-running financial difficulties culminated with a catastrophic avalanche that destroyed the main ski lift (Wood, 2024; Carlisle, 2021). Mount Shasta Ski Park, a new area on the north side of the mountain, opened in 1985. In the 1990s, there was a proposal to reopen the west side Ski Bowl area, but the Forest Service denied the project after years of public debate and opposition from local Native American tribes (Stienstra, 1998).

Throughout the 1800s and 1900s, hiking and mountaineering continued to be popular activities in the study area. Congress designated the 36,981-acre Mount Shasta Wilderness in 1984 (CUSDA Forest Service, 2025b). The wilderness area consists of the upper slopes of Mount Shasta. Fishing has also been a popular recreational activity in the area. In the 1980s, the Sacramento River—which has its headwaters in Mt. Shasta City—was considered one of the top 100 fishing streams in the United States (Siskiyou County, 1996).

Early timber industry

The construction of the Southern Pacific Railroad created a significant demand for local lumber and spurred development of logging companies and small sawmills (Jensen, 2015; "McCloud River Railroad History: Part 1," n.d.). By the early 1890s, the Siskiyou Lumber and Mercantile Company operated four mills along the railroad in the Mount Shasta area. Logging and milling activities focused on pine species. This company's activities proved foundational for the study area's timber industry after the owners formed the McCloud River Lumber Company and the McCloud River Railroad Company.

In 1897, the McCloud River Railroad Company completed a railroad shortline connecting vast tracks of old-growth pine in McCloud to Mt. Shasta City and the Southern Pacific Railroad. In this same year, the Siskiyou Lumber and Mercantile Company sold one of their lumber mills and 280 acres of timber land, both located in present-day Weed, to Maine lumberman Abner Weed (Wolf and Orlove, 2008). In 1903, Abner Weed then founded the Weed Lumber Company (Wolf and Orlove, 2008). At the time of its founding, Weed Lumber Company owned the townsite of Weed[3] and the major businesses and infrastructure, which included a store, banks, hotels, and housing.



Lumber piling machine at McCloud Lumber, 1920

In 1905, President Theodore Roosevelt designated the 1.5 million acre Shasta Forest Reserve. The forest's headquarters were based in Mt. Shasta City. At this time, Mt. Shasta City had two sawmills: the Pioneer Box Company (established in 1900) on the south side of Mt. Shasta City (Amador, 2016; Jensen, 2015), and the Curtis sawmill (established in 1904 and owned by McCloud River Lumber Company) on the north side of the city ("McCloud Customers," n.d.).

In 1916, the Long-Bell Lumber company gained majority ownership of the Weed Lumber Company and retained the company town structure (Marshall-Chalmers, 2022). Long-Bell expanded the Weed mill, and by 1918 the Yreka Journal boasted that it was "the largest mill on the Pacific Coast" (Mann, 2002, p.471). Long-Bell brought logs to the mill from their privately owned timberlands across Siskiyou County (Freeman, 2012).

Long-Bell company positions and housing were segregated by race: Italians, Greeks, Mexicans, and whites lived separately. In the early 1920s, Long-Bell recruited African-American workers from their mills in Louisiana, enticing them to transfer to Weed. Eventually other African-American workers joined them (Mann, 2002). Many were recruited specifically because Long-Bell intended to "import southern social relations to Northern California," which company managers expected would control the workforce and prevent labor unrest (Mann, 2002). As part of this plan, African-American workers were excluded from union membership in the Weed mill (Mann, 2002). While many African-American residents were forced out of Weed in the late 1920s (Mann, 2002), some remained in a neighborhood now known as Lincoln Heights, making Weed a center of African-American life in Siskiyou County (Mann, 2002).

From 1920 to 1950, the "pine region" (which includes Siskiyou County) of Northern California dominated the state's log production (Laudenslayer and Darr, 1990). Much of the timber coming from the area was a direct result of the expansion of the McCloud River Railroad and the mills it serviced, including the Curtis mill in Mt. Shasta City.

Post-World War II timber industry

In 1954, the Shasta National Forest was combined with the Trinity National Forest and renamed the Shasta-Trinity National Forest. The forest headquarters were moved from Mt. Shasta City to Redding (USDA Forest Service, 2025c).

3. The city of Weed was officially incorporated in 1961 (Marshall-Chalmers, 2022).

By 1955, Kimberly-Clark obtained the mill and box factory on the south side of Mt. Shasta City (Jensen, 2015). The company retooled the mill, demolishing the original structures and building new mill structures. Around this time (1956), International Paper acquired Long-Bell in Weed and sold most company-owned homes to employees who lived in them (Allen, 1963). Under International Paper, the mill included a door factory, a box factory, and a wood treatment facility (J.H. Baxter Co.) (Marshall-Chalmers, 2022).

In 1957, Marty Cooper built a sawmill on the north side of Mt. Shasta City ("McCloud Customers," n.d.). Lumber and wood chips were shipped from the Cooper mill by rail. The Cooper mill operated until the early 1970s when it was purchased by P&M Cedar Products who retooled the mill for cedar pencil manufacturing. By this time, with the completion of Interstate 5, the railroad became less important for shipping lumber.

In 1978, Roseburg Forest Products acquired the Kimberly-Clark sawmill on the south side of Mt. Shasta City. In 1983, Roseburg also acquired International Paper's lumber and veneer mills in Weed, eventually scaling back the operation to process veneer only. One interviewee described the end of the International Paper period as the town being *"punched...in the gut."* After Roseburg took over, the interviewee said, *"They immediately started tearing things down. The old mill is just a skeleton out there, now. There's nothing."* Soon afterward, Roseburg closed its sawmill in Mt. Shasta City in 1985 and sold the site to the city in 1989 (Jensen, 2015).



Former Roseburg Mill Site, Mt. Shasta

The P&M pencil mill was closed in 1990, and the site was purchased by Dannon and renovated to serve as a water bottling plant (McCloud Customers, n.d.). By 1990, the lumber operation on the Roseburg property in Weed included a lumber mill and veneer plant, processed wood storage yard, and wood-fuel power plants ("J.H. Baxter," 1990).

Mt. Shasta-Weed after the NWFP

Employment and industry

Interviewees' perceptions of local employment over the past 30 years were mixed. Five interviewees thought that local employment had decreased, two thought it had increased, and five thought that there was no change. Interviewees frequently commented on the labor market in the area, noting a lack of employment opportunities for younger people. Three interviewees mentioned that the study area had a shortage of electricians and other skilled laborers. Because of the high cost of living, interviewees commented that it has been hard to keep employees in the service and recreation sectors, and that many young people returning to the area worked multiple jobs to make ends meet. Others thought that there was a mismatch between the labor force and the type of work available in the area: *"I saw a lot of people needing to find work. Sometimes they had the skills, but they just needed to be re-tuned a little bit. Other times they didn't have the skills at all, so the effort was more seeing if we could get them some training instead of just trying to find them a job."*

For some interviewees, the decline of the timber industry in the study area began prior to the NWFP era with the sales of the mills in McCloud, Mt. Shasta City, and Weed to new owners in the late 1970s and early 1980s. In late 2025 Roseburg Forest Products announced it was closing its veneer plant in Weed, the last major timber processing facility in the study area. The company laid off 140 workers providing them with two months' severance pay and benefits (Roseburg, 2025). The company planned to continue operation of its cogeneration plant opened in 2011. In 2024, (during the 30-year monitoring fieldwork), Roseburg was still operating the mill. At that time, interviewees noted that the City of Weed had never aspired to become anything other than a timber town, unlike neighboring Mt. Shasta City: *"[The town had] the Abner Weed attitude of, 'Don't let any [other] business come in… ride timber as far as you can until it dies.' He wouldn't verbalize that, but that's actually what happened. We rode it until we dropped dead underneath it, like a horse that was exhausted."*

Recreation and tourism

Since at least the 1970s, the increase in recreation-oriented employment, including in the ski industry, has supplemented the declining timber industry. Spiritual tourists have continued to come to Mt. Shasta City to visit the 1987 Harmonic Convergence site as part of New Age religious practices (Huntsinger and Fernández-Giménez, 2000). During the summers, different New Age religious groups frequently hold events. Interviewees commented that spiritualism has attracted visitors and their business to the area: *"We get a huge draw for the spiritual traveler,"* as one interviewee put it.

With the decline of the timber industry in Mt. Shasta City, tourism surpassed timber economically. Interviewees noted that a more recent boom in Mt. Shasta City area tourism began during the COVID-19 pandemic. As one interviewee put it, *"Things changed in COVID. We got an influx of people from outside the area who wanted to recreate in our beautiful area here. That was a little disturbing for locals."* Before the pandemic, however, some interviewees stated that they were surprised by how little the town had changed: *"What's interesting to me is how little Mount Shasta has changed [since the 1990s]… except for the last leg post-COVID. When I moved here in '94 or '95, it blew me away that we were not like Tahoe or Yosemite."* In 2024, interviewees were concerned that Mt. Shasta City would face increasing tourism without being prepared for an influx of tourists. Some were concerned about the environmental impacts of tourism: *"Places are just getting loved to death. People are kind of destroying our most pristine spots around there."* One interviewee said that the town was *"simultaneously not wanting to be like Tahoe while also promoting recreation heavily."* Others thought that City leaders didn't have a clear vision for growth or change beyond the idea that the town is an *"alpine community."*

Ranching and agriculture

After the decline of placer mining along the west side of the Shasta Valley, the area north of Weed has been dominated by agriculture and ranching (Mack, 1960). In 2021, that area was predominantly pasture, grain, and hay (SCFCWDGSA, 2021). Recent droughts have significantly impacted the Shasta River, and minimum flow requirements decreased legally allowed limits for use by local ranchers (Walker, 2022). In protest, the members of the Shasta River Water Association decided to violate a state curtailment order and turned on diversion pumps (Walker, 2022). Interviewees in 2024 commented on this conflict, noting that *"[Water managers] over-promised the water and they cannot deliver on it. And those families feel like they were lied to and now they're losing their farms or ranches."* The interviewee added that, as climatic conditions have changed in the last decades, ranchers have been forced to adapt to warmer and drier conditions.

Cannabis cultivation is another significant economic activity in the study area. While cannabis had been illegally cultivated in Siskiyou County for many decades, the industry shifted after California legalized marijuana cultivation in 2016. The sheriff's office estimated that between 2016 and 2019 approximately 2000 people, mostly Hmong-American, moved to Siskiyou County to cultivate cannabis (Bruinsma, 2024).[4]

Spring water

Bottled spring water represents another post-NWFP industry in the study area, but it has not been without controversy. In 1996, Crystal Geyser plant opened a spring water bottling plant in Weed (Little, 2018; Benda, 2022). In 2016, Roseburg Forest Products, which had been providing water from a spring on its property to Weed residents under a lease for $1 per year, threatened to sell water rights to Crystal Geyser rather than to continue the lease rights to the town (Marshall-Chalmers, 2022). In July 2016, Roseburg increased the fee to $97,500 annually (Fuller, 2016[MC1] [ET2]). After a court case and a dispute over ownership of the spring, Roseburg, the city, and Crystal Geyser came to an agreement that resulted in higher water rates for Weed residents (Marshall-Chalmers, 2022; Meyer, 2021).

In Mt. Shasta City, the Dannon Water plant (on the site of the former P&M pencil mill) was purchased by Coca-Cola in 2002. The new owners closed the plant in 2010 and then sold it to Crystal Geyser in 2013 (Little, 2017; Little, 2018). This sale was controversial, with many locals concerned that water bottling would harm the aquifer underlying Mt. Shasta City (Moriarty, 2015). In 2021, Crysal Geyser abandoned the plan to open a Mt. Shasta City facility, and in 2022 the company sold the building to a San Francisco Bay Area-based company that planned to redevelop the facility into a distribution and/or manufacturing center. The new owners are prohibited from bottling water on that site due to a deed restriction added to the property after widespread opposition to the water bottling plant (Benda, 2022).

Demographic and community changes

The overall population of the study area experienced a slight increase between 2000 and 2020 (Table 9.1). The low-income population declined slightly during this period. Younger residents (25-44) also declined slightly as older populations (65 and over) increased from 18 to 28 percent of the population.

In terms of age structure, interviewees corroborated US Census statistics suggesting that the study area was aging. Other interviewees thought that the county had aged as the industries changed, for example, when fewer railroad employees were based in Mt. Shasta City, or the mills in Mt. Shasta City closed, families and working-age adults moved away. However, other interviewees thought that younger families had begun moving to the county during the pandemic, presumably because they were able to work remotely. Without remote work, however, interviewees noted that there were few opportunities for younger people: *"I know that there are young people who want to be here and raise families and have a career here, but there's just a lack of opportunity."*

Consistent with the US Census data showing a decrease in low-income populations, interviewees thought that new people arriving in Siskiyou County were wealthier than current residents. As one interviewee put it, *"there is a tension between locals who have lived here for a long time who are--I'll just generalize-- maybe retired or well-off and don't need to worry about work."* Interviewees

4. The US Census data for the study area show only a modest increase in individuals identifying as "Asian" from 2010 to 2020 period: 318 to 433 individuals (a 36% increase).

described a rural gentrification phenomenon in which *"people who have lived here who can't afford to live here [anymore]."* Eight interviewees agreed that new people were moving to the Mt. Shasta City and Weed areas, and characterized them as retirees (n=5), remote workers (n=4), and families (n=1) (results not additive, interviewees could mention multiple groups of new people). As elaborated below, interviewees also noted that not all new property-owners lived in town full-time.

Table 9.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	13,362	13,365	14,479	Increased
Low-income population*	5,150	5,047	4,754	Decreased
% Low-income population	39%	38%	33%	
Population aged 25-44	3,043	2,747	2,851	Decreased
% Population aged 25-44	23%	21%	20%	
Population aged 65 or older	2,408	2,712	2,037	Increased
% Population aged 65 or older	18%	20%	28%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

Housing

All twelve community interviewees who commented on housing agreed that housing availability and affordability decreased over the last decades, with eight interviewees noting a lack of housing availability and five noting high housing costs. Seven interviewees noted that they thought vacation homes or short-term rentals were negatively impacting the housing market. Two interviewees pointed out that there were few construction contractors to build or renovate houses in the area.

In 2014, the Boles fire destroyed 157 residences in Weed housing as well as eight commercial structures (Marshall-Chalmers, 2022; Gabbert, 2014). In 2022, the 3,939 acre Mill Fire destroyed 144 structures in Weed. Most of these structures were homes in the historically Black neighborhood of Lincoln Heights. In the fire, two residents were killed and three injured (Marshall-Chalmers, 2022). The fire began as a structure fire at the mill from inadequate fire suppression in a hot ash facility, and quickly spread through the dense Lincoln Heights neighborhood (Serrin, 2022; Marshall-Chalmers, 2022). Roseburg Lumber, whose mill operations caused the blaze, settled a lawsuit from Weed residents for $7.25 million in 2023 (Roseburg Forest Products Co., 2023).

The fire was devastating for the Black community of Weed, and many residents of the Lincoln Heights neighborhood chose to move away after the fire (Marshall-Chalmers, 2022). One interviewee thought that *"probably over 75% of the people that were affected in the Mill Fire are out of this area now, and they probably will never come back."* Interviewees thought that those impacted by the fire moved to live with younger generations in other areas, and that many displaced by the fire wouldn't rebuild because they lacked insurance or because of the small lot sizes in Lincoln Heights: *"they were smaller when they were company houses. They were right next to each other".* Interviewees mentioned that they were saddened by the loss to Weed's history and in the community: *"Those buildings will never be rebuilt. I'm gonna have to rely on the pictures... at the museum to enjoy and reminisce about the good old days of what it looked like in Weed."*

Interviewees also noted that they saw housing shortages related to other fires in the region, for example, the 2018 Camp Fire in Paradise, CA, the 2018 Carr Fire, and the 2022 August Complex in Redding. As one interviewee said:

> *"When 800 homes burned, people have to go somewhere. They'll call up Aunt Millie in Mount Shasta... They might look around and be looking for a home here to buy and say, 'Well, I could move here.' ...These fires and the decreased availability of homes due to the fires—it just exacerbated the problem."*

Housing shortages were compounded during the pandemic as new people moved to the area or bought second homes. One interviewee said: *"[The fires] created a need for building new homes and a crunch where there wasn't really enough capacity in construction. Then, there are people from when the whole COVID thing happened. People wanted to escape the city...It's a vacation home for them."*

Interviewees also noted that they believed a shortage in long-term rental housing was related to the increase in real estate investment and short-term rentals. For example, three interviewees mentioned that Bethel Church (Redding) had begun investing in both commercial and residential real estate and that this decreased local rental availability. Other interviewees noted that some long-term rentals were converted to short-term rentals or second homes. An online search in October 2024 yielded nearly 200 short-term rentals within the study area.

Two interviewees explained that local opposition to new construction was preventing the growth of affordable housing within Mt. Shasta City. As one interviewee said, *"Within Mount Shasta City, at least, there is a contingency of people that are against affordable housing. They hang onto this idea that the town would never change or get bigger. It's difficult for developers to know what they're gonna get into."*



Rebuilt homes in Lincoln Heights

Community services

Eight interviewees thought that services (including restaurants, health care, gas stations, grocery stores, and personal or business services) had decreased over the last 30 years, while two thought that there had been no change, one was not sure, and one thought that services had both increased and decreased depending on the sector. Services most notably declined in Weed, which, as of 2024, had many vacant storefronts in the downtown area. As one interviewee who grew up in Weed stated, *"It's hard to view this town now as to when I was a kid and grew up in it. It's a completely different town. There is very little vibrancy to it [today]."* Another interviewee from Weed thought that the decline mostly had to do with broader changes rather than the mill: *"I've seen a lot of businesses go under. I don't think that's due to the... the mill or the logging part of it. I think it's more due to, you know, the Internet and Amazon."* While downtown Weed has been suffering, there have been new developments at the South Weed highway interchange, including a new gas station, new grocery store, and fast-food restaurants.

Mt. Shasta City has a more active downtown district, though some interviewees thought that it had become less active over time:

> *"I would say that when I first moved to Mount Shasta, the community felt a little bit more vibrant. There was a bookstore, there was a record store, and there were more cafes. And then the 2008 crash happened, and then also the internet...[and] online businesses."*

Interviewees noted that there was less diversity in services in Mt. Shasta City, as storefronts have turned over from businesses like department stores to crystal shops. As one interviewee put it: *"We used to have more locally owned stores and more services being available. But now, one thing that Mount Shasta City is known for is its crystal shops... The reason they're able to have such big spaces is that they do a lot of their selling online."* Interviewees also thought that businesses catering to locals—rather than tourists—may not be able to make it long-term because of the greater spending power of tourists.

While Mt. Shasta City has a hospital, it does not have complete services for cancer or dialysis patients, who must drive to Redding. Even though the study area has four full-service supermarkets, some interviewees reported that they traveled to Redding or Oregon to shop for groceries. Current amenities are summarized in Figure 9.4.

Interviewees noted that school funding in Mt. Shasta City and Weed had always been low, attributing it to low property taxes, low enrollment, charter schools, and loss of timber receipts. However, of counties in California receiving Secure Rural Schools funding, Siskiyou County received the most in 2023, $4.1 million (Jones, 2024).



Lake Siskiyou

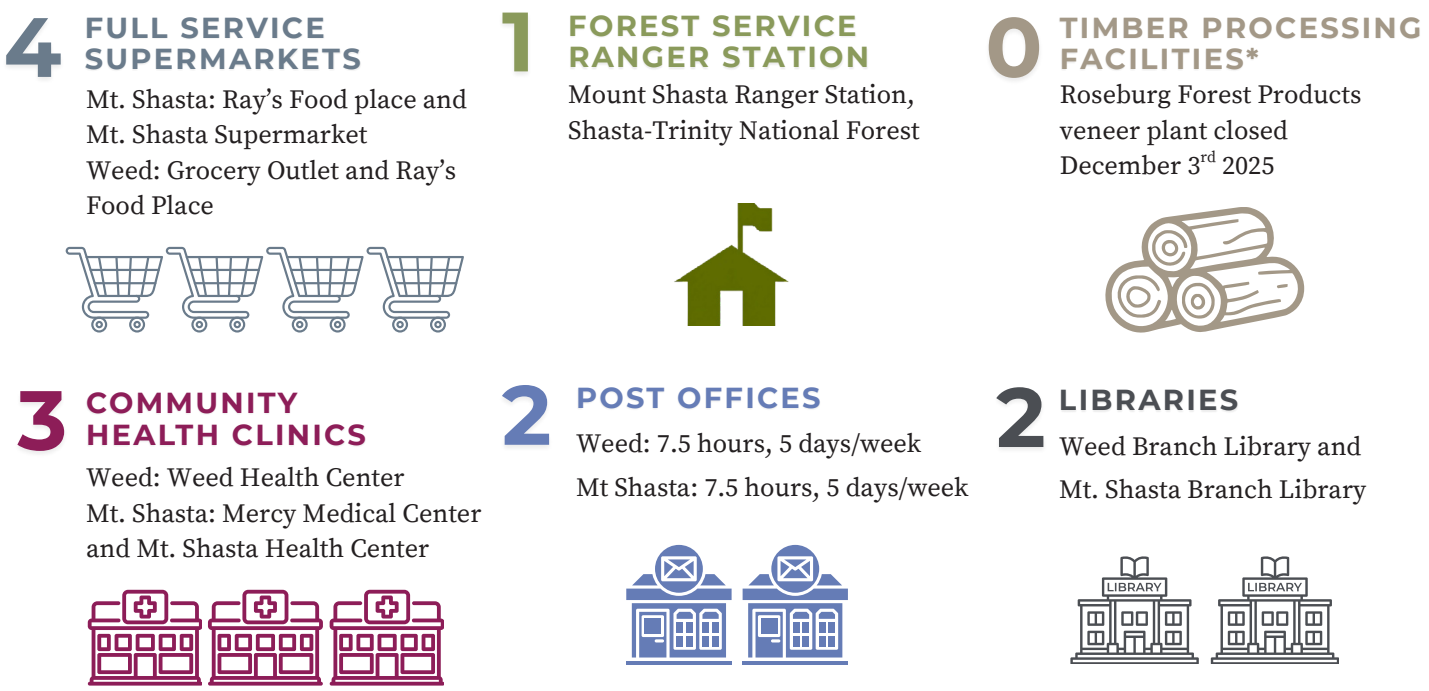


Figure 9.4. *Community amenities in the Mt. Shasta-Weed study area. Includes: four full-service supermarkets (other locations that accept SNAP benefits, such as gas stations or convenience stores, not included), one Forest Service ranger station, zero timber processing facilities*, three community health clinics, two post offices, two libraries. *At the time of data collection, the Roseburg Forest Products veneer plant in Weed was operational. It closed in December 2025.*

Community governance

Both Mt. Shasta City and City of Weed are incorporated, though few interviewees spoke highly of the city council in either town. Interviewees mentioned that they thought the city councils were not very involved or did not have the capacity or vision to implement positive change in the area. Interviewees identified community groups in Weed, including the Weed Community Resource Center and Weed Revitalization Coalition, that run local youth programs and have helped build a community skatepark. Interviewees in Weed also mentioned the involvement of the Ford Family Foundation in increasing community capacity.

Community relationship with the Forest Service

Of the twelve community members who commented on the relationship between the Forest Service and the community, three thought that the relationship was negative, one positive, two thought that there were both positive and negative relationships in different parts of the community, and two thought that there was not a relationship between the Forest Service and the community. Additionally, three interviewees commented that they thought the local Forest Service was understaffed.

Three interviewees mentioned that community members were dissatisfied with the Forest Service because of general sentiment against government and land managers. As one interviewee noted,

> *"From logging too much, to not logging enough, to the recreation permits, to law enforcement, I think there's a general anti-establishment [view] here...People who live in Mount Shasta tend to kind of live on the fringes. They're not doing an eight-to-five and working in a cubicle. There's a lot of independent thought."*

Other interviewees thought that community members had a strong sense that Forest Service shouldn't have as many restrictions on public lands, and that *"the Forest Service is too restrictive and too protective of the land."* Partner groups interviewed also noted that they thought that the Forest Service was very protective of the national forest.

Other interviewees thought that local frustrations were due to Forest Service understaffing, and that the Forest Service had less community presence in 2024 than in the past. Interviewees noted that there was limited enforcement of violations on the forest, and that Forest Service staff no longer were able to attend public-facing education events and festivals due to low staffing levels.

We asked community interviewees about their views on Forest Service management priorities (Figure 9.5). A majority of interviewees suggested that they believed the Forest Service was prioritizing management for wildfire resilience while the remainder were uncertain. Fewer people thought that the Forest Service prioritized science in its planning processes and most interviewees were unsure if the Forest Service was prioritizing management for climate change. The majority of interviewees thought that the Forest Service did not prioritize local community well-being. Sixtyfour percent thought that the Forest Service placed a low priority on incorporating public opinions into their planning processes.

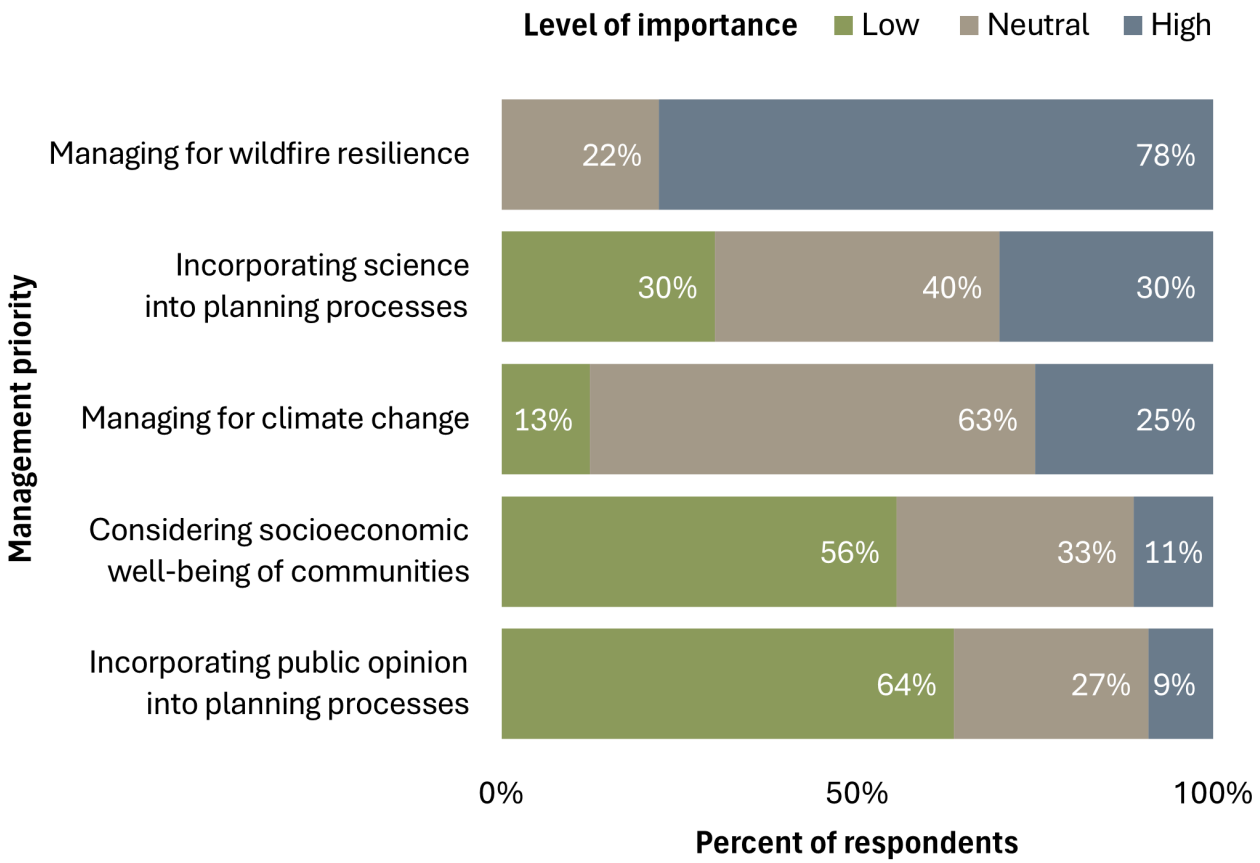


Figure 9.5. *Community perception of Forest Service management priorities (n=11). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

Community relationship with national forest lands

Interviewees ranked water, recreation, tourism, and hunting and fishing as the most important uses of the national forest (Figure 9.6). Timber was ranked as the least important use of the national forest.

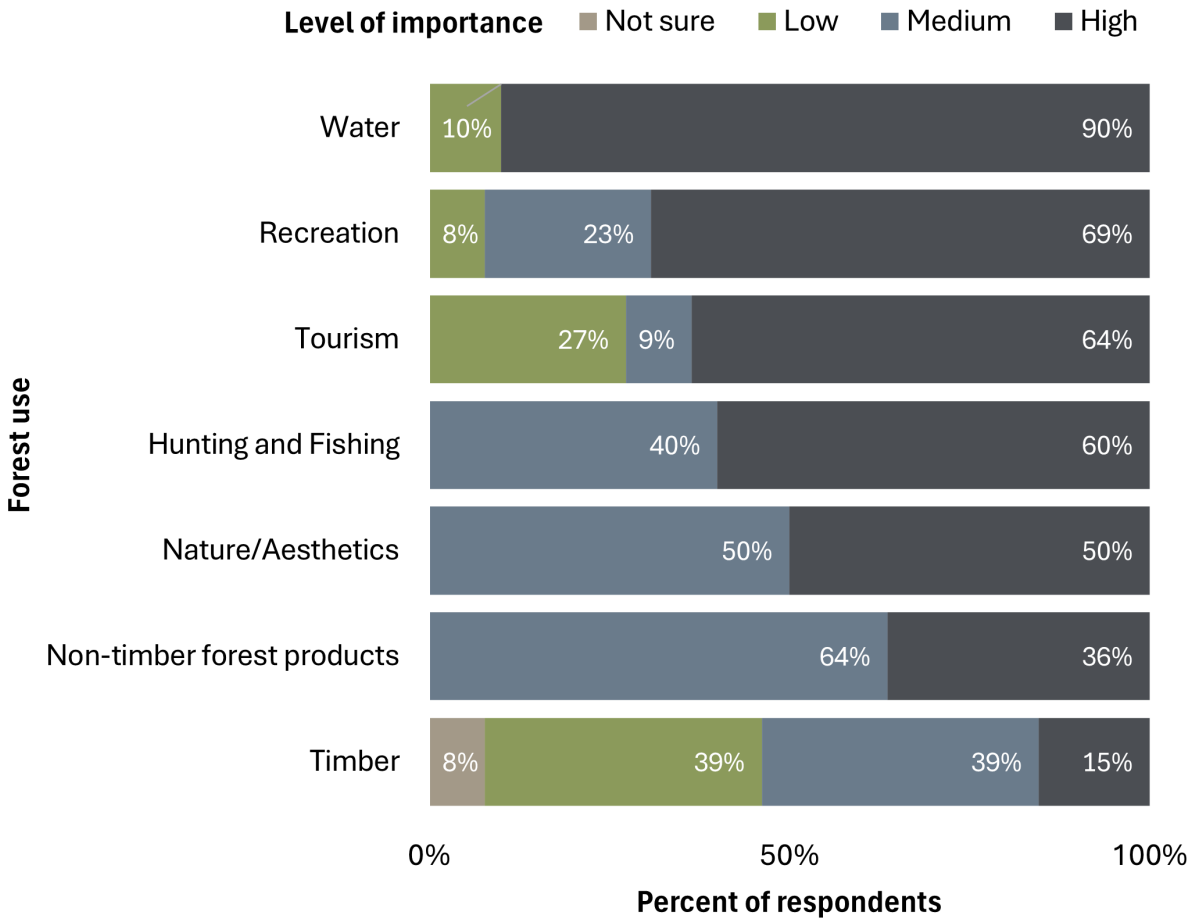


Figure 9.6. *Importance of national forest uses to community (n=11). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Water

Interviewees were uniformly proud of their local water, with one interviewee stating *"Every town claims to have the best water. But we [Mt. Shasta City] have the springs at City Park."* These springs form the headwaters of the Sacramento River. The water travels through a series of lava tubes on the mountain to reach the mouth of the spring where local residents can collect water for home use (Kinkade, 2014). As noted above, efforts to capitalize on Mount Shasta spring water have caused controversy within the community.



City Springs, Sacramento Headwaters

Recreation

Interviewees suggested that the most popular outdoor recreation activities were: hiking (n=8), mountain biking (n=6), skiing (n=5), fishing (n=3), hunting (n=3), off-highway vehicle use (n=3), camping (n=2), and water recreation (n=2). Popular recreation areas noted by interviewees were Mt. Shasta (including the Bunny Flat area), McCloud waterfalls, Lake Siskiyou, and Castle Lake. Interviewees mentioned a decline in the quality of fishing recently. Interviewees attributed this decline to *"pollution and overgrazing by cattle"* and recent drought. Hunting was also popular, but more concentrated on the eastern side of the mountain.

The Forest Service issues approximately 5000-6000 permits to climb Mount Shasta each year (USDA Forest Service, 2023). Fees for climbing permits have been controversial among the mountain climbing community. One interviewee recalled that at public meetings about the change, *"People were inappropriate: yelling at people and cussing... When stuff like this [proposed permitting change] happens, people are very opposed to any sort of rules or changes. Like, 'We've done it this way forever. I'm not gonna pay my money. I'm not gonna get my permit for that.'"*

The Forest Service also recently changed the commercial guiding permitting process. One interviewee with knowledge of the local recreation industry mentioned that the newest changes allowed for more outfitting companies to hold permits on the mountain, but that these new permittees were not locally owned and operated: *"Now, we have these outfitter companies operating on the mountain who don't live here, who aren't involved here...who don't have the expertise or the knowledge base to be leading trips up there."* The interviewee thought that allowing non-local companies to hold permits would hurt locally owned businesses by increasing competition from out-of-area trip leaders.

In 2024, mountain biking was on the rise in the Mount Shasta area. The Mount Shasta Trail Association, a local nonprofit, was working on a plan to build 100 miles of new trails in the area around Mt. Shasta using professional trail builders. Interviewees described these efforts to make Mount Shasta a mountain biking destination, and noted that there had been *"a dramatic increase in bike traffic and desire [for more trails]"* in recent years.

In terms of trail maintenance, interviewees noted that some areas—like the popular Bunny Flat and Castle Lake areas—were overcrowded and suffering the ecological impacts of over visitation. Others thought that a lack of trail maintenance was hindering local use of trails. Dumping in popular areas was also an issue for interviewees.



Castle Lake

Non-timber forest products

Interviewees did not rank non-timber forest products as an important forest use in the study area. The Shasta-Trinity National Forest is the largest national forest in California and comprises 2.2 million acres. Consequently, it is difficult to extract meaningful understanding of the importance of non-timber forest products from national forest-level cut and sold reports. Nevertheless, it is worth noting, that between 2013 and 2023, the forest sold 63,773 Christmas Tree permits (at $10 each), a comparatively large number for the NWFP area (USDA Forest Service, 2025a).

Timber

Between 2013 and 2023 the Mt. Shasta Ranger District sold 10 timber sales. Only four sales were for volumes greater than 320 thousand board feet (mbf). Larger sales ranged from 8,267 mbf to 3,697 mbf and were sold to businesses located near Redding approximately 75 miles from Mt. Shasta City (USDA Forest Service, 2023).



Pile of logs (Roseburg), Weed

The few interviewees who described logging as an important issue thought that it was deeply divisive in the community. As one interviewee put it, *"I think there's a big contingent here that would be very upset if there was more logging. There's another big contingent that says, 'You have to open everything up to logging and mining and drilling.'"* Interviewees also frequently mentioned that the type of logging would be essential to determining how a project would fare in the public view: *"I do, though, think that, if the main purposes were forest health and fire mitigation, I think the community would be more open to it. But if it's just to log and be revenue for the Forest Service, I think some community members would be pretty pissed off."* In general, the community only favored projects with a clear link to wildfire risk reduction.

Wildfire and other forest disturbances

Wildfire

Fifteen interviewees directly mentioned wildfires as an important disturbance in the local forest. As noted above, two recent wind-driven fires have destroyed residences and businesses in Weed (Marshall-Chalmers, 2022). As one interviewee mentioned when asked about recent changes in the region, *"I think the single biggest effect on the area is the mega-fires."* Interviewees most frequently mentioned how wildfires impacted home insurance (n=5), housing (n=4), mental health (n=4), air quality (n=4), tourism (n=3), and caused evacuations (n=4).

There have also been forest fires on federal lands that impacted local communities. In February 2006, an escaped prescribed burn caused the Hotlum Fire, which burned over 3000 acres after red flag conditions drove the fire out of the planned area (USDA Forest Service, 2006). This fire was described by Forest Service staff as a turning point in fire and fuels management: *"That forever changed the way that we managed the north side of the mountain in that we no longer prescribe burn out there. We haven't since, not even piles."*

The 2021 Lava Fire burned 26,409 acres northeast of Weed (CalFire, 2021). The fire began near lava tubes on the mountain, and, although managers thought that the fire had been extinguished, it rekindled during the night. When the fire rekindled, it prompted widespread evacuations in Lake Shastina, Carrick, and unincorporated portions of the county, though ultimately only 23 structures (14 of which were homes) burned in the fire (KOBI, 2021). This fire was controversial: CalFire (state agency) blamed the Forest Service for mismanaging the fire. As one interviewee noted, *"There was a lot of finger pointing and blaming. That was kind of not behind closed doors. It was out in the public."* Interviewees mentioned that, though the relationship between the Forest Service and CalFire was quite bad during the Lava Fire, it had improved since that time.

Interviewees noted that local attitudes toward fire mitigation had changed as wildfires stopped being events and instead became *"fire season":*

> *"Prior to [having a] fire season, you couldn't cut a tree down in this town without people losing their minds. Once we got threatened by fires, people are far more open to logging operations, particularly around fire mitigation. If you drive up the Everett Highway, which goes up to Bunny Flat, last fall they did a mountain thin (which was really a clear cut). If that had happened 10 years ago, people would have lost their minds. Yeah. Now it's like, 'Oh, good. They did another clearing.' I think people would rather see the forest harvested and logged than burned."*

Increasing public acceptance of fire mitigation has allowed the Forest Service to undertake more projects. Although community members are more open to seeing mitigation work today, there remains some local controversy because of local perceptions of the spiritual nature of the mountain: *"It's just been so difficult to implement anything [for fire mitigation] up on the mountain because of the spiritual nature of it and the Native American uses on the mountain. A lot of people feel very strongly about not altering the landscape on the mountain."* While public opinion has moved to favor wildfire mitigation projects, interviewees were not sure that projects would be able to be completed. The South Fork Sacramento project, scheduled for implementation in December, 2023 (USDA Forest Service, 2024) was still under debate while research was taking place in 2024.

Because of the risk of high severity fire in the area, portions of the Shasta-McCloud Management Unit were designated as priority landscapes under the Wildfire Crisis Strategy (WCS) (USDA Forest Service, 2022). The Forest Service was allocated additional funds from the Bipartisan Infrastructure Law (BIL) (Infrastructure Investment and Jobs Act, 2021) to conduct fire mitigation work on two projects covering most of the Western side of the Shasta-McCloud Management Unit (USDA Forest Service, 2022). Interviewees thought that the priority landscape designation was a recognition of what local managers already knew: *"We know that fire is always the driver, and it has always been here for the last 24 years. We live in a fire environment, and there's just more emphasis now on protecting.... communities [and] private timber lands."*

Air quality

Wildfire smoke has also had significant effects on the community. Because summer is the busy season for recreation and tourism, smoke from fires has impacts on local well-being: *"When we have big fires like that, and the smoke hanging in the air for weeks, everything is depleted. Nobody's out there doing anything. Nobody's coming to stay in the hotels, buying things, coming to the museum, whatever it might be."* Interviewees also noted that some events normally scheduled for the summer or fall have been rescheduled to the spring to avoid smoke.

Other forest disturbances

In addition to wildfires, interviewees mentioned pest-induced tree die-offs (n=5), landslides (n=3), and droughts (n=2) as disturbances that impacted the nearby national forest. The specific die-off noticed by interviewees was the red and white fir zone die-off from drought and insect kill, which is highly visible from Mt. Shasta City. As one interviewee said, *"it's so visually noticeable. You can go away for three weeks and then come back and go, 'Oh my God, there are more orange trees out there.'"* Land managers noted that action to prevent the die-off should have taken place earlier: *"By the time it [the die-off] showed up, it was too late... To me, it should be the eye-opening opportunity to talk to town and say, 'Hey, we should have been in here 20 years ago, thinning this out.'"*

However, community members have long resisted thinning activities or timber sales on the mountain; as one person put it: *"The mountain has been such a sacred place for so long. Nobody really planned any timber sales or activities up there. Everybody's kind of an ostrich with a head in the sand."* Interviewees also noted insect-related tree death elsewhere in the area around Mount Shasta but thought that these areas were not being treated due to lack of funds: *"[A Forest Service employee] said, 'Number one, I don't have the people to even do anything. I don't have the equipment.' At the federal level, the resources aren't there to deal with [insect infestations]."*

There have also been several debris flows (landslides and mudflows) on the mountain, some of which have impacted infrastructure in Mt. Shasta City, including a subdivision and the local high school. Glacial melt on the mountain, tree die-offs, and wildfires all cause more severe debris flows. Consequently, these debris flows have become worse in recent years. As one interviewee summarized, *"[debris flows] are completely natural, but there are clear correlations in data that show an increase in frequency and events since temperatures started to warm."*

Community futures

When asked about the next ten years, interviewees mentioned that they saw climate change (n=4), water (n=3), housing (n=2), wildfire (n=2), and recreation (n=1) changing the most in their community. Interviewees thought that the climate in the Mt. Shasta area was changing: *"the heat, the low humidity, the fire risk, and these trees are stressed and dying."* Another interviewee agreed with this sentiment, saying: *"We're basically a desert state here."* Interviewees were concerned about what climate change might mean for the winter ski resort, which is located on a south-facing slope. As one interviewee discussed, *"All the data shows that in 50 years, we're not going to have snow at that elevation. Or even 20 years. It's not sustainable for them."* Looking toward the future, interviewees were concerned about how climatic changes would affect both the forests and their towns.



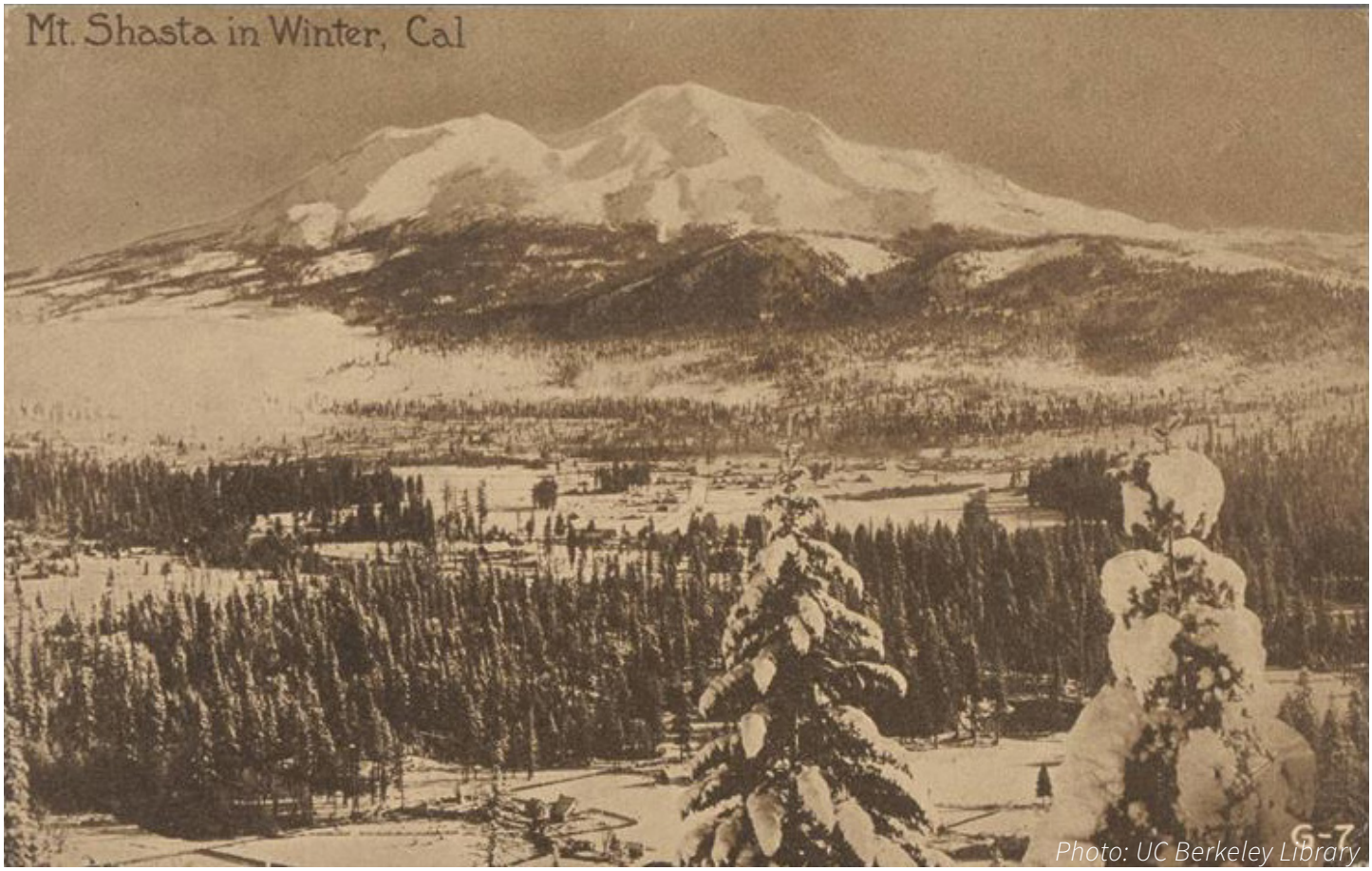
Homes in Lincoln Heights

Conclusions and case study highlights

By the late 1980s, timber processing capacity in Mt. Shasta City had collapsed and did not seem likely to return, with or without the NWFP. Most interviewees did not link the community's social and economic well-being to the implementation of the NWFP and some suggested that the timber industry began to decline by the 1970s and early 1980s. In Weed, Roseburg Forest Products continued to be an important employer through 2025. However, the Weed veneer and cogeneration plants did not accept roundwood and since at least 2013, Roseburg Forest Products had not purchased timber from the Mount Shasta Ranger District.

Mt. Shasta-Weed key forest management takeaways

- Water provisioning and water quality is of critical importance to local residents.
- Recreation, tourism, and aesthetics are key forest values for the community.
- The strongest support among local communities is for forest management with a clear link to wildfire risk reduction.
- The increasingly visible effects of climate change—pest-induced tree die-off, debris flows, and wildfire—strongly inform residents' perceptions of federal forest management.
- Despite their similar beginnings and geographic proximity, Mt. Shasta City and Weed are currently on divergent trajectories. If the Forest Service continues to be concerned with the social and economic wellbeing of the study area, the two communities will require different types of engagement and support from the agency.



Postcard of Mt. Shasta in winter, 1910-1915

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Thinned plantation on Everett Memorial Highway

For full report, visit:
https://hdl.handle.net/1794/31412

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Chapter 10: Smith River-Gasquet, California

Photo: Julia Sizek

Julia Sizek, Michael R. Coughlan, Heidi Huber-Stearns

Case study facts

Population (2020): 3,239

Location: Del Norte County, California

Federal forest lands (84% of study area): Gasquet Ranger District, Six Rivers National Forest

Climate:
Average Annual High: 59.7 °F/Low: 44.6°F
Annual Precipitation: 71.5 inches;
Snowfall: 0.0 inches (National Oceanic and Atmospheric Administration, 2021)

Approach

We conducted social and economic monitoring of eight rural communities (<15,000 residents) within the Northwest Forest Plan (NWFP) area. We used a case study approach involving analysis of qualitative interviews (Figure 10.1), literature review, and descriptive summaries of selected secondary data. All interviewees worked in, resided in, or had social or economic ties to the Smith River-Gasquet study area. Quotes in these reports are from interviews conducted in 2024. Each case study can be read as a standalone report. Chapter 1 provides a full introduction and methods including case study selection, interviewee sampling rationale, and secondary data analyses.

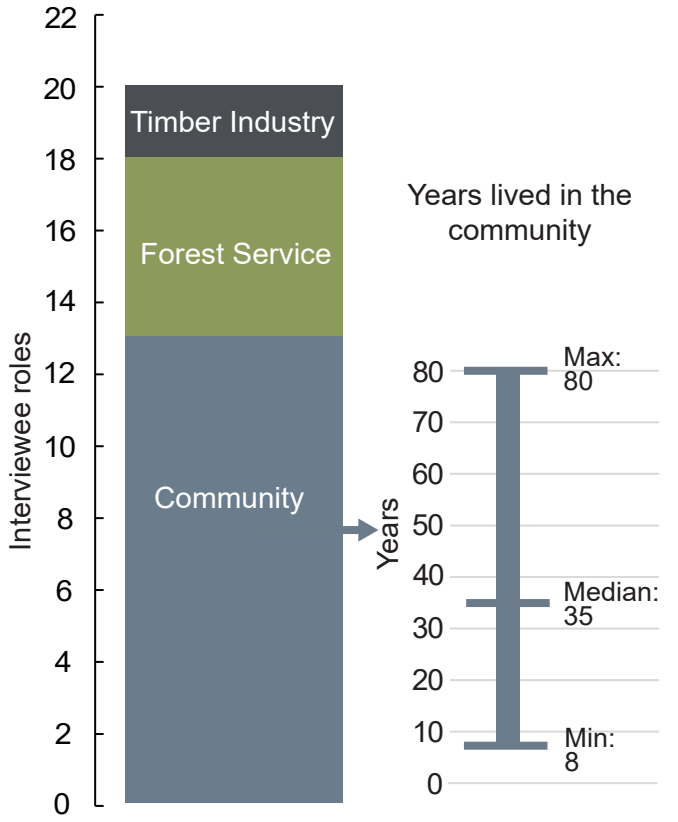


Figure 10.1. *Graph of interviewees by role and number of years lived in the community. Our sample included thirteen community members, five Forest Service employees, and two timber industry representatives. Community member interviewees lived in the study area for a minimum of eight years, a maximum of 80 years, and a median of 35 years.*

Sizek, J., Coughlan, M., & Huber-Stearns, H. (2025). Chapter 10: Smith River-Gasquet, California. In M. Coughlan, H. Huber-Stearns, & S. Schneider (Eds.). *The Northwest Forest Plan: 30 years of social and economic change in rural forest-based communities (1994–2024)* (Working Paper No. 125). Ecosystem Workforce Program. Institute for Resilient Organizations, Communities, and Environments, University of Oregon. https://hdl.handle.net/1794/31412

Ecosystem Workforce Program
UNIVERSITY OF OREGON

Study area and geography

The Smith River-Gasquet case study focused on the Gasquet Ranger District-Smith River Recreation Area in the Six Rivers National Forest, California. We spatially defined the local community as the Smith River-Gasquet CCD (Figure 10.2). The study area consists of rural portions of Del Norte County including the unincorporated, census designated places (CDP) of Smith River, Hiouchi, and Gasquet (pronounced "Gas-key"). All three communities are located along the Smith River or its forks. As of the 2020 US Census, Smith River was the largest CPD with 906 residents; Gasquet had 657 residents, and Hiouchi had 314 residents. Crescent City, approximately 10 miles southwest of Hiouchi, is the county seat of Del Norte County and is the only incorporated city in the county. In addition to Forest Service-managed lands, the National Park Service and California State Parks jointly manage Redwood National and State Parks within the study area. Forests in this region consist largely of mixed evergreen forests including Douglas-fir, white fir, a variety of hardwoods, and stands of redwoods along the coast. This region also includes serpentine chapparal areas. The Gasquet Ranger Station is located in Gasquet.

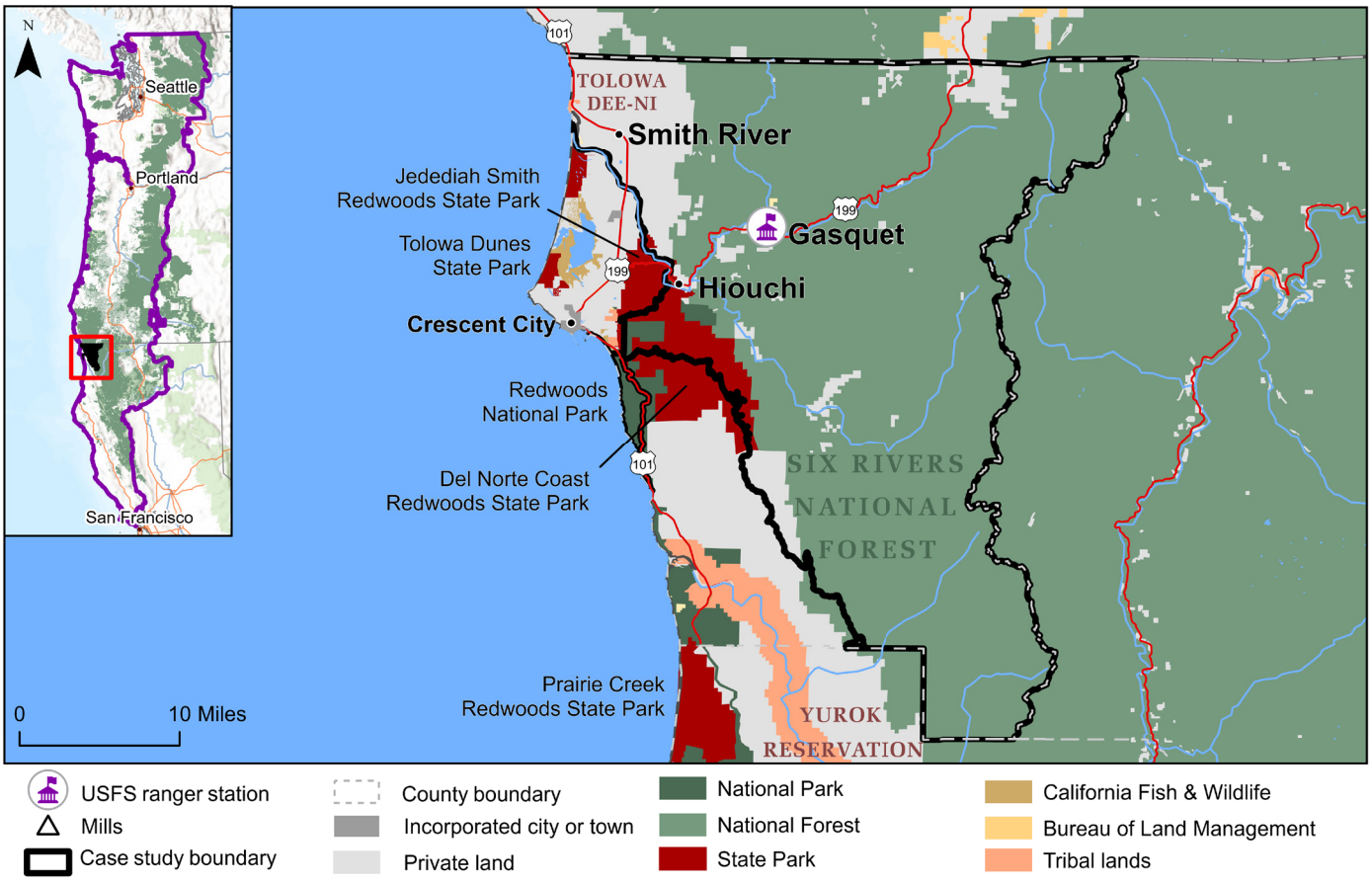


Figure 10.2. *Smith River-Gasquet community case study area.*

Shared sense of place

While Smith River and the Tolowa Dee-ni' Reservation are coastal and agricultural, the communities of Hiouchi and Gasquet are inland and forested areas. Residents of the study area see their climate as distinct from adjacent Crescent City: "*We [Smith River] have an interesting microclimate where it gets considerably*

warmer and less windy than it does in Crescent City...you can have fruit trees in your yard." Others commented that the weather could be cold in Crescent City and warm in Gasquet: *"Loosely calculated, it's like a degree per mile as you drive west. 80 degrees in Gasquet, it'll be 60 in Crescent City."*

Residents of Smith River identify their community as being more diverse than others in the county. *"Smith River is... the most diverse community probably in the county because of the migrant workers and then... second generation immigration... and the Tribe. Del Norte County and Northern California is... really white, so it's sort of nice that this [Smith River] has a little more diversity."* Gasquet residents see their community as a typical small town: *"Gasquet is a very quiet little town. We have our [Gasquet Bible] church. We don't have a gas station. We have a little store, a post office."*

Points of interest

Redwood National and State Parks

The Northern California coast is home to Redwood National Park, Del Norte Coast Redwoods State Park, Jedediah Smith Redwoods State Park, and Prairie Creek Redwoods State Park. The 38,982 acres of ancient coast redwood forest makes up approximately 35% of all old-growth redwood forests remaining in the world (National Park Service, n.d.a.). According to the National Park Service, there were approximately 410,000 visitors to Redwood National Park in 2023. Visitor spending that year supported 384 local jobs and contributed almost $38 million to the local economy (National Park Service, 2004). In 2024, visitation numbers increased to 622,883 (National Park Service, n.d.b.).

Smith River National Recreation Area

The Smith River National Recreation Area (NRA) is located in the Six Rivers National Forest and is a popular recreation area, particularly for fishing, rafting, or hiking. As California's only remaining undammed river (USDA Forest Service, 2026), the Smith River is protected under the Wild and Scenic Rivers Act of 1968. Its designation as a NRA confers additional protections to the ecological diversity, clear waters, and cultural resources within the Smith River watershed.



Smith River

The litigation era and the NWFP: a summary of local impacts

In the late 1980s, conservationists began to raise public awareness of the destruction of old-growth forest habitat by logging in the Pacific Northwest. Public protests and legal actions soon focused attention on the northern spotted owl (Strix occidentalis caurina), whose habitat was threatened. During the "litigation era", beginning in 1989 with a temporary legal injunction on federal timber sales in the Pacific Northwest and culminating with the implementation of the NWFP in 1994, timber harvest decreased significantly on federal forests in Northern California, western Oregon, and western Washington. Unrelated to these events, in 1990, the Smith River NRA (and accompanying management plan) was created within the Gasquet Ranger District. Along with the spotted owl-related injunctions on logging, these two changes eliminated almost 60% of proposed timber sales areas on the Six Rivers National Forest ("Timber Sales Reduction Expected in Six Rivers Forest," 1990).

This section provides a summary of the direct impacts of these events on the social and economic wellbeing of the Smith River-Gasquet study area. In the sections following this summary, we situate these impacts within the study area's pre-NWFP history (including settlement and post-World War II timber industry) and on-going changes in the community's wellbeing following 30 years of the NWFP.

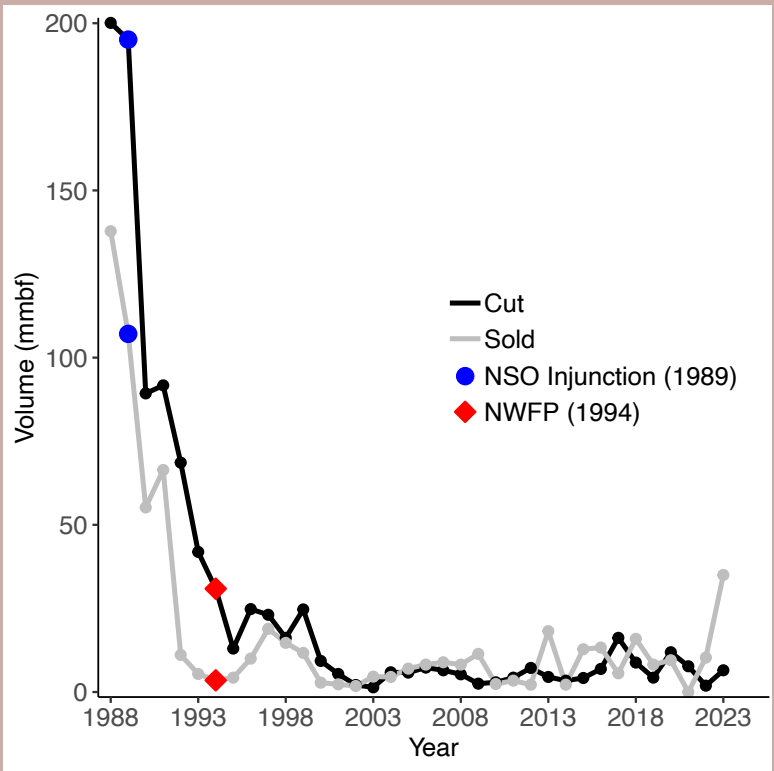


Figure 10.3. *Line graph showing timber harvest and sales ("cut" and "sold" volume in million board feet) for the Six Rivers National Forest, federal fiscal years 1988 through 2023. Landmark 1989 temporary injunction on timber sales in NSO (northern spotted owl) habitat in federal forests in the Pacific Northwest and 1994 implementation of the Northwest Forest Plan indicated by blue dots and red diamonds respectively (USDA Forest Service, 2025).*

Harvest volumes on the Six River National Forest fell from 200 million board feet (mmbf) in 1988 to 13 mmbf in 1995, a drop of nearly 95 percent (USDA Forest Service, 2025).[1] Harvest volume continued to fall, reaching a low of 1.4 mmbf in 2003. Over the next two decades, harvest volumes varied between approximately 2 to 16 mmbf averaging approximately 6 mmbf annually until 2023 (Figure 10.3).

In the memory of community members we spoke with, the designation of the Redwood National and State Parks (1968 and expanded in 1978) and Smith River National Recreation Area (NRA) (1990) were more significant events for local social and economic wellbeing than the Northwest Forest Plan. The Smith River and its tributaries were also designated as a National Wild and Scenic River prior to the spotted owl injunctions and the NWFP. This designation limited development and logging along the river corridor (including lands managed by the Forest Service) and the Smith River NRA management plan covers most of the remaining portions of the Gasquet Ranger District. Some interviewees thought that the NRA and Wild and Scenic River designations were more prescriptive for Forest Service land management than the NWFP.

1. *USDA Forest Service cut and sold data reported in federal fiscal years.*

Pre-NWFP history

Settlement

Tolowa peoples have lived in northwestern California and southwestern Oregon since time immemorial (Tolowa Dee-ni' Nation, n.d.b). Spanish explorers and traders may have visited the area as early as the 17th century. The first documented visit by Euro-Americans occurred in 1828 when Jedidiah Strong Smith (i.e., the “Smith” of Smith River) led a group of trappers to the area. Early non-Indigenous settlement of the area came primarily by sea during the Gold Rush in the early 1850s. In 1853, J. F. Wendell, established Crescent City on the site of a Tolowa village. Before the year ended, there were approximately 300 houses and 800 people in the former Indigenous settlement (Bearss, 1969).

In the summer of 1853, Euro-American settlers massacred Tolowa people at Yan'-daa-k'vt (Yontocket), a village on the south bank of the Smith River, while they were engaged in ceremony. In the massacre, between 450 and 500 people from Taa-’at-dvn (outside Crescent City), Tolowa people from Yontocket, and Tututnis from southern Oregon, were killed (Akins & Bauer, 2022; Tolowa Dee-ni' Nation, n.d.a.).

After the 1853 massacre, some Tolowa people were relocated to reservations in Northern California and Oregon (Tushingham & Brooks, 2017). Tolowa peoples were additionally impacted by U.S. Army actions in the 1855-1856 Rogue River Wars to the north (Tushingham and Brooks, 2017). The Tolowa signed a peace treaty with the government of Del Norte County in 1857, however, hostilities between Euro-American settlers and Indigenous residents continued as many Indigenous peoples in the area remained legally landless (Slagle, 1987). The Smith River Reservation and a U.S. Army outpost (Fort Lincoln) were established within the study area in 1862 (Ruhge, 2017). After local Euro-American settlers destroyed Indigenous crops and livestock and threatened to force the Native Americans from their reservation homes, the U.S. Congress eliminated the Smith River Reservation in 1868 (Slagle, 1987). Decades later, in the late 1920s, the Smith River and Elk Valley Rancherias were federally recognized (Slagle, 1987). Both Tribes lost this federal acknowledgement in 1960 when the federal trust relationship was terminated by the U.S. Government. Federal recognition was restored in 1983 following settlement of the Tillie Hardwick class action lawsuit, overturning the 1960 termination (Wood, 2008). As of 2024, the Tolowa Dee-Ni' Nation was the only federally recognized Tribe within the Smith River-Gasquet study area.

Early economic development of the study area was facilitated by ocean transport as roads were difficult to build and maintain along California’s northern coast (Bearss, 1969). An early stagecoach route established in 1854 was abandoned due to high costs and maintenance challenges (Bearss, 1969; Bledsoe, 1881). Mining was important to the early development of the study area. Nearly all private land holdings in Gasquet were originally titled as mining claims (Keter, 1995). During the Civil War, mining transitioned from panning for gold to more capital-intensive mining operations for copper, chromite, and manganese (Chase, 1959). By 1865, more destructive hydraulic mining techniques predominated. Later, as copper demand waned, mining declined (Keter, 1995).

By 1880, the population of Crecent City was 2,669 people, which included large populations of Chinese and Native American inhabitants (each comprising approximately 10% of the population). Both groups faced significant discrimination from the white population (Bledsoe, 1881), while also working for the mining industry in the study area (Keter, 1995). In 1881, Crecent City businessman, Horace Gasquet (namesake of the Gasquet CDP), relied on Chinese workers to build a road along the north and middle forks of the Smith River (Wey, 2004). The road became known as the Gasquet Toll Road and served mining camps along the

Smith River and its tributaries as well as Gasquet's "Health Resort" (Keter, 1995). The county purchased the road in 1904, and by 1930, the Forest Service began maintaining it.

Railroad connections to major population centers were never developed, and the Redwood Highway was not completed until 1923. US-199, which connected Crescent City to Grants Pass, Oregon and the Rogue River Valley, wasn't completed until 1929 (Bearss, 1969).

Early timber industry

As early as 1853, water-and horse-powered sawmills began processing timber from the study area to meet local lumber demand (Bearss, 1969). Timber export industry began in 1869 when the Crescent City Mill and Transport Company constructed a mill. Two years later, Hobbs, Pomeroy, and Company (later Hobbs, Wall, and Company), opened a competing mill and box factory in Crescent City (Bearss, 1969). By 1880, the local lumber industry was booming, focused primarily on exporting redwoods via boat to San Francisco and other coastal areas (Oswald, 1970; Buckley, 2000).

In the late 1800s and early 1900s, the timber industry grew and redwood production from coastal Northern California dominated the state's timber harvest. Timber companies in and around the study area were operating primarily on private lands with high-value redwoods (Fischer, 1967; Poli, 1956). Three large export companies dominated the local industry: (1) Hobbs, Wall, and Company, (2) J. Wenger and Company (successor to the Crescent City Mill and Transportation Company) and (3) Hume, Westbrook, and Bomhoff (Bearss, 1969). The latter company constructed a mill within the study area at the mouth of the Smith River in 1882, but the mill closed soon after due to the shifting river channel which made timber transport difficult for the company.

Between 1880 and 1893, Hobbs, Wall, and Company expanded from 6 to 8.5 mmbf per year, logging private timberlands between Crescent City and Smith River (Bearss, 1969). They operated two mills, one on Lake Earl, north of Cresent City, and one on Elk Creek in the South. Harvested lands were converted to pasture rather than replanted, as the company aimed to provision its 300-to-400-man workforce. By the early 1890s, the company constructed the Crescent City & Smith River Railroad (a common carrier) to transport logs from the logging camps to the mills and the processed wood from the mills to the wharf. In 1894, the railroad reached Smith River and enabled the former Hume, Westbrook, and Bomhoff mill in Smith River to reopen under new ownership (Bearss, 1969).



Truck hauling, Hobbs, Wall & Co, 1935

In 1903, Hobbs, Wall, and Company acquired the J. Wenger and Company mill on Lake Earl. The company continued to expand, and by 1908 it began construction on the Del Norte & Southern Railroad to access timber in the study area southeast of Crescent City (Bearss, 1969). By 1909, the mill in Smith River closed, allowing Hobbs, Wall, and Company to monopolize timber supply in the county. Although Hobbs, Wall, and Company continued to focus efforts on logging old-growth redwoods for the next two decades, they also met demand for Sitka Spruce (used in early airplane construction) during World War I (Bearss, 1969).

In 1939, Hobbs, Wall, and Company suddenly closed their operations (Bearss, 1969). The closure may have resulted from the unionization of the company's workforce (Gibson, 2019). However, since Crescent City lacked a railroad connection to the national transportation network, local timber industry was also limited by the high cost of ocean-based transportation (Fischer, 1967). The ensuing quiet period in timber harvesting and processing did not last long. Timber demand during World War II induced a rapid expansion of industry in the study area. The population of Del Norte County doubled between 1940 and 1952 with the influx of timber industry capital, loggers, mill workers, and truck drivers (Bearss, 1969).

Post-World War II timber industry

Between 1945 and 1947, the number of sawmills in Del Norte County expanded from three to 11 (Conners, 1998). By 1954 there were 40 logging, lumber, and plywood companies operating in the county (Oswald, 1970). The county's harvest numbers grew from 53 mmbf in 1946 to 300 mmbf in 1953 (Bearss, 1969). This dramatic increase was due, in part, to the creation of the Six Rivers National Forest in 1947, which aimed "to bring forestry to an area long neglected and where it was badly needed" (Conners, 1998). Initial reception to the Forest Service's control over timber was not positive, as many accused the Forest Service of hampering sales. However, the new units did result in an increase in logging on federal lands, specifically on harvesting Douglas-fir (Conners, 1998).

California's timber production peaked in 1955 with the northern coastal area accounting for 55 percent of the state's production (Oswald, 1970). Douglas-fir accounted for most of the increase even as redwood harvest increased annually from 1947 to 1956 (Oswald, 1970). Following the peak of Douglas fir production in the 1950s, redwood production continued to increase into the mid-1960s. Despite harvests on the national forest, private timberlands remained important during after World War II (Oswald, 1970): nine companies owned approximately 140,000 acres of private timberlands in Del Norte County, with five companies owning the majority of those holdings (Bearss, 1969).

In addition to lumber, coastal Northern California also served as the center of plywood production during the 1950s and 1960s (Oswald, 1970). In Cresent City, Northern California Plywood operated between 1952 and 1967, and the Standard Plywood Company operated between 1954 and 1975 (McKeever and Meyer, 1984).

By 1954, approximately half of Del Norte County's labor force worked in the timber industry (Bearss, 1969). Employment in the timber industry peaked in California in 1955, dropping 20 percent by 1968 due to mill closures (Oswald, 1970). In Del Norte County 13 mills closed in the 1950s, and another 13 closed in the following decade (McKenzie-Bahr, 1994b).

By the 1970s and early 1980s, the timber industry was in local decline, a result of both broader economic conditions and the expansion of Redwood National Park in 1978 (see below). In the 1970s, eight mills closed in Del Norte County and another five closed in the 1980s (McKenzie-Bahr, 1994b). One interviewee noted that, *"people from Del Norte County [will say that]... the creation of Redwood National Park was certainly a very controversial thing that happened in the [19]60s and expanded in the [19]70s."* By 1992, federal officials estimated that only 350 people, or 5% of Del Norte County's workforce, remained in the timber industry (Crawford et al., 1993).

Local news reporting in the 1990s (McKenzie-Bahr, 1994b), as well as two of our interviewees, suggested that the timber industry was effectively dead in Del Norte County by the 1980s. A few community interviewees thought that the designations of state and national parks impacted timber harvest in the study area more

than the NWFP: *"The Northwest Forest Plan, obviously wasn't the big piece that set this mess in motion. It was also the establishment of Redwood National and State Parks."*

Conservation, recreation, and tourism

In 1905, the Smith Fork District (renamed the Gasquet Ranger District in 1933) was created as part of the Klamath National Forest (National Park Service, 1998). In 1911, the district was transferred to the Siskiyou National Forest, headquartered in Grants Pass, Oregon (USDA Forest Service, 2009; Conner, 1998). However, timber harvesters remained focused on privately held redwood forests.

As redwood logging was increasing in the early twentieth century, nascent conservation concerns began to gain political traction. The Save the Redwoods League was founded in 1918. This organization initially focused on establishing California State Park units to conserve old-growth redwood forests (Conners, 1998). Humboldt Redwoods State Park was established in 1921, Prairie Creek State Park in 1925, Del Norte Coast Redwoods State Park in 1927, and Jedediah Smith State Park was established in 1929 (and expanded in 1939) (Bearss, 1969). Following the success of redwood conservation efforts, ponderosa pine lumber from California's interior forests began to replace redwood as the dominant wood production species in the state (Oswald, 1970).

By the 1930s, the federal government decided it wanted to have greater control over the redwood timber market and moved to acquire private timber lands in Del Norte County (Crabtree, 1974; Conner, 1998). Although the federal government planned to acquire up to 263,000 acres, they only successfully acquired 14,491. This forest was administered by the Gasquet Ranger District until 1968 when it was included in the establishment of Redwood National Park (Hudson, 1978).

The Six Rivers National Forest was created in 1947, combining portions of the Siskiyou, Klamath, and Trinity National Forests. At the time of its establishment, the Six Rivers National Forest had 63 campgrounds with 405 units that could accommodate 2,675 people, and the vast majority of these were on the Gasquet Ranger District, which had 49 campgrounds with 295 units that could accommodate 2,265 people (Conners, 1998). Throughout the 1950s, recreation was aided by the development of new roads that supported timber production and increased access to the forest (Conners, 1998).

Redwood National Park was established by eminent domain in 1968, and the 58,000 acres of park lands were acquired from private timber-owners Arcata Redwood Co., Simpson Timber Co., Miller-Rellim Redwood Co., and Georgia-Pacific Corp (Hudson, 1978; Schrepfer, 1980). The establishment of the Redwood National Park was controversial locally, as many saw it as a strategy to crush the thriving local timber industry that they saw as the first viable industry in the region ("LBJ Stabs DN in Back," 1966). At the time, Del Norte County's economy was highly dependent on timber with up to 85% of residents directly or indirectly reliant on the lumber economy ("Redwood Mill Is Near Opening," 1966).



Logging by Arcata Redwood Company, 1975

In 1978, President Carter expanded Redwoods National Park by 48,000 acres despite continued opposition from the timber industry (National Park Service, 2024). At the time, approximately 25% of Del Norte County's labor force worked in timber (Crawford et al., 1993). To counter the negative impacts of the expansion on people working in the timber industry, the U.S. Congress created the Redwood Employee Protection Program to provide workers with monetary and nonmonetary assistance over a six-year period (Crawford et al., 1993). While approximately 3,500 people received severance payments across Humboldt and Del Norte Counties, fewer than 13 percent enrolled in retraining programs. Of the 432 people who undertook retraining, 139 of them relocated. In advance of the Northwest Forest Plan, the U.S. General Accounting Office conducted an audit of the Redwood Employee Protection Program (Crawford et al., 1993). The audit found that the program had limited success. Many timber workers took advantage of the program during seasonal layoffs, maintenance shutdowns, or other adverse conditions, but later returned to the industry (Crawford et al., 1993).

Smith River and five of its tributaries have been designated as Wild and Scenic Rivers under California law in 1972 (Conners, 1998). In 1980, 314 miles of the Smith River and its tributaries were added to the National Wild and Scenic Rivers System (Conners, 1998). Both designations contributed to the eventual development of the Smith River NRA in 1990. Reaction against a proposal to mine Gasquet Mountain that could have impacted local waterways provided additional political pressure in support of the NRA designation (California Nickel Corporation, 1983). When the Smith River NRA was established, the U.S. Congress debated whether to place it under control of the Forest Service or Park Service. Congressional designation put the Smith River NRA under the control of the Forest Service, but also legislated a written management plan (Conners, 1998). The NRA management plan limited timber harvest on the Gasquet Ranger District (Conners, 1998). Unsurprisingly, the management limitations associated with the NRA designation were controversial in the community. One interviewee shared that local residents had initially called the NRA, the *"no recreation area."* However, the relationship between the Forest Service and the community has improved since that time. Interviewees generally saw the Smith River NRA designation as emblematic of a shift *"towards recreation as a primary economic driver, away from industry."*

Smith-River after the NWFP

Employment and industry

Interviewees offered mixed perspectives on whether the number of jobs in the study area changed in the last 30 years. However, industries in the study area have changed. As one interviewee put it, *"It has gone more from a resource dependent... to being more tourism and government employee employment, and more recently, the tourism over the last few years."* Five interviewees mentioned that government jobs (e.g., with Pelican Bay State Prison, Redwood National and State Parks, or the county government) were the major employers of the county. The prison, which opened in 1989, continues to be a particularly important driver of the local economy in Del Norte County (Reiter, 2018).

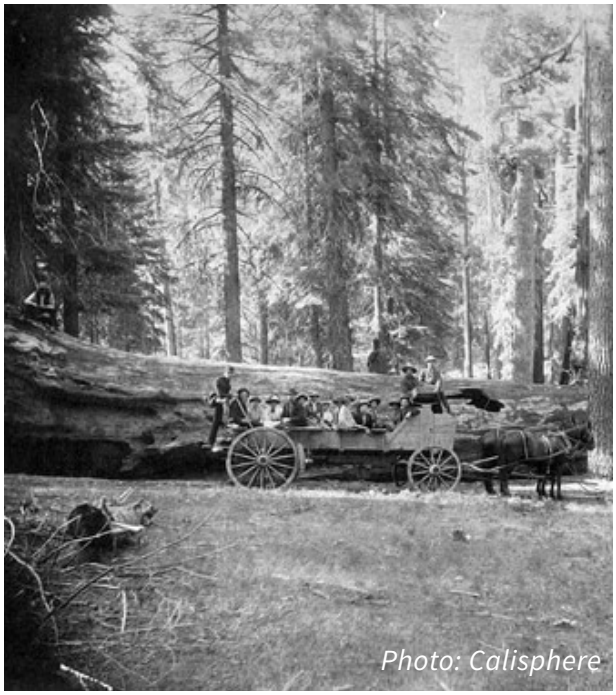
Since the 1990s, Del Norte County has been dependent on federal and state government employment with a large percentage of the population employed in the public sector (Pender, 2015). As mentioned in one oral history collected in 2018, "We either work for the Del Norte Unified School District, the city, the county, the Pelican Bay Prison, or law enforcement" (Rhodes, 2018, p. 208).

Eight interviewees reported on the decline of the timber industry over the last 30 years. Even the most vocal proponents of the timber industry suggested that the industry was *"not going to come back the way it was."* Miller Redwood, the last old-growth redwood mill in Del Norte County, closed in 1994 (McKenzie-Bahr, 1994a). Nonetheless, that same year, loggers harvested approximately 90 mmbf private lands in Del Norte County (McKenzie-Bahr, 1994c). By 1996, two more mills in Crescent City closed and unemployment peaked at 23.8% (Curtius, 1996). Fifty percent of timber workers in Del Norte County left the area due to this downturn (Crawford et al., 1993).

In 2002, the Save the Redwoods League purchased the Mill Creek land tract (approximately 25,000 acres) previously owned by Stimson Lumber Company, and subsequently deeded it to the state of California (Gray, 2002; Larimer, 2002; Grimes, 2002). To counter local concern about the loss of timber-yield and property taxes, Stimson and Save the Redwoods League created a $5 million annuity for the county (Gray, 2002). In 2012, Hambro Particleboard, the last mill in Del Norte County, closed permanently, and a year later the mill burned down (Cejnar, 2012; Cejnar, 2013). In 2024, the closest remaining timber processing facilities to the study area were in Brookings (50 miles north in Curry County, Oregon) and Eureka (150 miles south in Humboldt County, California).

Tourism

Seven interviewees commented on the rise in tourism in Del Norte County over the last few decades. As one interviewee noted, *"people come from all over the world and country to visit places like Jedediah Smith, Redwood State Park, Redwood National Park, of course, [and] Smith River National Recreation Area."* Another interviewee mentioned that it felt like the promise of economic benefits from the national park were not delivered: *"Redwood National Park and supposed promises that were made, you know, with the number of tourists that would come and stay in the park...those things weren't delivered."* Interviewees also commented that Del Norte County did not capitalize on tourism as much as Humboldt County. However, interviewees thought the county's efforts to promote tourism in the 2000s were successful in increasing visitation to the study area.



Early tourists visit fallen sequoia, late 1800s

Prison

In the mid-1980s, rural communities across California were competing over the siting of prisons as a new way to boost their economies (Reiter, 2018). Del Norte County made a successful bid for Pelican Bay State Prison which opened in 1989. While the prison was not universally popular among Del Norte County residents, many civic leaders supported its construction (Cates, 1984). They often pointed to the loss in employment and mill closures in Crescent City during the early 1980s as a reason to site the prison in their community (Del Norte County Citizens Steering Committee, 1985). They thought the prison would offer stable job opportunities to the community (Heiser, 1985). Opponents to the prison often noted that the prison would have a negative impact on the tourism industry and cited environmental concerns (Rohe, 1985; Heiser, 1985).

Many locals warily accepted the prison as it reshaped the local economy and population. When asked how the study area had changed since the implementation of the NWFP in 1994, one interviewee said *"what really changed is the Pelican Bay Prison came [in]. [Del Norte County] was such a small community. That single thing really changed the community for a long time."* Another interviewee noted that the prison provided employment after other industries had left: *"It was [a] mill and fishing town, yeah, now the prison actually coming in probably is the only thing that saved it, because those are the highest paying jobs in the county."*

However, when the prison opened, as few as 20 percent of employees were local hires (Reiter, 2018). An early 1990s report area employment noted that approximately 1,200 employees and their families moved to the Crescent City area when the prison opened, contributing to the growth of Del Norte County's population from 15,100 people in 1971 to 27,000 in 1991 (Crawford et al., 1993). Families of prisoners also moved to Crescent City (Rhodes, 2018). Local population increases associated with the prison likely attracted new businesses such as the Wal-Mart in Crescent City (Groves, 1993).

In 2024, the prison continued to be an important local employer, employing approximately 1,070 people, many of whom live in the study area (California State Controller's Office, 2024). Many interviewees considered the community to be dependent on prison employment and worried that the study area lacked a future without a more diverse economy. As one interviewee noted, if the prison were to leave, it would *"fundamentally change the economics of our already disadvantaged community."* Another interviewee stated: *"We're just raising a bunch of COs [Correctional Officers] like, that's your best opportunity for a job here."* The prison is such an important employer that interviewees in Smith River noted that prison employees commuted from as far away as Brookings or Cave Junction to work.

Other industries

Easter lily farming came to Del Norte County in the 1970s and 1980s (Andrews, 2024c). In 2024, there were three lily bulb producers in Smith River that collectively farmed approximately 200 acres, though the industry was previously larger (Andrews, 2024c). In the early 2020s, the industry was criticized for the negative impacts of pesticides and agricultural runoff on the area's water (Andrews, 2024c). In 2024, three interviewees noted declines in the local lily bulb industry, and of those, two noted this decline would be beneficial for watershed health because of the industry's use of pesticide.

Demographic and community changes

The total population of the study area declined between 2000 and 2020 (Table 10.1). Low-income populations and populations aged 25-44 also declined, while populations 65 and over increased, nearly doubling.

Interviewees thought that the main changes in the community included new people moving to the study area. Although the census data shows a net decline in population, interviewees mostly agreed that new people were moving to the study area (n=7). Interviewees described *"new people"* as families, retirees, wealthy, immigrants, teleworkers, and city people. Interviewees thought that new residents were attracted by the natural beauty of the place and its recreation opportunities, the appeal of rural living, and job opportunities at the prison.

Table 10.1. *US Census and American Community Survey demographic estimates for 2000, 2010, and 2020. See Appendix D for complete citations.*

	2000	2010	2020	Trend
Total population	3,754	3,321	3,239	Decreased
Low-income population*	1,747	1,284	958	Decreased
% Low-income population	47%	39%	30%	
Population aged 25-44	899	677	697	Decreased
% Population aged 25-44	24%	20%	22%	
Population aged 65 or older	678	696	1,078	Increased
% Population aged 65 or older	18%	21%	33%	
**For low-income population, 2010 is an ACS 5-year estimate for 2008-2012 and 2020 is an ACS 5-year estimate for 2018-2022.*				

Retirees began to arrive in Del Norte County, resulting in net in-migration that was *"unrelated to the area's timber production,"* in the 1970s (California Nickel Corporation, 1983). While four interviewees mentioned an increase in retirees in the study area, they also noted that Brookings, Oregon and not Smith River, was seen as the primary retirement destination. Some interviewees thought that retirees only moved to Del Norte County because Brookings was *"starting to get overcrowded."*

Housing

Eight interviewees thought that housing had become less affordable and available in the area. Three interviewees suggested that housing was a major barrier to local economic development: *"If people can't move here to open a new business or offer their skill set to the community then like, well, then we're at a disadvantage.... People can't move here to get started."*

Interviewees noted a shortage of low-income housing across the county. In 2023, the County was awarded $7.5 million to create 160 units for low-income families and seniors in Cresent City (Lincoln, 2023). However, as of 2024, outside of Crescent City, there were no large-scale housing developments to improve the availability of homes.

Five interviewees noted that vacation rentals and second homes had negatively impacted the availability of housing stock. Interviewees commonly thought that most property purchases were not for long-term residents: *"So even the houses that are here being purchased by people that aren't coming here to live in them, they're going for short-term vacation rentals."* Over the last 10 years, Del Norte County supervisors debated whether to regulate vacation rentals in unincorporated areas (Bosetti, 2021). In 2022, the County supervisors decided to monitor, but not limit, short-term rentals, which grew from

131 to 196 between 2017 and 2022[2] (Andrews, 2022). The county's 2024-2025 strategic plan raised the possibility of regulating short-term rentals (Del Norte County, 2023), but, as of late 2024, no new regulations had been passed. One 2024 interviewee thought the lack of regulation was because the local representatives *"don't like to limit people's opportunity to do this or that. I think they would just assume that we have more housing created to offset what's lost through the short-term rentals."*

Community services

Community interviewees agreed that services (including restaurants, health care, gas stations, grocery stores, and personal or business services) in the study area either decreased (n=5) or did not change (n= 3) since the implementation of the NWFP in 1994. In 2024, Smith River, Hiouchi, and Gasquet did not have many services. According to interviewees, Ray's Food Place (a supermarket) in Smith River closed in the last decade, and *"a couple of restaurants"* also closed during that time. In 2024, there was a taco food truck and a burger place, and the post office remained open. Gasquet had a small grocery store and a post office. Five interviewees mentioned the high turnover of restaurants in the study area. Some residents of Smith River, Hiouchi, and Gasquet mentioned that they often needed to go to Crescent City, Grants Pass, or Brookings for services or medical care. Community amenities are summarized in Figure 10.4 below.

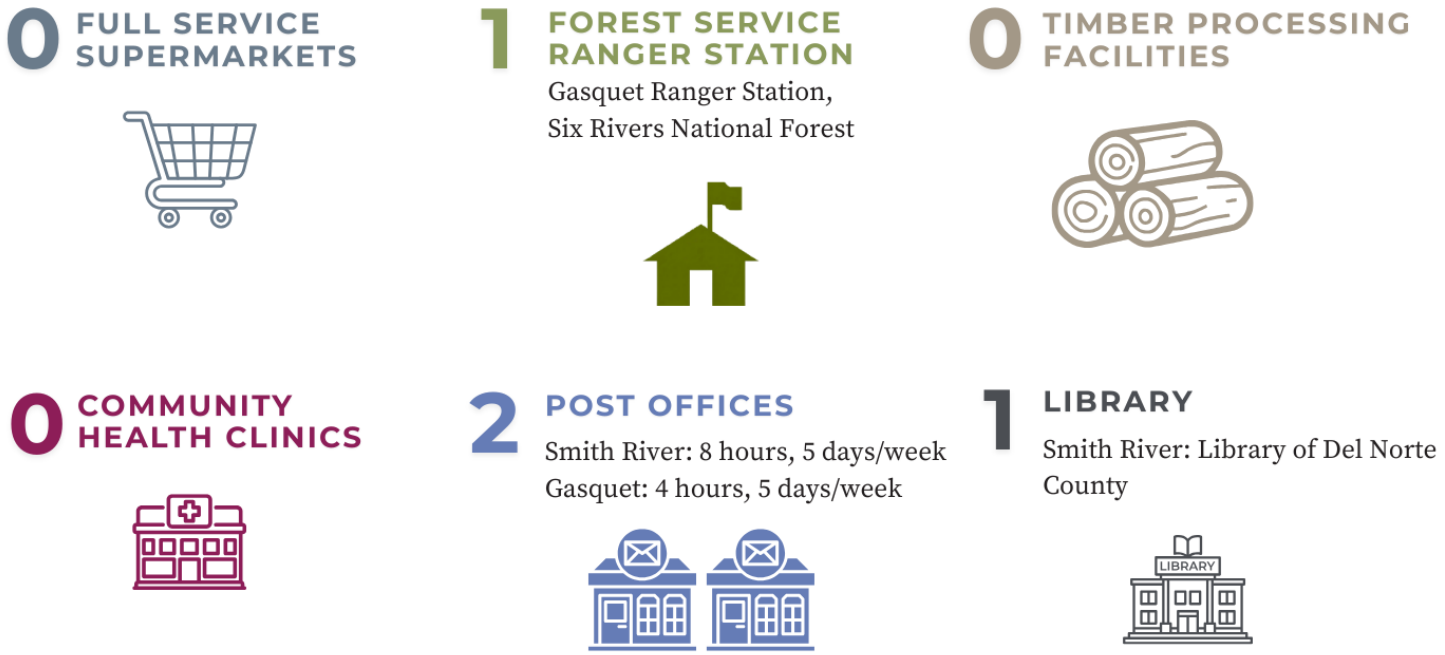


Figure 10.4. *Community amenities in the Smith-River study area. Includes: zero full-service supermarkets (other locations that accept SNAP benefits, such as gas stations or convenience stores, not included), one Forest Service ranger station, zero timber processing facilities, zero community health clinics, two post offices, and one library.*

Community relationship with the Forest Service

Five community interviewees thought that the relationship with the Forest Service was positive, while one thought it was negative, and one thought it was divided. Community members also spoke to how

2. *An internet search in October 2024 yielded 41 short-term rentals in the study area (one of three CCDs in the County).*

this relationship changed over time: two thought that there was a positive change since 1994, and two thought that there was a negative change. Three interviewees described how the relationship with the Forest Service depended on the individual district rangers leading the office. As one interviewee stated, *"When I'm feeling good about my work with the Forest Service is usually when they've got excellent leadership, and that leader and I are working together. When they have leadership that I don't respect as much, then the relationship can become strained."* Interviewees spoke about the impacts of agency staffing and funding levels on this relational dynamic between the Forest Service and the community. Two interviewees mentioned that the Forest Service staff noted how staffing shortages negatively impact their ability to work. While one interviewee thought this was related to Forest Service-specific hiring practices, another saw this as a more universal issue across federal and state agencies.

The Smith River Collaborative, a local *"initiative to advance habitat restoration, fuels treatment, and other projects across the National Recreation Area,"* is highly involved in management of local Forest Service lands. One interviewee noted that the Collaborative works to fill gaps from staffing and budget shortages. One interviewee who has followed the Collaborative's work noted, *"the collaboratives are completely genius, and whoever thought of that should get, like, a Nobel Peace Prize or something, because it really works well."* An agency interviewee described the Collaborative as highly important to their work.

We asked community interviewees about their views on Forest Service management priorities (Figure 10.5). Interviewees thought that incorporating science into planning processes (67 percent) and managing for wildfire resilience (60 percent) were high priorities for the Forest Service. Interviewees were either neutral or unsure (50 percent) of the importance of socioeconomic well-being of local communities as a Forest Service management priority.

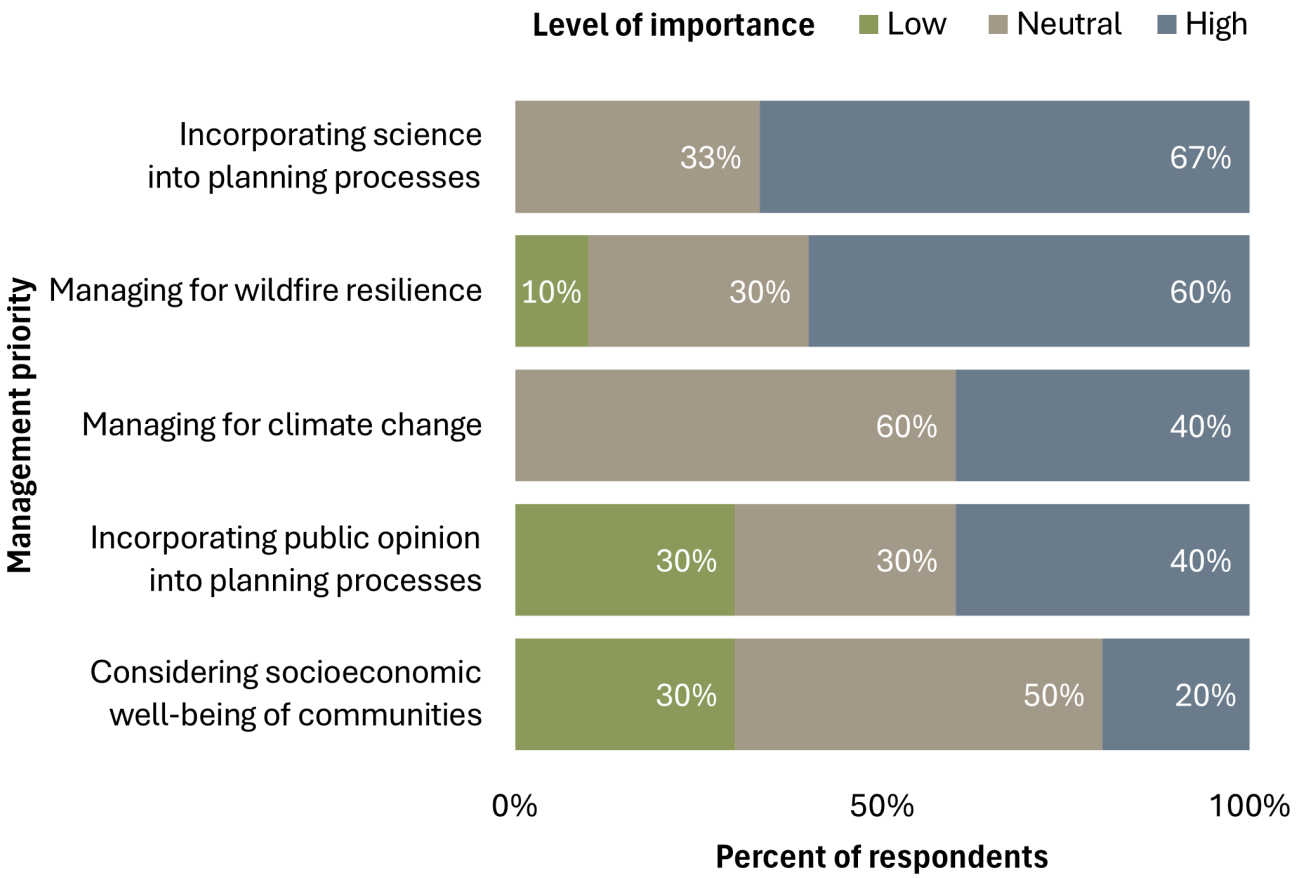


Figure 10.5. *Community perception of Forest Service management priorities (n=10). Bar graph segments represent the percentage of interviewees indicating level of importance (Low, Medium, High) of each management priority.*

Tribal partnership

While the Forest Service primarily interacted with the Indian Service (renamed the Bureau of Indian Affairs in 1947) rather than Tribes during the early decades of the Six Rivers National Forest, the agency has since formalized government-to-government relationships with four federally-recognized Tribes and eight Rancherias that use the Six Rivers National Forest: Yurok, Karuk, Hupa, Round Valley Indian Tribes; and the Elk Valley, Tolowa Dee-Ni' Nation (formerly known as Smith River Rancheria), Resighini, Big Lagoon, Trinidad, Table Bluff, Rohnerville, and Blue Lake Rancherias (Conners, 1998).

As of 2024, the Tolowa Dee-Ni' Nation had active partnerships with the Forest Service, including a 2020 hazardous fuels reduction project (California Climate Investment-Fire Prevention Funding from CalFire) in and around the communities of Gasquet, Big Flat, and Rock Creek. The project was staffed by the Nation's Tribal Resources Field Crew (Tolowa Dee-Ni' Nation and Six Rivers National Forest, n.d.). Overall, the project constructed around 1,613 acres of fuel breaks, and interviewees credited the fuel breaks with saving the town of Gasquet during the Smith River Complex Fire in 2023.

Forest Service staff saw themselves as *"among one of the leaders in the country"* for how they worked with Tribes on land management. Forest Service staff noted that, in 2024, Tribal collaboration efforts meant that the office was more competitive for grants, even though the Gasquet Ranger District was not part of a priority landscape under the Wildfire Crisis Strategy.

Community relationship with national forest lands

Most interviewees thought that nature and aesthetics were of high importance to the community (73 percent). Water, hunting, fishing, and tourism were also rated highly (Figure 10.6). About half of interviewees thought that recreation and non-timber forest products were of high importance to the community. Most interviewees ranked timber as medium to low importance to the community.

Recreation and roads

When asked to list popular types of recreation in the study area, interviewees mentioned water-based recreation (e.g., kayaking, rafting, swimming) (n=7), fishing (n=5), off-highway vehicles (n=4), hunting (n=3), hiking (n=3), mountain biking (n=3), and camping (n=1).

Hunting and fishing have long been important to the study area. As one interviewee put it, *"everybody that seems kind of halfway happy to be here either hunts and fishes, like a lot, like it's a part of their life, or, you know, for tribes, that's also like subsistence."* Some interviewees suggested that sport fishing had declined in the study area. As one interviewee explained, this was partly due to the relative proximity of the Chetco River in Oregon, where fishing regulations were less stringent: *"Those are California Department of Fish and Wildlife changes that have resulted in a lot of the outside money that would have been spent here to fish going 10 miles north into Oregon on the Chetco River."* Interviewees expressed hope that they could bring the fishery back, however, they also noted that *"there's so many factors, ocean conditions, ocean trawling, you know, all of it has taken its toll."* Nonetheless, interviewees noted that there was still an active guiding industry in the study area.

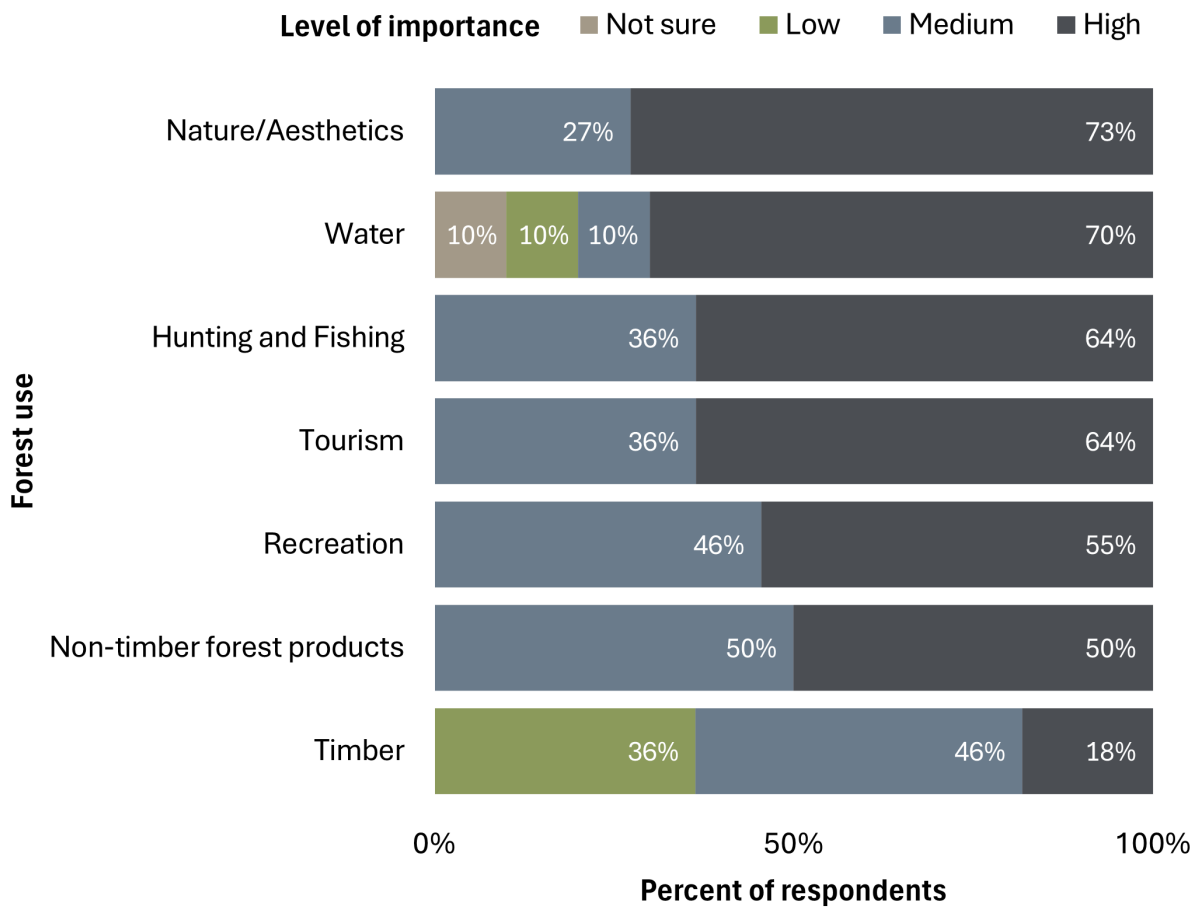


Figure 10.6. *Importance of national forest uses to the community (n=11). Bar graph segments represent the percentage of interviewees indicating level of importance (Not sure, Low, Medium, High) of each forest use to the community.*

Interviewees also suggested that both recreation and tourism were essential. One interviewee said about the study area, the *"bucolic Six Rivers National Forest...and the NRA...[is] the crown jewel on top of the forest."* Another added that *"it [the Smith River NRA] attracts people from all over the world to recreate here."* Interviewees mentioned that the study area was also attractive to birders and those interested in seeing rare botanical species (e.g., Darlingtonia, a rare carnivorous plant).

Because vehicular recreation in the neighboring national and state parks is limited, many users recreate in the national forest and, specifically in the Gasquet Ranger District. In 2017, the Gasquet Ranger District completed a travel management plan that designated roads and trails for vehicular use. (USDA Forest Service, 2017).

According to one interviewee, there were also many complaints among locals about trails, campgrounds, and other maintenance. A growing community of mountain bikers were particularly concerned about trail maintenance. Community members understood this issue as a lack of agency budget and staffing. As one interviewee put it: *"[The Gasquet Ranger District] didn't have enough infrastructure within this agency to even apply for the money to do more things."* Regardless, interviewees shared that local residents appreciated that the ranger district was successful in putting in a new boat ramp.



Coastal Dunes at Yontocket

Non-timber forest products

Between 2013 and 2023, the Six Rivers National Forest sold 43,882 gallons of mushrooms for a total of $16,553 (USDA Forest Service, 2025). The forest also sold 102,000 pounds of unspecified "fruits and berries", 135,000 pounds of limbs and boughs (such as incense cedar and fir), and 341,000 pounds of foliage (such as ferns and bark). Christmas trees and fuelwood were also popular with over $155,000 in Christmas tree permits and nearly $236,000 in fuelwood harvesting permits.

Non-timber forest products were especially important for local Indigenous communities and Hmong Americans who resettled to the study area after the Vietnam War. Hmong Americans rely on the forest primarily for food products, and are active mushroom foragers, hunters, and fishers. Indigenous communities use many non-timber forest products like hazel, ferns, spruce roots, cedar bark, and redwood. One Forest Service employee noted that Indigenous peoples were the *"largest user group"* for non-timber forest products. According to Forest Service interviewees, Tribal members had concerns about the quality of some non-timber forest products. For example, acorn supply is threatened by Sudden Oak Death and the quality of hazel, a traditional basket-making plant, is negatively affected by the lack of traditional management.

Timber

From 2013 to 2023, the Gasquet Ranger District sold five timber sales (excluding commercial fuelwood) with a total volume of 12 mmbf (USDA Forest Service, 2023). Sales occurred in 2013, 2017, and 2020. Conventional timber sale contracts went to two logging contractors based in Oregon (less than 2.5 mmbf) and two sawmills in California (4.2 mmbf). The largest sale (5.5 mmbf) was a stewardship contract with the Mule Deer Foundation based in Salt Lake City, Utah. The smallest sale, purchased by a business based in Cave Junction, Oregon (approximately 38 miles from the study area), was 52,000 board feet. All other businesses purchasing timber were based at least 100 miles away from the study area.

Many interviewees agreed that timber was seen as locally important by some members of the community. However, according to one interviewee, *"for the longest time, our local leaders held out for more logging.... it's only in the last five years, I would say, that that kind of pressure is finally ended."*



Salvage logging near Little Jones Creek

Wildfire and other forest disturbances

Interviewees noted that they believed catastrophic wildfires were a new development in the community threatening both the national forest and the well-being of local communities. Five interviewees expressed that firefighting was the most important Forest Service policy for local community members.

Interviewees noted that the recent Smith River Fire Complex was one of the most impactful forest disturbances in recent years. The Smith River Complex burned 95,107 acres in August 2023 (National Interagency Fire Center, 2023). During the fire, evacuations were widespread, with the entire town of Gasquet under an evacuation order. As one Gasquet resident recalled, *"We had to go to Crescent City, to the fairgrounds. We filled up the whole town, every hotel in town. We were there for three weeks. Couldn't come home at all."*

The Smith River Complex was particularly devastating for local infrastructure, as mentioned by nine interviewees. Highway 199, a scenic highway that connects Crescent City to Grants Pass, was closed because of the fire and post-fire landslides (Andrews, 2023). The two redundant power lines that power Crescent City run parallel to this highway, so residents lost power for weeks. When power was restored, residents had to rely on a diesel-powered microgrid for nearly a month (Toohey, 2023). As a result, some have proposed having a planned microgrid for future emergencies or providing a redundant powerline from Curry County (Andrews, 2024b).

The impacts of the Smith River Complex were dramatic on local people and businesses, and a survey conducted by the University of California Cooperative Extension estimated that residents spent $1,790 more because of the fires (from costs related to, for example, buying a generator or auxiliary power, evacuating, and spoiled food) and businesses spent around $6,371 more, which did not include additional losses from lack of tourism during the peak season (Dompka, 2023). Interviewees mentioned that both they and their friends and neighbors lost refrigerators and freezers full of food. One community leader mentioned that many people held barbecue gatherings to cook and share food supplies before they went bad.

Local reporting has suggested that fuels reduction projects at Pappas Flat and Big Flat protected Gasquet, Washington Flat, and Little Jones Creek from widespread wildfire destruction (Andrews, 2024a). Five interviewees mentioned that, as a consequence of increased wildfire risk, community members had already lost private insurance or were concerned about losing it in the near future. Many interviewees noted that they used the California FAIR (Fair Access to Insurance Requirements) plan, the state-run fire insurance program, or knew people who did.

Other forest disturbances

Landslides are another common forest disturbance in Del Norte County and have been a chronic issue along Highway 199. Study area residents used this highway extensively to travel to Grants Pass for medical care or large shopping trips. Periodic landslides have closed the highway or created one-way traffic patterns along significant road stretches, increasing travel times. One resident recalled her experience: *"You had to get in line at six o'clock in the morning...They'd let 20 cars go. Then, they stopped all that traffic, and you had 20 coming back this way. That went on for almost a year."*

Community futures

Wildfire (n=8), climate change (n=3), and recreation (n=2) were viewed as the biggest changes in the community's future by community members and Forest Service employees. While some interviewees commented on the ongoing impact of the Smith River Complex Fire, others commented that there would be more fires. Three interviewees mentioned that they were not optimistic about wildfire mitigation efforts, stating that, *"even if the restrictions were limited or removed wholesale... we've built up forest fuels for 80 years, and we're not going to get that undone in five years."* Aside from that, there was little consensus about future changes in the study area – interviewees mentioned groundwater, wind energy, changes in the prison, and infrastructure issues.

Conclusions and case study highlights

The Smith River study area was impacted by several waves of conservation policies prior to the implementation of the NWFP. From World War II through the 1960s, the timber industry gained importance for the study area. The creation of the Redwoods National Park, the designation of the Smith River as a National Wild and Scenic River, and the establishment of the Smith River NRA each impacted the potential timber supply from federal lands while also opening new economic opportunities related to tourism and recreation. Although timber processing facilities began to close in the 1970s, several plants remained open through the mid-1990s. Even though local timber supply had already been constrained by previous conservation efforts, after 1994, the implementation of the NWFP further limited region's timber harvests. These additional supply constraints may have contributed to the closure of remaining wood processing facilities in Del Nort County. Since the 1990s, the opening of the Pelican Bay Prison provided some stability in employment for the study area. Tourism also offers economic benefits to the study area. However, some community interviewees felt the potential for tourism associated with national and state parks and recreation areas remained underdeveloped.

Smith River key forest management takeaways

- The aesthetic and scenic value of the forest, water quality, fisheries, and general tourist appeal of the Gasquet Ranger District/Smith River NRA are of high importance to the local community.
- Community members may no longer expect a timber program to return; however, wildfire risk and its mitigation are of increasing concern to the community.
- Tribal collaborations have been successful on the Gasquet Ranger District and may serve as a model for other national forest units.
- Managing for wildfire resilience will continue to be an important consideration for the community's future.

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Crescent City lighthouse and town

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We extend our thanks and appreciation to interviewees from Smith River-Gasquet who shared their experiences with us.



Chapter 11: Postscript

Photo: Heidi Huber-Stearns

Michael R. Coughlan, Heidi Huber-Stearns, Stephanie Schneider, James Johnston

Comparing the 25- and 30-year monitoring efforts of communities in the NWFP area

The Northwest Forest Plan (NWFP) provided management guidance for 24.5 million acres across national forests and U.S. Department of Interior Bureau of Land Management (BLM) districts in Washington, Oregon, and Northern California (USDA Forest Service and DOI Bureau of Land Management, 1994). Over 1,200 communities (US Census designated places) exist within the Plan area, which spans a total area of over 58 million acres (Figure 11.1). The Departments of Agriculture and the Interior anticipated that rural, historically timber-dependent areas would face the most significant impacts from the NWFP. Consequently, the Forest Service conducted in-depth social and economic monitoring of rural, forest-based communities after 10, 25, and now 30 years of implementing the NWFP.

The USDA Forest Service Region 6 partnered with the Ecosystem Workforce Program (EWP) to conduct community case studies during the last two monitoring cycles . EWP conducted 10 case studies in 2018 (the 25-year mark, see Coughlan et al., 2025) and eight case studies in 2024 (the 30-year mark, this report) (Figure 11.1). The goal of these case studies was to assess changes in community well-being since the implementation of the NWFP and to provide local perspectives about the social and economic changes that have occurred as a result of implementing the NWFP.

The combined monitoring sample, of 18 rural communities with strong ties to nearby federal land managed under the NWFP, draws on a total of 326 interviews with community leaders, Forest Service staff, and representatives of the timber industry. Together, these case studies provide a rich representation of people's experience with social and economic changes associated with the NWFP. Our findings suggest that most of the sampled communities have struggled to reinvent themselves following employment shocks related to declines in timber supply (which were sustained under the NWFP) combined with shifts in timber-industry geography, corporate financial priorities, and automation. These trends evident in the 25-year monitoring case studies were confirmed by the 30-year case studies, despite our efforts to sample communities with higher potential for developing natural amenity-based economies.

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Key findings from the 25 and 30-year case studies

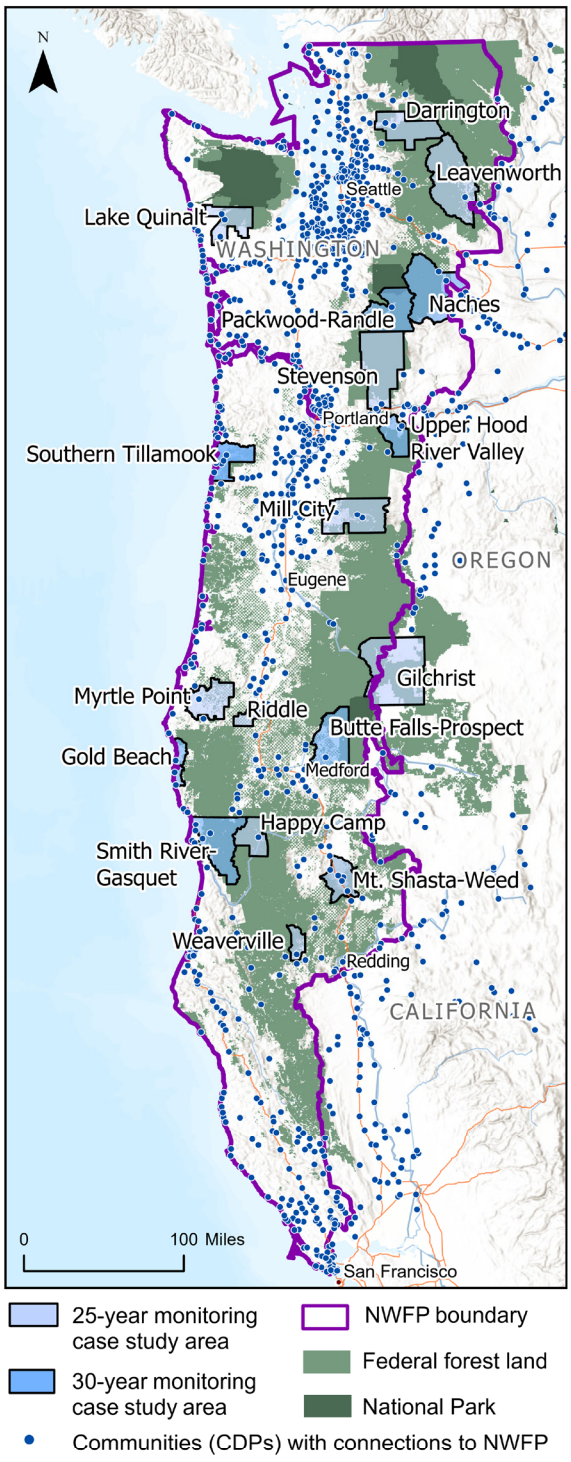

Figure 11.1. *25- and 30-year monitoring case study locations. NWFP area outlined in purple.*

The 25-year monitoring classified the social and economic trajectories of case study communities into four categories: high amenity, diversified timber and recreation, natural resources dependent, and low amenity communities (Coughlan et al., 2022; Coughlan and Huber-Stearns, 2025)[1]. High amenity communities were those that successfully developed tourism and recreational amenity economies and continued on a trajectory of demographic and economic growth following the NWFP. Only one community fell into that category. This community had begun to reorient its economy as early as the late 1960s, shifting from timber dependence toward tourism. Diversified timber and recreational communities were those that retained wood products industries but also diversified their economy into other sectors, such as recreational amenities. Five communities that fell into that category. Three of those communities had suffered a decline or stagnation in their social and economic well-being, including aging demographics. However, these communities retained the potential to recover from the economic shocks they experienced in the wake of the NWFP. The other two communities in that category faired a bit better in terms of social and economic well-being because they were the seat for the county government. These county seat communities offered government employment opportunities and services that the other communities could not. Two communities fell into the natural resources dependent trajectory. Those communities experienced continued economic and demographic decline and continued to rely heavily on the wood products industry. Efforts to develop alternative industries or amenity-based economies in those communities were not yet successful. Lastly, two communities fell into the low amenity category. Those communities were isolated from metropolitan areas and major transportation corridors and experienced significant demographic decline. It seems unlikely that low amenity communities could restore former levels of social and economic well-being without significant external investments.

1 High amenity = Leavenworth, Washington; diversified timber and recreation = Darington, Washinton, Stevenson, Washington, Santiam Canyon (including Mill City, Detroit, Idanha), Oregon, Gilchrist (including Crescent and Crescent Lake), Oregon, and Weaverville, California; natural resources dependent = Myrtle Creek, Oregon, Riddle, Oregon; low amenity = Lake Quinault, Washington, Happy Camp, California.

For the 30-year monitoring, we purposively sampled formerly timber-dependent "gateway" communities that had clear potential for developing amenity-based economies. Rural, forest-based communities that develop economies based on natural or cultural amenities as alternatives to production-based economies may be more resilient to local economic shocks (Winkler et al., 2007). Consequently, we reasoned that sampling gateway communities would allow us to control for potential biases against "success stories" inherent in the 25-year monitoring that may have skewed our results toward communities with declining or stagnant social and economic well-being.

We found that the formerly timber-dependent gateway communities we selected offered a diverse set of local social and economic outcomes. Like findings in the 25-year monitoring, case study communities from the 30-year monitoring experienced extensive social and economic ups and downs related to the timber industry and forest management dynamics. These included mill closures, agency workforce reductions, and forest and ranger district consolidation, with rippling effects on local businesses and the services they provide. Some communities lost significant wood products manufacturing capacity before the adoption of the NWFP, and were already experiencing declines in social and economic well-being by the early 1990s.

Communities that had diversified economies prior to the NWFP were buffered from social and economic shocks associated with the changes in the wood products industries or other changes related to the NWFP. Economic activity associated with agriculture, tourism, and recreation proved to be significant in Naches, the Upper Hood River Valley, Southern Tillamook, and Mt. Shasta. Like the 25-year diversified timber and recreational community group, communities such as Packwood-Randle, Gold Beach, and Smith River-Gasquet were developing amenity based economic opportunities, but these industries primarily offered low-wage, low-skill service jobs that did not replace mill and forestry work.

Like most of the 25-year case study communities,


Photo: Heidi Huber-Stearns

the 30-year communities faced significant challenges in terms of affordable, high-quality housing. Amenity-based economic activity across the case study communities also had indirect effects on the housing market. For example, a growing trend in which high-income outsiders purchase vacation homes or rental properties has had negative impacts on housing access for working people across the sampled communities. As evidenced in Packwood-Randle, these changes can transform the character of rural communities in ways that are not always welcomed by long-time residents. Gold Beach provides another example where the attraction of retirees to the community has shifted local demographics and had ripple effects on the community's development priorities.

In 2020, the Santiam Canyon case study (25-year monitoring) experienced a wind-driven wildfire event. Over 1,600 structures were lost and five people were killed in the Beechie Creek and Lions Head fires (Headwaters Economics, 2020; The Oregonian, 2020). Although some interviewees from the 25-year monitoring mentioned wildfires, interviewees in the 30-year monitoring made clear that wildfire and forest management related to wildfire mitigation were of increasing concern. In many of the case study communities, recent wildfire seasons provided a catalyst for raising awareness about wildfire risk. National forests comprise a large percentage of the area burned near these communities. Future changes in forest management will need to specifically address forest resilience to wildfires and climate change more broadly to align with community priorities and concerns.

Future NWFP management and policy

After thirty years of implementation, there have been significant changes in policy governing BLM lands in the NWFP area, but no significant adaptation of the NWFP on national forest lands.

In 2016, the BLM signed Records of Decision (RODs) for Resource Management Plans (RMPs) for western Oregon, removing the 2.5 million acres of BLM-administered lands from the NWFP. The BLM contends that the new plans will "maintain strong protections for the northern spotted owl, listed fish species, and water resources while offering predictable and sustainable outcomes for local communities from tourism, recreation, and timber harvest" (Bureau of Land Management, n.d.).

The Forest Service still operates under the NWFP. In December 2023, the Forest Service began an amendment process by publishing a Noice of Intent in the Federal Register (USDA Forest Service, 2023; OFR, 2022). The agency noted changing social and ecological conditions over the past 30 years, including climate change, increasing extent and severity of wildfire, declining forest health and habitat quality, and unrealized economic opportunities for rural communities. The agency also noted a need to amend the plan to be inclusive of Tribal concerns and perspectives since the NWFP does not currently contain any provisions explicitly considering Tribes or meeting the agency's Tribal trust responsibilities. In September 2023 the Secretary of Agriculture established the NWFP Area Federal Advisory Committee (FAC) to "provide advice and recommendations on landscape management approaches that promote sustainability, climate change adaptations, and wildfire resilience while providing for increasing use of and demands from National Forest System lands in the Northwest Forest Plan area" (Federal Register 87 FR 69249). Between 2023 and 2024 the FAC committee developed a set of recommendations for an amendment to the NWFP, which informed the agency's development of a draft environmental impact statement for the proposed amendment that was released in November 2024



Photo: Heidi Huber-Stearns

(USDA Forest Service, 2024). The Forest Service originally intended the FAC to run for two years, but in early 2025 President Trump issued Executive Order "Commencing the Reduction of the Federal Bureaucracy," which directed the termination of several Federal advisory committees, including the NWFP FAC (Exec. Order No. 14,217, 2025).

The FAC recommendations represent the largest effort to date to modernize the NWFP, and adapt it to changing ecological, social, and economic conditions. The FAC included 6 recommendations for: "incorporation of Indigenous Knowledge into planning, project design, implementation, and meeting the agency's trust responsibilities, while protecting confidentiality and preventing appropriation", wildfire resistance and resilience, and better anticipation of climate impacts to promote forest ecosystem's capacity to adapt to climate change. (U.S. Department of Agriculture [USDA], 2024). The FAC also recommended protecting remaining moist forest old-growth forests from logging while facilitating forest restoration treatments to increase forest resilience to fire, drought, and insects in dry forest types. The FAC additionally made recommendations to "Support Carbon Sequestration and Storage, Designate and Steward Community Protection Areas, and Remove Barriers for Adaptive Management" (FAC, 2024).

In late March 2026, the Forest Service announced that based on over 3,400 public comments it received on the November 2024 draft environmental impact statement, it would be conducting additional analysis and alternatives for amending the NWFP, especially focusing on the "need for a more comprehensive approach to increase wildfire resilience, address restoration needs, and advance active management, while continuing to protect species. The agency will analyze additional options, including updates to forest type definitions, clarity on commercial timber opportunities, and refinements to Survey and Manage requirements," (USDA Forest Service, 2026). This will be conducted under USDA National Environmental Policy Act (NEPA) rules (as updated in July, 2025), anticipating updates for public comment in Summer 2026, and a final environmental impact statement and record of decision in early 2028 (USDA Forest Service, 2026).

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Cedar Flats, Washington NWFP FAC field tour

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