Department of Geology and Mineral Industries' 2027-29 Workplan for Executive Order No. 25-26: Fostering Resilient Lands, Waters and Communities - DRAFT

September 2026

DOGAMI's Connection to EO No. 25-26

During the 2027-29 biennium, the Department of Geology and Mineral Industries (DOGAMI) will directly advance the objectives of Executive Order (EO) No. 25-26 by producing, analyzing, and distributing geoscientific data required for science-based decision-making and hazard risk reduction and by undertaking a new mine reclamation initiative. The agency's mission, to provide earth science information and regulation to make Oregon safe and prosperous, supports the core goals of the EO related to the protection of natural and working lands and waters; building community resilience to natural hazards, including wildfires; and fostering climate change adaption and resilience across Oregon.

DOGAMI's Geological Survey and Services Program will continue to collect, analyze, and distribute lidar and other remotely sensed data; map geologic hazards; perform risk assessments; and conduct outreach so that empowered communities can prepare for and protect themselves from hazards amplified by climate change. Reliable, transparent geoscientific information builds trust among landowners, planners, local governments, and resource managers by improving the consistency and credibility of state actions, without creating new policy or regulatory mandates. This program's work not only advances EO 25-26's priority to accelerate the acquisition and use of climate-smart data, mapping, and monitoring, but also contributes to the shared statewide data infrastructure. Consistent with EO 25-26's recognition that people and nature grow more resilient together through place-based stewardship, DOGAMI will pair technical analysis with sustained, meaningful community engagement to ensure that data are accessible, understood, and actionable. This will equip Oregonians with the tools needed to prepare for, respond to, and thrive despite climate and natural disaster risks.

In parallel, DOGAMI's Mineral Land Regulation and Reclamation Program has submitted a proposal to complete enhanced mine reclamation. The Oregon Environmental Restoration Council may fund this one-time, $1,000,000 investment beginning in the fall of 2026. If funding is provided, this project would advance EO 25-26 priorities by restoring floodplains and ecological processes, increasing aquatic connectivity, re-establishing native riparian plants, and supporting community resilience by reducing flood and channel migration risk.

EO 25-26 List of Directives

Below is a list of the sections and subsections within EO 25-26. The items that are most closely related to DOGAMI's work have been highlighted.

1. **Define Key Resilience Attributes for Lands and Waters**
    a. **Interagency Team Shall Develop Resilience Attributes**
    b. **Interagency Team Shall Develop Baseline Conditions**
    c. **Lead Agencies Shall Coordinate with ODOE re Natural and Working Lands (NWL) work**
2. **Keep Oregon's Working Lands and Waters Working**
    a. **Identify and Improve Programs, Tools, and Incentives that Support Stewardship and Co-Benefits**
    b. Improve Permitting Processes for Restoration Projects on Working Lands and Waters
    c. Improve Application and Grant Review Processes
    d. Evaluate Opportunities to Support Long-term Resilience of Near-Shore Resources
3. **Conserve Natural Lands and Waters**
    a. **Protect, Conserve, Connect or Restore 10% of Lands and Waters within 10 years**
    b. Develop Innovative Mitigation Solutions
4. Lead by Example
    a. Develop and Implement Strategies to Enhance Climate Resiliency as a Co-benefit of Existing Management Objectives
5. **Community and Wildfire Resilience**
    a. **Support Efforts to Create a Plan for Resilient Oregon**
    b. Implement 20-year Landscape-Resiliency Plan
    c. **Create Fire-Adapted Communities**

DRAFT

DOGAMI 2027-29 Actions

DOGAMI's 2027-29 Actions to advance EO 25-26 are summarized below. These actions are individually described in the following workplan narrative and summary of interactions table.

- Action 1: Lidar and remote sensing data collection, analysis, and distribution
- Action 2: Enhanced mine reclamation

- Action 3: Natural hazard mapping, risk assessments, and additional GIS datasets

Action 1: Lidar and remote sensing data collection, analysis, and distribution

Summary: DOGAMI will make lidar and other remote sensing data available to support EO 25-26 analysis and will identify priority areas where repeat data collection is needed and pursue funding to recollect them. This data enables the state to: (1) map the topography and natural features such as floodplains, wetlands, riparian corridors, landslides, coastal dunes, and estuaries with high precision; (2) map human-modified landscapes and the location of infrastructure; (3) identify areas with space for floodwater storage that can alleviate flooding, prioritize areas for river restoration, and identify areas vulnerable to channel migration; (4) plan for and mitigate risk from wildfire by identifying areas that are vulnerable to wildfires and post-wildfire debris flows; and (5) establish baseline topography and vegetative canopy and density data needed to track the change in the quantity of carbon stored in forests and other vegetation, including carbon lost during wildfires. Beyond lidar, DOGAMI also collects other remotely sensed data, including geophysical data and earth observation data such as optical and hyperspectral imagery, which can be used to analyze land cover change, water budgets, forest and agricultural health and condition, drought stress, invasive species mapping, wildfire burn severity, movement of landslides, erosion of river banks, coastal erosion, and the presence of dunes.

DOGAMI has coordinated statewide lidar collection since 2007 through the Oregon Lidar Consortium (OLC), and as of spring 2026 approximately 99 percent of Oregon is covered by at least one lidar project. This existing coverage, of varying vintages, is already available to support EO analysis and can serve as baseline data for the resilience attributes and the statewide 10 percent conservation goal. However, each lidar collection represents only a single point in time, and much of the state's current coverage is now more than a decade old, predating recent wildfires, landslides, floods, and development. DOGAMI's priority under this action is therefore to identify where existing data is too old or too coarse to support reliable EO analysis, and to target those areas for recollection. Bathymetric lidar is a particular gap: coverage is very limited statewide, and new bathymetric collection would enhance EO 25-26 efforts such as mapping channel features, wetland delineation, and flood hazard studies. Many other remote sensing datasets are collected via satellite, which offers consistent, highly repeatable coverage and can be more cost-effective than terrestrial surveys or airplane-based data collection. Although DOGAMI currently lacks dedicated funding for this broader remote sensing work, the agency is well-positioned to expand its collection and analysis of these datasets, share its analytical expertise, and distribute this data to other agencies for purposes aligned with the EO.

Funding Status: DOGAMI is actively seeking funding through the OLC's partner-funded model for lidar collection. In the past, federal funding has been critical to new lidar collections, but

DRAFT

funding from these sources has been greatly reduced in the last 3 years. DOGAMI does not currently have dedicated funding to expand its collection and analysis of other remotely sensed data, such as satellite-based optical and hyperspectral imagery, but is pursuing opportunities to build this capacity.

Metrics/Outcomes: Since 2017, DOGAMI has tracked progress to complete lidar coverage through Key Performance Measure (KPM) 3 (Percent of Oregon (sq. miles) with lidar data at USGS quality level 2 or better). Now that the state has nearly full baseline coverage as of spring 2026, the agency is in the process of updating the KPM to reflect the publication of additional, useful lidar-derived products, such as a highest-hit digital surface model.

Connection of EO: Making lidar and other remotely sensed data available, and recollecting or expanding collection in areas where change has occurred, supports EO 25-26 analysis. This data supports the identification of natural lands and waters that may be protected to improve resilience to climate change, and empowers communities to protect themselves from natural hazards, including flood, drought, landslides, and catastrophic wildfire.

The EO 25-26 Workplan Executive Summary calls for accelerated acquisition and use of climate-smart data, mapping, and monitoring. It specifically names statewide lidar and remote sensing for forests, floodplains, estuaries, rangelands, shorelines, watersheds, and landslides and identifies that this is a shared information source that strengthens Oregon's shared statewide data infrastructure for natural climate solutions. Identifying where data is outdated or absent, and securing funding to collect it, is necessary for measuring progress toward the EO's conservation goals.

Interagency and External Partner Collaboration: Lidar and other remotely sensed data are used by many agencies beyond DOGAMI to answer primary questions about land use, water, agriculture, forests, infrastructure, wildlife, ecology, and more. The OLC has included more than 80 partners to date, including federal, state, and local agencies, utilities, and nonprofits—who co-fund data collection. This is consistent with EO 25-26's emphasis on shared science and shared resources. DOGAMI will work with these and other EO-implementing agencies to identify which areas of the state most need updated lidar and other remotely sensed data to support their resilience analyses, and will prioritize recollection and analysis efforts accordingly.

Alignment with Statewide Resiliency Attributes: Lidar and other remote sensing data collection, analysis, and distribution provide the high-resolution topographic, vegetation-structure, and land-condition information needed to assess and monitor these resilience attributes. This data supports mapping of habitat connectivity and barriers to species movement, characterizes vegetation and habitat diversity, and informs floodplain, fire, hydrologic, and drought-stress process modeling. It also helps identify flood, wildfire, landslide, and erosion risks to communities and infrastructure, supporting resilience planning that protects both ecological function and community livelihoods.

DRAFT

Action 2: Enhanced Mine Reclamation

Summary: DOGAMI will implement a three-year initiative to advance enhanced reclamation at up to 13 mine sites across Oregon, restoring floodplain function, riparian and aquatic habitat, and native vegetation at sites that would otherwise remain stabilized but ecologically impaired. DOGAMI regulates approximately 1,000 surface mine sites statewide, many located within floodplains and forested landscapes. While reclamation requirements in legacy permits ensured basic site stabilization, they may have supported the additional work needed to reestablish thriving native plant communities, reconnect floodplain processes, or restore functioning ecosystems after a mine is closed. In addition, there were numerous mine and drill sites that were closed before modern reclamation regulations; many of these remain degraded decades later and represent a significant, largely untapped restoration opportunity.

Working with landowners, state and federal agencies, restoration organizations, and permitting entities, DOGAMI will identify priority sites, develop site-specific restoration plans, implement a mix of lower-cost revegetation and more complex floodplain connectivity projects, and monitor ecological outcomes. Collectively, these actions support all four of EO 25-26's key resilience attributes: connectivity; diverse and complex habitats; ecological processes; and community resilience.

Funding Status: DOGAMI has requested $1,000,000 in support from the Oregon Environmental Restoration Council, funded through the Monsanto Settlement Agreement. The Council has approved the project concept, but funds cannot be released until further review in the fall of 2026.

Metrics/Outcomes: The primary measurable outcome is the completion of enhanced reclamation at up to 13 mine sites. Key milestones include staffing the project team, establishing site-selection criteria, identifying project sites, completing designs and permitting, securing contractual support, executing reclamation projects, and providing reports to the Council. Anticipated ecological outcomes include improved riparian condition, increased native vegetation cover, reduced erosion and runoff, restored floodplain processes, reconnected off-channel habitat, and enhanced carbon storage.

Connection to EO: Enhanced mine reclamation directly advances EO 25-26 by transforming legacy mine sites into functioning ecological assets. This will address the EO goal of protecting 10 percent more climate-resilient lands and waters within 10 years. Mine restoration is explicitly named in the EO 25-26 Workplan Executive Summary as a priority initiative to accelerate strategic water quality and aquatic habitat restoration. Restoring floodplain connectivity, riparian habitat, and native vegetation at these sites helps re-establish refugia for threatened and endangered native salmonids and other species, strengthens watershed resilience to drought and flooding, and demonstrates how state regulatory programs can be leveraged to achieve resilience outcomes beyond baseline compliance.

DRAFT

Interagency and External Partner Collaboration: DOGAMI will collaborate closely with Department of Fish and Wildlife, Oregon Watershed Enhancement Board, Department of State Lands, and other state and federal agencies to align enhanced reclamation projects with existing restoration priorities, regulatory requirements, and watershed objectives, and to identify opportunities to leverage additional funding. The project will also engage mine site owners, soil and water conservation districts, watershed councils, and conservation organizations, along with Tribal governments, and environmental justice communities during project planning and site selection, consistent with EO 25-26's emphasis on shared science, shared resources, and inclusive resilience planning.

Alignment with Statewide Resiliency Attributes: Enhanced mine reclamation restores floodplain connectivity and reconnects aquatic and riparian habitats, supporting the connectivity attribute. Expanding native vegetation and off-channel habitat strengthens habitat diversity and complexity. Reconnecting hydrologic processes between mine ponds, floodplains, and river systems restores natural ecological function, and the resulting improvements to water quality, erosion control, and species refugia contribute to community and livelihood resilience across affected watersheds.

Action 3: Natural Hazard Mapping, Risk Assessments, and Additional GIS Datasets

Summary: DOGAMI's natural hazard maps, risk assessments, and supplemental GIS datasets are core to statewide resilience planning and emergency response. DOGAMI produces natural hazard maps and assessments that identify areas at greatest risk from floods, channel migration, coastal erosion, liquefaction, landslides, and post-wildfire debris flows—hazards that intensify as climate conditions change. These reports show which homes and communities are in hazardous areas, how many people may be displaced after a disaster, and how much financial damage may occur. DOGAMI riverine and coastal data can be used to identify floodplains and coastal features that have been impacted by infrastructure or human development (e.g., levees that reduce floodplain connectivity). In addition, DOGAMI publishes other GIS datasets, including the statewide building footprint database, that have a wide range of applications related to resilience and land use analysis.

Accurate hazard maps allow Oregon to target resilience investments where climate risks are highest while avoiding public and private investment in locations that are unsafe or increasingly untenable. They can be used to identify which farms, forests, floodplains, dunes, bluffs, and wetlands are prone to, or buffer against, natural hazards helping prioritize these features for protection and land management. Local governments, planners, emergency managers, and landowners rely on this information to understand their risk, create Natural Hazard Mitigation

DRAFT

Plans, make land-use decisions, and act during emergencies (e.g., evacuating at-risk neighborhoods).

Despite the need and use for these maps and reports, current mapping remains incomplete, leaving significant gaps in areas critical to public safety.

Funding Status: Hazard mapping and risk assessments are currently partially funded but insufficient to meet statewide needs. Historically, the majority of funding for natural hazard mapping has come from federal grants, including those administered by Federal Emergency Management Agency and National Oceanic and Atmospheric Administration. However, in the last two years these agencies have delayed grant awards and changed grant parameters to exclude natural hazard mapping. Unless federal funding resumes, DOGAMI will face a substantial decrease in funding for natural hazard mapping in the 2027–29 biennium, and will need to identify new funding sources to maintain the state's current ability to meet EO 25-26 objectives related to risk reduction, climate resilience, and strategic conservation.

Metrics/Outcomes: In the past, DOGAMI has tracked advances in hazard mapping through KPM #1 (Hazard and Risk Assessment Completion). The revised KPM #1 will continue to be a useful measure of agency progress toward producing new maps and assessments.

These studies typically produce products such as detailed maps, technical reports, GIS datasets, hazard inventories, and interactive tools. DOGAMI staff also prioritizes community engagement, including project-specific presentations and outreach events across the state.

Connection to EO: Production and publication of natural hazard maps and risk assessments support the key EO priority to improve community and wildfire resilience. Furthermore, both the Plan for Resilient Oregon and the EO 25-26 Workplan Executive Summary identify the need for basic hazard data collection and to accelerate climate-smart data, mapping, and monitoring as priorities. DOGAMI data helps identify where people, property, and infrastructure are at greatest risk from natural hazards exacerbated by climate change. It also helps identify natural floodplains, dunes, and wetlands that buffer communities from climate-driven hazards and warrant protection.

The EO also seeks to create fire-adapted communities which need to be both prepared for wildfires and also ready to address post-wildfire threats. After wildfires, heavy rainfall and snow melt can produce life-threatening flooding, landslides, and fast-moving debris flows. By mapping these hazards before or shortly after a wildfire, DOGAMI can help communities understand which areas are at risk from secondary disasters after wildfires.

Interagency and External Partner Collaboration: DOGAMI collaborates on natural hazard mapping and risk assessments with local governments, Tribes, and a wide range of state and federal agencies including the Department of Land Conservation and Development, Oregon Office of Emergency Management, Oregon Department of Transportation, Oregon Department of Forestry, Federal Emergency Management Agency, U.S. Army Corps of Engineers, National

DRAFT

Oceanic and Atmospheric Administration, U.S. Geological Survey, Silver Jackets (interagency flood team), and the state Interagency Hazard Mitigation Team.

DOGAMI is better able to serve Oregon and share resources by collaborating with these agencies and partners. Collaborators help DOGAMI prioritize hazard mapping needs and share information, including local knowledge and scientific expertise. Since DOGAMI hazard maps and datasets are used by many communities and agencies and need to be widely understood, staff will continue to prioritize outreach and engagement.

Alignment with Statewide Resiliency Attributes: Natural hazard mapping and risk assessments are key to communities' ability to sustain themselves and to be resilient. This work most directly advances the attribute of support for natural and working lands and waters and support for human communities, lifeways, and livelihoods. By identifying where people, property, and infrastructure face the greatest risk from natural hazards, mitigation action and informed development can occur to protect communities while allowing natural processes to function.

DRAFT

Summary of the Intersection of DOGAMI Actions and EO Directives

1. DEFINE KEY RESILIENCY ATTRIBUTES FOR LANDS AND WATERS			
Subpart	Interagency team shall develop resilience attributes	Interagency Team shall develop baseline conditions	Lead Agencies shall coordinate with ODOE on Natural and Working Lands
Anticipated Agency Action		Action 1: Lidar and remote sensing data collection, analysis, and distribution	

2. KEEP OREGON'S WORKING LANDS AND WATERS WORKING				
Subpart	Identify and improve programs, tools and incentives that support stewardship and co-benefits	Improve permitting processes for restoration projects on working lands and waters	Improve application and grant review processes	Evaluate opportunities to support long-term resilience of near-shore resources
Anticipated Agency Action	Action 2: Enhanced Mine Reclamation			Action 3: Natural Hazard Mapping, Risk Assessments, and Additional GIS Datasets

3. CONSERVE NATURAL LANDS AND WATERS & 4. LEAD BY EXAMPLE			
Subpart	Protect, Conserve, Connect or Restore 10% of Lands and Waters within 10 years	Develop Innovative Mitigation Solutions	Develop and Implement Strategies to Enhance Climate Resiliency as Co-Benefit of Management Objectives
Anticipated Agency Action	Action 2: Enhanced Mine Reclamation		

5.COMMUNITY AND WILDFIRE RESILIENCE			
Subpart	Support Efforts to Create a Plan for a Resilient Oregon	Implement 20-Year Landscape Resiliency Plan	Create Fire-Adapted Communities
Anticipated Agency Action	Action 3: Natural Hazard Mapping, Risk Assessments, and Additional GIS Datasets		Action 3: Natural Hazard Mapping, Risk Assessments, and Additional GIS Datasets

DRAFT