Policy and Implementation Insights from Oregon's SB 762/80 Wildfire Hazard Mapping Process

ALEX CASEY

OCTOBER 2025

ECOSYSTEM WORKFORCE PROGRAM WORKING PAPER NUMBER 124

UNIVERSITY OF OREGON

Ecosystem Workforce Program

About the Author

Alex Casey is a Ph.D. candidate and pyrogeographer in the Department of Geography at the University of Oregon.

About the Ecosystem Workforce Program

The Ecosystem Workforce Program is a program of University of Oregon's Institute for Resilient Organizations, Communities, and Environments. We conduct applied social science research and extension services at the interface of people and natural resources. Our publications aim to inform policy makers and practitioners and contribute to scholarly and practical discourse.

Acknowledgements

We are deeply grateful to the interviewees who took time to participate in this research. We also thank the three reviewers of this report for their expertise and the Ecosystem Workforce Program for including this in their report series. This work was completed as part of an MS Thesis from the University of Oregon Department of Geography. Funding for this study was provided by a Joint Fire Science Program Graduate Research Innovation Award (GRIN) and the University of Oregon Student Sustainability Center.

This report is the culmination of 2.5 years of evaluating Oregon's SB 762/80 policy implementation and associated wildfire hazard map rollout. There has been heartache throughout the entirety of this process, from state and agency personnel who received threats to their lives, to everyday people who have experienced great loss from wildfire and insurance premium increases. This report seeks not to add fuel to a contentious legislative space, but rather to offer reflections and considerations for future iterations of wildfire policy and mapping efforts.

Gayle Rubin wrote "acknowledgements are an inadequate expression of how much this [work], like most, is the product of many minds. They are also necessary to free others of the responsibility for what is ultimately a personal vision of a collective conversation." While the research presented in this report was made possible through close collaboration with members of the public, fire and forestry professionals, and government personnel at multiple scales across Oregon, it ultimately reflects Casey's vision of a collective conversation. For this reason, "we" is used throughout this report to refer to the collective effort of such an undertaking, while acknowledging responsibility for Casey's interpretation. All participants are kept anonymous to protect their identities and livelihoods.

Photos courtesy of Alex Casey (pp. 10 and 12) and public domain courtesy of USDA Forest Service Flickr accounts (front cover, pp. 3, 4, 5, 7, 9, 13, 14, 15 and 16).

Full Citation of this publication:

Casey, A. **Policy and Implementation Insights from Oregon's SB 762/80 Wildfire Hazard Mapping Process.** October 2025. EWP Working Paper 124. University of Oregon, Eugene. https://hdl.handle.net/1794/31720

For questions, contact:

Ecosystem Workforce Program
Institute for a Sustainable Environment
5247 University of Oregon
Eugene, OR 97403-5247
ewp@uoregon.edu

TABLE OF CONTENTS

Introduction

Senate Bills 762 and 80 (SB 762/80) established Oregon's statewide wildfire hazard map as part of a broader legislative initiative aimed at reducing wildfire risk through land-use planning, education, and mitigation. SB 762, passed in 2021 following Oregon's 2020 Labor Day fires, mandated the creation of a wildfire hazard map intended to educate residents, prioritize mitigation resources, and inform regulatory standards for defensible space and home hardening. SB 80, passed in 2023, amended parts of SB 762 to refine hazard classifications and the property owner appeal process. Oregon's SB 762/80 wildfire hazard map processes quickly drew national attention following retraction after significant public feedback.

Public contestation of hazard maps is not unique to Oregon. Similar responses have emerged around FEMA floodplain maps (e.g., Elliott, 2018; Lea and Pralle, 2022), landslide and avalanche hazard maps (e.g., Provant and Carey, 2023), and wildfire mapping and modeling efforts in other countries (e.g., Neale, 2017; Sherry et al., 2019). Such mapping efforts frequently raise concerns about insurance, property values, and regulatory implications (e.g., Elliott, 2018; Provant and Carey, 2023). Understanding how the public, local officials, and policymakers responded to Oregon's hazard map, enacted under SB 762 and revised under SB 80, can help inform future mapping processes and policy approaches, both within Oregon and more broadly.

This summary report examines the wildfire hazard mapping and policymaking process in Oregon, reflecting on key findings and considerations for future efforts.

While much of the public conversation surrounding SB 762/80 focused on the implications of the map, this report broadens the scope of that conversation to examine the underlying processes that informed and produced the map. Specifically, this document describes challenges that arose from creating a policy that mandated mapping, which was then intended to inform subsequent regulatory policies. The sequencing and timing of this legislation – where policymaking, map production, and regulation development occurred simultaneously and in overlapping stages – created a complicated and sometimes confusing landscape for policymakers and agency personnel, county-level personnel and experts, and members of the public. Oregon's experience illustrates the complexities that can arise when the processes of mapping, policymaking, and regulation intersect; and the complexities that can arise when stakeholders feel as if their values and input do not matter to such processes.

This report has two primary aims:

1) To present stakeholders' experiences with the Senate Bill 762/80 implementation processes, and 2) To offer considerations for future policymaking and management processes, both for Oregon and for other states or entities engaged in similar efforts.

To accomplish these aims, this study synthesized insights from 35 semi-structured interviews with state officials, county personnel, and residents, 18 hours of participant observation at public meetings, and a content analysis of related appeals submitted in response to the initial SB 762 map (a combination of 3,000 phone calls and written and electronic appeals).

Approach

This study[1] used a mixed-methods approach to identify challenges and opportunities in Oregon's SB 762 and SB 80 wildfire policy and hazard map implementation. It integrated qualitative data from three main sources: state-level policymakers and agency personnel (n=5), county- level employees and forestry and fire experts (n=6), and members of the public (n=24). These interviews complement the analysis of approximately 18 hours of Association of Oregon Counties meetings and 3,000 entries in the SB 762 appeals dataset, including phone calls, written appeals, and electronic appeals. This dataset was generously provided by the Oregon Department of Forestry (ODF) for research purposes.

The data collected in this study were analyzed using a combination of content and thematic analysis. Appeals data provided a broad perspective on public responses, which were then contextualized through insights from public meetings and interviews. Throughout the following section, we incorporate select quotes from participants to ensure their perspectives are represented in their own words.

Timeline of SB 762

SB 762/80

From September 7 to mid-October 2020, a group of five "megafires" ignited across western Oregon during an intense east wind event (ODF, 2022). These fires, among the largest in Oregon's recorded history, burned nearly 1.2 million acres, destroyed over 4,000 homes and other structures, resulted in eleven fatalities, and caused more than $1 billion in property damage (ODF, 2022). Following this, Oregon passed SB 762 in 2021, dedicating $220 million to a range of wildfire risk reduction measures. Some of these measures included a systematic program to monitor air quality and provide grants for clean air shelters, a landscape-scale wildfire risk reduction program, and a grant program for fire risk reduction on private forestlands and Tribal lands (SB 762, 2021). One component of this legislation was the creation of a statewide wildfire hazard map, first released in June 2022. The intent of the SB 762/80 map was to:

"(a) Educate Oregon residents and property owners about the residents' and property owners' wildfire exposure by providing transparent and science-based information;

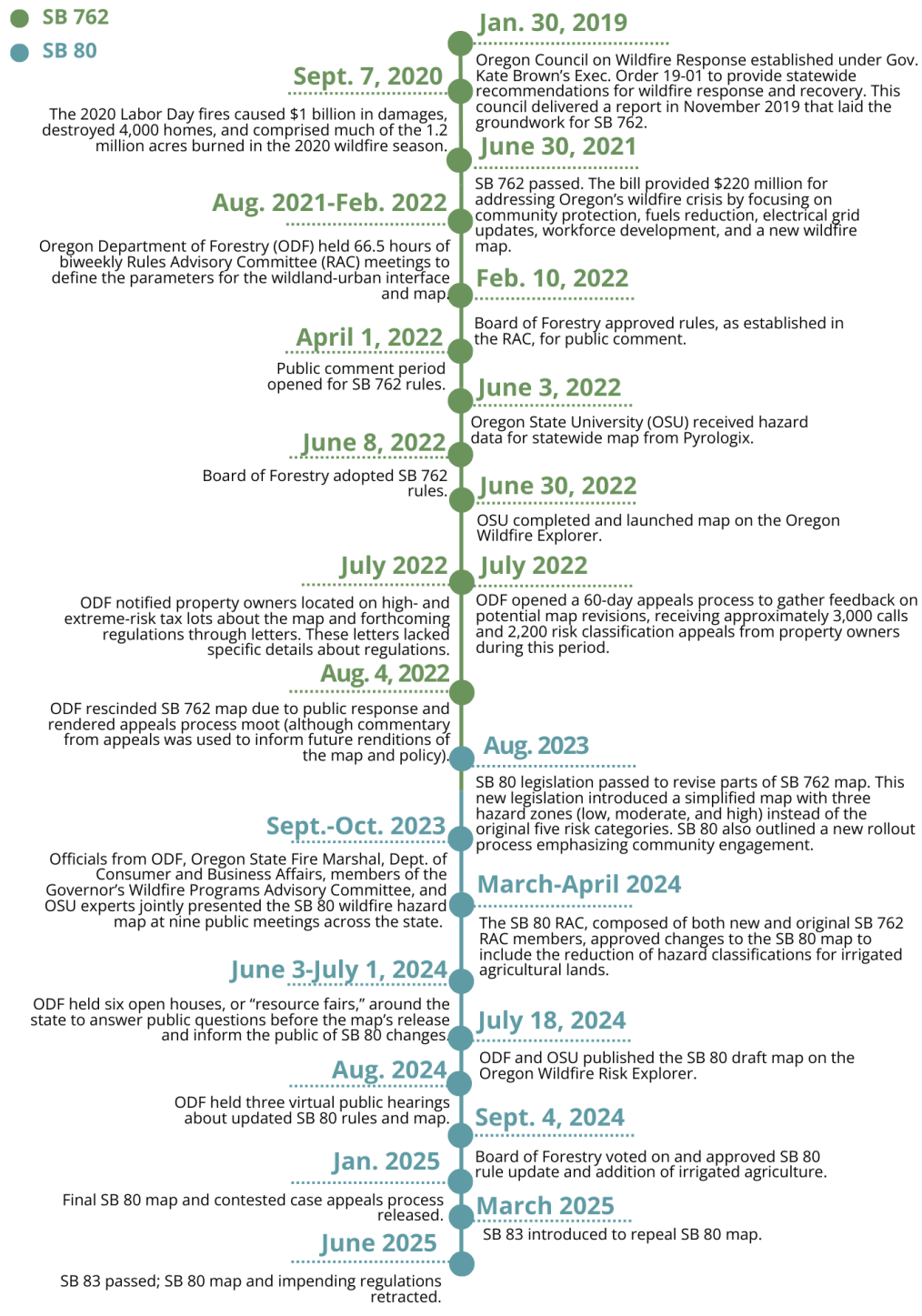
(b) Assist in prioritizing fire adaptation and mitigation resources for the most vulnerable locations; and

(c) Identify where defensible space standards and home hardening codes will apply," (SB 80, 2023).

A timeline of events is shown in Figure 1.

1 This study received approval from the University of Oregon Institutional Review Board (IRB) Study #00001037.

Figure 1 Timeline of key events during the SB 762/80 implementation



Legislative foundations of the map

The SB 762/80 wildfire hazard map was shaped by policy, rulemaking, and legislative precedent. The map's scope and methodology were defined by SB 762 (2021) and later revised under SB 80 (2023).

The SB 762 legislation restricted hazard classifications to four key inputs, climate, weather, topography, and vegetation, and assigned the tax lot as the primary unit of regulation (SB 762, 2021). These legislative decisions were realized through 66.5 hours of deliberations in the SB 762 Rules Advisory Committee (RAC), a 26-member body of state agency officials, academics, and public interest representatives. Over the course of 13 public meetings, the RAC developed rules regarding the scope and scale of wildland-urban interface (WUI) classifications and hazard designations. Following the map's retraction, SB 80 introduced futher modifications, particularly regarding the classification of irrigated agricultural lands to lower hazard designations, based on three additional RAC meetings totaling about six hours of discussion.

Oregon's approach to wildfire mapping has evolved over time; the SB 762 hazard map built on lessons from the 1997 Forestland-Urban Interface Fire Protection Act (SB 360). While SB 360 represented the state's first attempt at wildfire legislation, it relied on a voluntary compliance model, in which county fire personnel updated hazard maps every five years and adjusted classifications for properties that implemented wildfire mitigation actions (Interview with Author, 2024). However, only three counties adopted SB 360, leading to limited statewide impact (Rawlings, 2017). SB 762/80 adopted a more centralized, state-led approach, requiring property owners in high hazard WUI areas to implement home hardening and defensible space measures.

As the SB 762 map and associated regulations rolled out in June 2022 public responses were diverse but mostly critical of the state's efforts (VanderHart, 2021; Zarkhin, 2021; Urness, 2022; Dodge, 2023). ODF and Oregon State Fire Marshal (OSFM) organized public meetings in La Grande, The Dalles, Grants Pass, and Redmond, as well as virtual meetings for Jackson and Josephine counties (ODF, 2023). ODF later converted its Grants Pass meeting to an online format due to threats of violence. In total, about 1,700 people attended these sessions (ODF, 2023). Oregon State University (OSU), which led the mapping effort, also received about 350 emails about the map (ODF, 2023). Collectively, these responses led to the SB 762 map's retraction on August 4, 2022. Although the appeals process was rendered moot with the map's cancellation, the collected feedback informed changes to a new map under SB 80.

In August 2023, Oregon passed SB 80 to revise certain aspects of the SB 762 wildfire hazard map. SB 80 also implemented a formal contested case hearing process, to be administered through the Office of Administrative Hearings (ODF, 2024)[2].

2 This process was different than the SB 762 appeals process, which required filing a written or electronic submission with ODF. Due to the nature of the transition between SB 762 and SB 80, this summary report refers to the original map as the SB 762 map and the revised map as the SB 80 map. See Figure 1 for additional details about the SB 762/80 implementation process.

Status of SB 80

In January 2025, ODF released the final SB 80 wildfire hazard map on the Oregon Wildfire Risk Explorer. However, key regulatory components, including home hardening and defensible space standards from the Department of Consumer and Business Services (DCBS) and OSFM, were not finalized at that point. On February 17, 2025, Governor Kotek directed ODF to pause appeals referrals to the Office of Administrative Hearings until the legislative session ended in June to allow more time for public feedback on the map (Governor Tina Kotek Press Office, 2025). In March 2025, Democrats and Republicans introduced SB 83, which called for the repeal the SB 80 map and the local adoption of statewide defensible space and home hardening codes (Pittman, 2025). In April 2025, the Oregon State Senate passed Senate Bill 83. In June 2025, Governor Kotek signed SB 83 which meant the SB 80 hazard map and its associated statewide regulatory requirements would no longer be implemented. This action shifted responsibility for adopting and enforcing wildfire mitigation codes to local jurisdictions.

Public feedback after Oregon's wildfire mapping processes persists, particularly around the map's perceived connection to home insurance (Urness, 2025; Castillo, 2025; Curry Coastal Pilot, 2025). Despite Senate Bill 82's prohibition on using the map for insurance underwriting and rate-setting, many members of the public remain wary of potential indirect consequences in future mapping efforts. The following sections reflect:

1. How stakeholders – including members of the public, county officials and experts, and state and agency officials and personnel – experienced the implementation of SB 762 and 80.

2. Key considerations for policymakers and land managers in Oregon and across the Western U.S.

Key Learnings

Co-creating a hazard map alongside regulatory policy can complicate where and how responsibility is assigned.

Findings suggest that the scale of the SB 762/80 wildfire hazard map, developed using landscape-level data, as legislatively mandated, did not align clearly with the proposed parcel-level regulatory implications intended by policymakers. The SB 762/80 map was informed by coarse-resolution data but had policy and regulatory implications at finer scales (i.e., the scale of the property owner). While some members of the public expected parcel-level risk assessments, or changes to the map based on parcel-level actions, the map was never intended to function at that level of precision. Since the scale of intended regulation (parcel-level) was not intended to match the landscape scale of the map (landscape-level), some participants perceived a challenge for both public understanding and policy implementation. The following quotes capture this sentiment:

"We kept saying to people, this is not a property lot specific map, this is a landscape map. … That is the core problem. We made a landscape scale map that has implications and requirements that apply at individual tax lots," (Interview with Author, 2024).

"I spent thousands of dollars hardening my property. Metal roof, clearing trees, cleaning up debris. All that doesn't matter [on the SB 762/80 map]," (Focus group with Author, 2024).

As a result of this perceived mismatch, some public feedback reflected con cerns that assigning regulatory responsibility at the individual or parcel-level – without addressing or incorporating surrounding scales, such as neighborhood, community, or broader jurisdictional contexts – may unintentionally place disproportionate responsibility on individual prop-

erty owners. For instance, some participants noted challenges when individual parcels are situated adjacent to differently managed lands (county, state, or federal). Other participants mentioned the scale of their neighborhoods by drawing on their inclusion in initiatives such as Firewise[3] (see quote below):

"There's no recognition of the work that's been done for this to become a Firewise community. A ton of hard work and expense," (Focus group with Author, 2024).

In this quote, the participant viewed the scale of wildfire risk and mitigation at a level of responsibility beyond the parcel level. Although the map was not meant to reflect an individual's risk, regulation at the parcel level meant that many property owners saw the map as reflecting it. This finding does not advocate for one scale but rather underscores a sequencing and process consideration. When landscape-level hazard assessments are closely linked to regulations applied at the individual property scale, responsibility can disproportionately shift to individual homeowners. This challenge is not unique to Oregon; other states and counties similarly apply wildfire regulations at the parcel level (i.e., California Public Resources Code 4291). The Considerations for Policy and Management section explores alternative ways to approach and mitigate these sequencing and responsibility reflections.

3 Firewise is a voluntary, opt-in initiative organized by the National Fire Protection Association that advocates for mitigation at the neighborhood scale. To receive Firewise status, neighborhoods must prove annual mitigation activities, such as gutter cleaning and defensible space.

Participants emphasized the value of clearly defined and accessible opportunities to contest designations.

Many participants expressed desire for a process, established at the start of policymaking, to contest hazard designations. Although SB 80 introduced an independent contested-case appeals process (which was paused after the map's release in January 2025), stakeholders raised concerns about procedural complexity, accessibility, and the extent of the criteria permitted for appeal. Under the SB 80 appeals framework, changes to parcel-level hazard classifications could solely occur if appellants successfully challenged the underlying scientific modeling or demonstrated errors in policy rollout by ODF (Interview with Author, 2024). Wildfire mitigation actions – such as defensible space, home hardening, or community-level mitigation efforts – were not considered in the SB 80 appeals process because the intent of the hazard map did not include or measure mitigation.

Some participants expressed concerns that meaningful parcel-level mitigation measures undertaken by property owners would not influence hazard designations under the SB 80 appeals structure. Some participants advocated for appeals processes to be structured differently from the outset of policymaking to explicitly include avenues for documenting parcel-level mitigation. The following quote provides an example:

"I can show you road systems of one house after another where there is not a piece of brush and their gutters are clean. But they will be penalized unless there's an appeals system [that accounts for mitigation]. It's important that it's in place so not everyone is treated the same as those who say, 'I don't really care,'" (Grants Pass AOC meeting, 2023).

According to this participant, future policymaking and engagement strategies that clearly define and broaden criteria for appeals to explicitly include parcel-level mitigation could improve perceived fairness. Introducing parcel level mitigation data into an appeals process could also introduce complexity, especially for property owners without the resources or expertise to document their mitigation efforts.

Timing and extent of engagement with local experts influenced trust between state agencies and localities during policy and mapmaking processes.

Some participants emphasized the importance of involving local experts – defined by participants as tribal members, county officials, local fire districts, emergency mangers, and representatives familiar with community-specific wildfire conditions – early in the hazard map and policy development processes. While the SB 762 process involved engaging "fire modeling experts and regional fuel specialists [who] updated and adjusted LANDFIRE fuel models to account for recent disturbance and reflect burnable landscapes across Oregon," (Dunn & McKevoy, 2024), some participants perceived this process was not widely advertised and advocated for fuels specialists more familiar with local conditions (Interview with Author, 2024). According to these participants, local knowledge holders can possess knowledge of fine

scale conditions such as irrigation,[4] vegetation management, and recent fuels treatments that national or state-level datasets may not reflect. Participants justified their involvement by highlighting that conditions relevant to wildfire hazard can vary across time and geographic scales:

"Irrigation is a tricky one because you may have irrigation for part of the year, but it could be shut off in August during a drought year," (Interview with Author, 2024).

"What's irrigated is changing every year and should be revisited often," (Klamath AOC meeting, 2023).

Data granularity considerations and related standardization challenges aside, participants identified a broader takeaway related to how hazard mapping methodologies were linked to policy development and community engagement processes. Some participants emphasized missed opportunities to involve local experts in the early stages of policymaking, around the time of legislation writing and data curation. Others pointed out opportunities for dialogue about alternative data platforms or methods that may have captured regional differences. By involving local experts in early stages of policy- and mapmaking, follow-up iterations, and through more structured engagement, state agencies may have increased the potential for more conversation, partnership, and alignment.

Second, the sequencing and timing of policy development and map release constrained local engagement. Participants explained that simultaneous map creation, policy development, and deadlines for wildfire mitigation standards limited the ability for state agencies to engage communities meaningfully in the SB 762 process. To develop statewide wildfire mitigation standards before the next fire season, policymakers faced: "...this push and pull of setting a realistic time and doing the best we can in a short time and then constantly course correcting," (Interview with Author, 2024).

Consequently, the SB 762 process allocated just under one year for map creation, which limited opportunities to engage local experts. The SB 80 process included more opportunities for feedback; the AOC meetings, held in summer 2023, provided forums for county officials and personnel to review the draft SB 80 maps. Participants were then encouraged to provide follow-up feedback through a designated email address. While SB 80 dedicated more time to public outreach, participants still felt outreach was delayed by competing agency priorities (Interview with Author, 2024). One participant articulated the impact of these constraints:
"It's the political process that's been waiting in comms world. I always thought the summer (2023) would be more of a public outreach campaign. After [the AOC meetings with counties], I thought we would have a whole public outreach campaign. We're getting one month. We lost September ... February, March, April," (Interview with Author, 2024).

Public engagement after the AOC meetings included one optional opportunity for county commissioners to follow-up with ODF and mapmakers about their concerns after the SB 80 wildfire hazard map draft was released in July 2024 (AOC, 2024); it also included a series of information fairs with the public, at which point agency personnel briefed members of the public on finalized changes to the map, as determined in the SB 80 RAC. Even if more time would not have fundamentally changed the hazard map's underlying science, more deliberate sequencing, earlier and clearer communication, and structured local engagement might have improved how stakeholders engaged with and responded to the map. Participants further expressed that community-facing local experts

4 The SB 80 revision process reclassified irrigated agricultural lands as lower hazard, a decision influenced by input from Oregon Farm Bureau in the SB 80 RAC. While some participants advocated for a case-by-case approach to irrigated agricultural lands, others asserted that irrigated lands should automatically receive a low-hazard designation due to the perceived buffering effects against wildfire.

and personnel can help build trust, as they are often perceived as more familiar with local conditions and concerns:

"The locals trust their local people more so than the state," (Interview with Author, 2024).

"[Appellant] thinks that each community should play a part in the decisions of the map," (ODF appeals, 2022).

Based on this participant feedback, state agencies might consider approaches that prioritize local involvement – such as structured engagement with local experts at the start of policy and mapmaking – to facilitate buy-in. The Considerations for Policy and Management section discusses potential avenues to incorporate such feedback, drawing on Oregon's past experiences with Senate Bill 360.

Home insurance affordability and availability remain major concerns, despite legislative efforts to separate the map from underwriting decisions.

Most participants consistently raised concerns about home insurance affordability and availability, despite legislative efforts (SB 82) explicitly separating the hazard map from insurance underwriting decisions. Many members of the public and county-level personnel expressed skepticism and confusion regarding whether or how hazard designations might indirectly influence insurance premiums. One participant described, "You have a lot of people saying these maps are raising rates," (Tillamook AOC Meeting, 2023). Additionally, some participants highlighted the disproportionate impacts of rising insurance premiums and nonrenewals on rural and lower income households:

"I have neighbors in this community that cannot get insurance. … We're all getting hurt and damaged. Those of us that can get insurance, our premiums are skyrocketing now. For rural communities, we're getting severely damaged," (Focus group with Author, 2024).

Such comments resonate with broader national trends of insurers withdrawing from high-risk areas. One commissioner advocated for addressing insurance challenges proactively in state hazard mapping efforts:

"Insurance in other states say, 'we don't care what your map says, we're pulling out.' We need to have more of a conversation," (Dallas AOC meeting, 2023).

Participants' concerns illustrate the importance of providing sufficient lead time, clear communication, and explicit coordination between mapping and regulatory efforts and state-level transparency about the status of home insurance availability and affordability in Oregon. These findings reflect similar results as previous hazard mapping studies (see Provant and Carey, 2023; Elliott, 2021, etc.) that argue for weighing such efforts alongside insurance-related concerns.

Considerations for policy and management

This section presents several considerations for addressing feedback from members of the public and stakeholder groups. These considerations may also be applicable for other states undergoing policymaking pathways for similar wildfire-related challenges.

The scale at which policymakers choose to regulate wildfire hazard influences how responsibility is distributed across communities and jurisdictions.

At the start of policymaking, policymakers and managers could consider a process that aligns with landscape-level dynamics. Adopting regulation at a landscape- or neighborhood- scale might promote collaboration across property boundaries and jurisdictions while aligning mitigation efforts with the collective nature of wildfire risk. Such a framework might focus around a zone, community, or utilize an approach such as the Potential Operational Delineations (PODs) model (Thompson et al., 2022). The PODs model uses landscape-level management zones to help land managers coordinate fuels treatments and mitigation efforts across jurisdictions. In mixed-ownership or WUI areas, PODs could be adapted as a collaborative planning tool to coordinate mitigation strategies among private property owners, local governments, fire districts, and state or federal agencies.

While PODs have mainly been used across public forests, they present a potential way to shift regulatory and educational focus from parcel-level classifications to landscape-level fire dynamics. This framework could contextualize parcel-level regulation within a broader framework that accounts for regional fuel loads and treatments. While this framework would not eliminate the need for parcel level actions altogether, it could contextualize these actions within a landscape perspective, potentially reducing confusion and promoting cooperative wildfire risk management across multiple ownerships, communities, and jurisdictions. California's SB 1101 provides one example of a policy that establishes a statewide network of PODs for wildfire response and prescribed fire (CA SB 1101, 2023).

This approach does not come without difficulties; integrating the PODs framework into legislation would require coordinated planning across agencies, local governments, and landowners, and funding and resources to utilize PODs beyond federal and public lands. While no state has yet adopted such an approach, other institutions are beginning to think outside the individual parcel. The Insurance Institute for Business and Home Safety (IBHS) launched its Wildfire Prepared Community initiative in April 2025 to account for the importance of a neighborhood when mitigating wildfire (IBHS, 2025). This effort tracks the spread of ember across a community to locate strategic fuel breaks, and to identify homes that should mitigate in accordance with different IBHS standards. Such a model illustrates an early step toward addressing the broader implications of scale and responsibility inherent in wildfire policy and mapping.

Thoughtful sequencing and engaging boundary actors are important for building trust.

Policymakers and managers could consider a process prior to map development that provides a space for people to input their thoughts about priority values and assets for protection and regulation. The PODS process, for example, brings together managers, local experts, and personnel at multiple scales to work collaboratively and identify areas of highest value and risk. From the outset, such a process establishes shared interest and collaboration. Wildfire affects everyone, yet its impacts are unevenly distributed; hazard mapping efforts must therefore emerge from a community of voices.

Regarding sequencing, establishing a structured county verification process at the initial point of policymaking could offer a more consistent mechanism for incorporating local insights. The SB 80 process facilitated county involvement through nine in-person meetings in summer 2023. However, data collection from county officials and personnel primarily occurred through informal channels, such as email submissions to OSU after initial drafts of the SB 80 maps were produced.

Possible approaches include:

1. Regular county review periods: Regularly scheduled review periods (e.g., every five years) would allow counties to submit feedback on hazard classifictions and identify discrepancies based on observed landscape characteristics. This process would be similar to map update processes for SB 360 (Interview with Author, 2024).

2. Standardized submission process: Providing counties with a structured template or dedicated data portal could facilitate the submission of local fuel observations and other relevant information.

3. Collaboration with ODF field staff: Designated ODF field agents could work directly with county officials to collect and integrate local feedback. Some stakeholders also suggested involving local fire chiefs and emergency managers in the map development process (Gilliam AOC meeting, 2023).

Potential shortcomings remain here. Integrating county-level adjustments into a statewide hazard framework may present standardization challenges. While local fuel layers and data points may provide important qualitative insights, counties and local agencies do not always maintain spatial records of fuel treatments, irrigation, or other mitigation actions that could be incorporated into a map in a standardized way.

A county- or community-based approach may more effectively match the intent of appealing landscape-level hazard.

Hazard indicators used in statewide hazard mapping processes, such as burn probability or flame length, are derived from landscape-scale modeling efforts, often based on coarse input data. While burn probability and flame length can vary at fine spatial scales, their modeled values in statewide maps represent aggregated or generalized conditions across broader geographic units (i.e., the 30 by 30 meter pixel). As a result, individual property owners may find it challenging or unrealistic to contest these classifications effectively on a parcel-by-parcel basis, since the statewide modeling outputs used for regulatory purposes may not directly align with highly localized or site-specific conditions observed on individual properties.

One alternative might involve an appeals and verification framework modeled after Oregon's previous SB 360 process, which engaged county-level personnel to provide on-the-ground verification of mitigation efforts. While the SB 762/80 map was not designed to include mitigation efforts, a county-level approach to ground truthing landscape-level factors such as irrigation or fuels reduction could offer collective avenues for communities to refine hazard classifications based on localized conditions. Advantages of a county- or town-based appeals process include:

- Leveraging existing local expertise and familiarity with community-specific conditions
- Reducing burdens and accessibility issues associated with individual property owners contesting landscape-scale criteria
- Building buy-in and partnerships with local experts

Additional mechanisms, such as 1) a mitigation map layer and 2) additional funding for mitigation, could acknowledge and document owners' property-level mitigation efforts to support regulatory compliance, insurance concerns, and offset compliance costs.

Future legislative or regulatory frameworks might recognize and document individual property owners' mitigation actions, such as compliance with defensible space and home hardening standards. If hazard mapping and regulation continue to include a parcel-level component, participants suggested adding a complementary map layer or certification system that acknowledges documented mitigation activities at the parcel scale. Such a certification could serve alongside landscape-level hazard classifications and provide evidence of individual efforts to reduce wildfire risk.

Implementing such a layer would require establishing clear standards and mechanisms for oversight. Potential approaches include:

- A standardized submission process (i.e., a photo-based mobile app) that property owners could use to demonstrate compliance or mitigation actions
- Regular verification protocols for temporally variable defensible space efforts
- In-person alternatives, such as county or local official site visits conducted under Oregon's previous SB 360 model, to verify mitigation measures directly. This may address equity concerns for residents unable to engage with digital technologies (Interview with Author, 2024)

Participants also recommended dedicated funding streams from the outset of policymaking to help offset the compliance costs associated with implementing required mitigation measures. Establishing stable, pre-identified funding pools at the state level to support property owners remains an important step in removing economic barriers to compliance and supporting wildfire-risk reduction. The lack of funding for such efforts since 2021 resulted in widespread challenges to achieving community protection throughout Oregon.

Many participants further noted potential benefits of linking documented mitigation activities to insurance considerations. While Oregon's SB 82 explicitly prohibited insurers from using the SB 762/80 map for underwriting decisions, participants highlighted the potential value of mitigation certifications or documented risk-reduction activities as evidence that property owners could provide to insurers. Sequencing hazard mapping and regulatory processes alongside insurance considerations might contribute to members of the public feeling more seen and heard. Additionally, new public, zip-code level data from the U.S. Department of the Treasury provides the opportunity to analyze where and how the insurance crisis is disproportionately impacts Oregonians, and where premium burdens are the highest (U.S. Treasury, 2025). Such data, while subject to limitations, could influence policy interventions in geographies experiencing high levels of insurance instability.

References

Association of Oregon Counties. (2023, October 3). Statewide wildfire hazard map released for public input. Retrieved from https://oregoncounties.org/statewide-wildfire-hazard-map-released-for-public-input/

California Legislature. (2024). Senate Bill 1101: Wildfires: Potential operational delineations. Retrieved from https://trackbill.com/s3/bills/CA/2023/SB/1101/analyses/senate-governmental-organization.pdf

California Public Resources Code § 4291 (Deering 2023).

Castillo, E. (2025, January 31). Oregon residents face home insurance challenges. Oregon Public Broadcasting. https://www.opb.org/article/2025/01/31/oregon-residents-face-home-insurance-challenges/

Dodge, S. (2023, March 8). Oregon wildfire risk map once again put on hold while lawmakers make changes. KTVL News 10. https://ktvl.com/newsletter-daily/oregon-wildfire-risk-map-once-again-put-on-hold-while-law-make-changes

Elliott, R. (2021). Underwater: Loss, Flood Insurance, and the Moral Economy of Climate Change in the United States. Columbia University Press.

Governor Tina Kotek Press Office. (2025, February 17). Governor Kotek pauses wildfire hazard map appeals referrals. Oregon Governor's Office. https://govpress.oregon.gov

Insurance Institute for Business & Home Safety. (2025). Wildfire Prepared Neighborhood: Technical standard (2025 ed.). https://wildfireprepared.org/wp-content/uploads/Wildfire-Prepared-Neighborhood-Standard-2025.pdf

Lea, D., & Pralle, S. (2022). To appeal and amend: Changes to recently updated Flood Insurance Rate Maps. Risk, Hazards & Crisis in Public Policy, 13(1), 28-47.

Neale, T. (2016). Burning anticipation: Wildfire, risk mitigation and simulation modeling in Victoria, Australia. Environment and Planning A: Economy and Space, 48(10), 2026–2045. https://doi.org/10.1177/0308518X16651446

Oregon Department of Forestry. (2022). The Labor Day 2020 wildfires: Oregon's most devastating fire season. Retrieved from https://www.oregon.gov/odf/Documents/forestbenefits/fact-sheet-labor-day-fire-weeds.pdf

Oregon Department of Forestry. (2024). Wildfire hazard mapping in Oregon. Retrieved from https://www.oregon.gov/odf/fire/pages/wildfire-hazard.aspx

Oregon State Legislature. (2021). Senate Bill 762. Salem, OR. Retrieved from https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/SB762

Oregon State Legislature. (2023). Senate Bill 80. Salem, OR. Retrieved from https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/SB80

Oregon State University. (2024). Oregon statewide wildfire hazard map technical guide: Senate Bill 80 (2023) methodology. Retrieved from https://hazardmap.forestry.oregonstate.edu/sites/default/files/2024-05/WUIMap_TechnicalGuide_SB80_041724.pdf

Pittman, C. (2025, March 7). Lawmakers introduce bill to repeal Oregon wildfire hazard map. Central Oregon Daily. https://www.centraloregondaily.com/news/regional/lawmakers-introduce-bill-to-repeal-oregon-wildfire-hazard-map/article_b86b4db8-c5a7-4a70-8dce-a71b5b00f6d2.html

Provant, Z., & Carey, M. (2023). Hazard zone conflicts in the avalanche capital: Stress points for avalanche and landslide mitigation in Juneau, Alaska. International Journal of Disaster Risk Reduction, 98, 104111.

Rawlings, T. (2017). Wildfire Mitigation Compliance Through Senate Bill 360: A Content Analysis of Oregon County Documents. [Masters Thesis]. Oregon Scholar's Bank.

Sherry, J., Neale, T., McGee, T. K., & Sharpe, M. (2019). Rethinking the maps: A case study of knowledge incorporation in Canadian wildfire risk management and planning. Journal of Environmental Management, 234, 494–502. https://doi.org/10.1016/j.jenvman.2018.12.116

The Curry Coastal Pilot. (2025, February 15). Sen. Golden proposes changing state wildfire map to curb anger and rumors. NewsBreak. https://www.newsbreak.com/the-curry-coastal-pilot-1600339/3802936033815-sen-golden-proposes-changing-state-wildfire-map-to-curb-anger-and-rumors

Thompson, M. P., O'Connor, C. D., Gannon, B. M., Caggiano, M. D., Dunn, C. J., Schultz, C. A., Calkin, D. E., Pietruszka, B., Greiner, S. M., Stratton, R., & Morisette, J. T. (2022). Potential operational delineations: New horizons for proactive, risk-informed strategic land and fire management. Fire Ecology, 18, Article 17. https://doi.org/10.1186/s42408-022-00139-2

Urness, Z. (2022, August 5). Oregon withdraws controversial wildfire risk map after outcry. Statesman Journal. https://www.statesmanjournal.com/story/news/2022/08/05/oregon-withdraws-controversial-wildfire-risk-map-after-outcry/65392821007/

Urness, Z. (2025, February 17). Oregon wildfires: Lawmakers seek to kill risk map for second time. Statesman Journal. https://www.statesmanjournal.com/story/news/2025/02/17/oregon-wildfires-lawmakers-seek-to-kill-risk-map/78986105007/

U.S. Department of the Treasury. (2024). Analyses of U.S. homeowners insurance markets: 2018-2022 climate-related risks and other factors. U.S. Department of the Treasury, Federal Insurance Office. https://home.treasury.gov/system/files/311/Analyses_of_US_Homeowners_Insurance_Markets_2018-2022_Climate-Related_Risks_and_Other_Factors_0.pdf

VanderHart, D. (2021, June 21). Oregon wildfire bill faces pushback from Republicans. Oregon Public Broadcasting. https://www.opb.org/article/2021/06/21/oregon-wildfire-bill-pushback-republicans/

Zarkhin, F. (2021, June 21). Oregon's comprehensive and contentious wildfire response bill left for the last week in session. The Oregonian. https://www.oregonlive.com/politics/2021/06/oregons-comprehensive-and-contentious-wildfire-response-bill-left-for-the-last-week-in-session.html