



# Department of Geology and Mineral Industries

Joint Ways and Means Subcommittee  
on Natural Resources  
February 5, 2025



## **OUR MISSION**

The Oregon Department of Geology and Mineral Industries (DOGAMI) provides earth science information and regulation to make Oregon safe and prosperous.

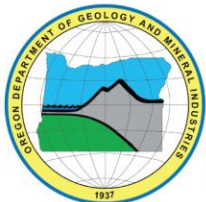
## **OUR VISION**

DOGAMI envisions an Oregon where people and places are prepared for natural hazards; where decisions for Oregon's future always consider natural hazards; where resource potential is fully understood and responsibly developed with our current and future needs in mind; where earth science contributes to the health of our coast, rivers, forests, and other ecosystems; and where geologic learning and discovery abound.

## **OUR VALUES**

We hold our work and ourselves to the highest standards of science and professionalism. We seek opportunities for innovation and collaboration. We build our capacity for sustainable success. We are open, engaged, responsive, and respectful in all we do.





# OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

Agency Leadership - Administration, Finance, Information Technology

## Geological Survey & Services



  
**Earthquake Hazards Mapping**

  
**Landslide Inventory & Hazard Mapping**


  
**Flood & Channel Migration Mapping**


  
**Tsunami & Coastal Erosion Mapping**


  
**Geologic Mapping & Mineral Resource Evaluation**

  
**Lidar Mapping & Remote Sensing** 

## Mineral Land Regulation & Reclamation

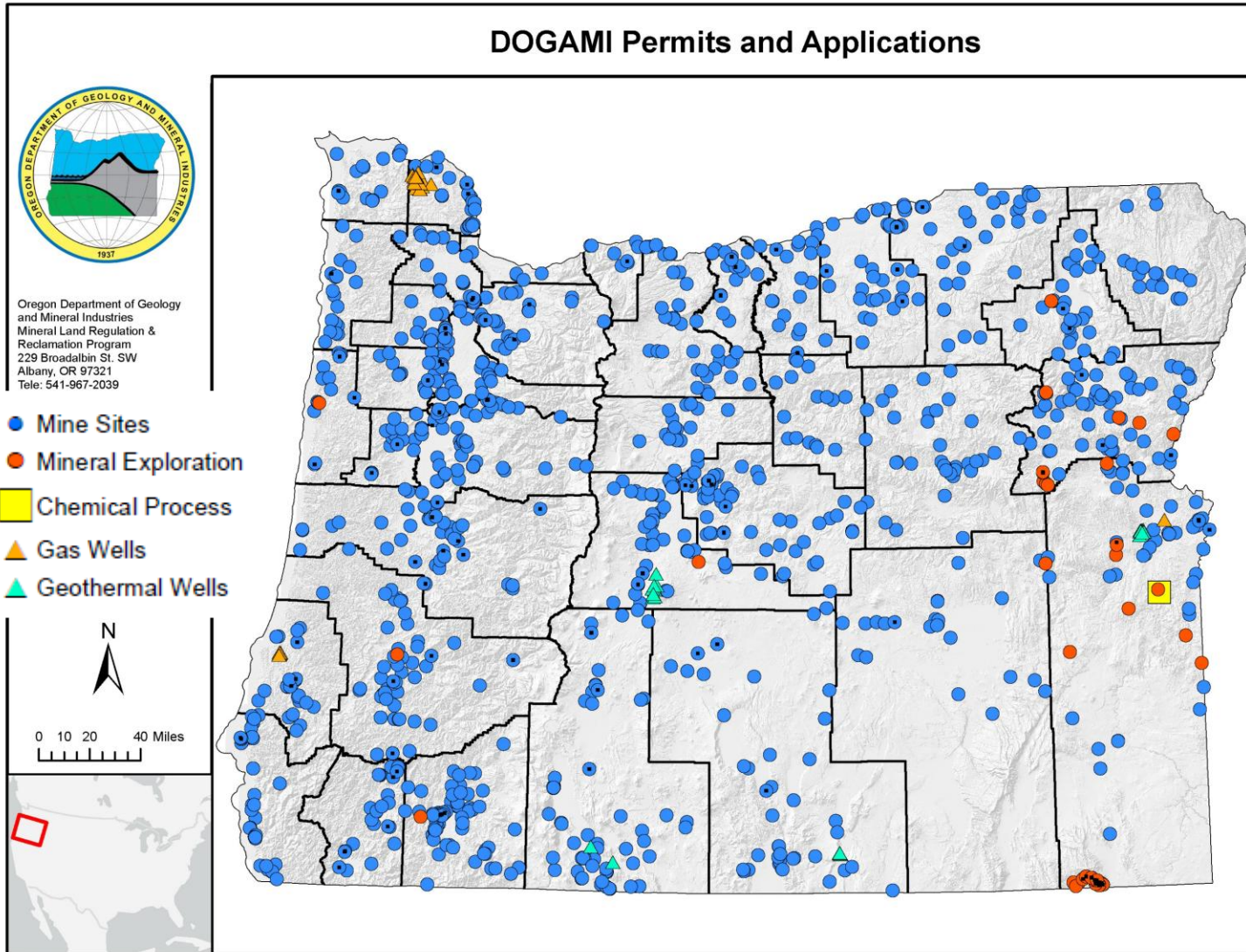
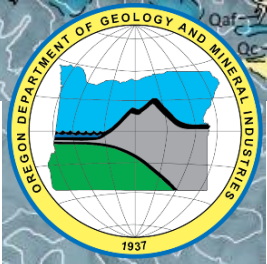
  
**Surface Mining & Exploration**

  
**Chemical Process Mining**

  
**Oil & Gas, Geothermal Well Drilling, Carbon Storage**

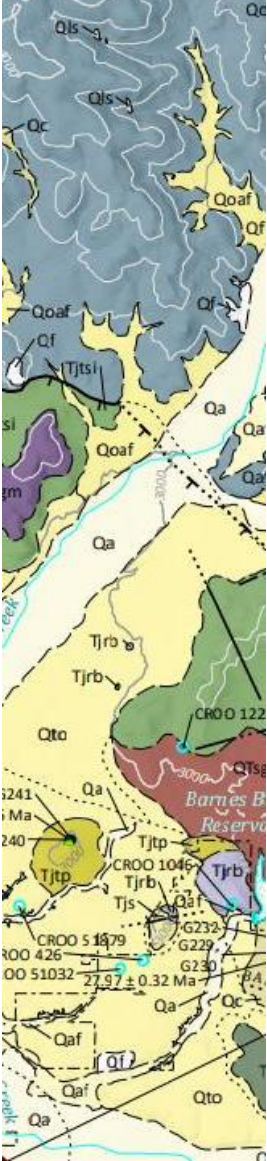


# Mineral Land Regulation and Reclamation Program (MLRR)



Prepared By: E. Buchner / 1-17-2025

Permit Type	#
Operating Permit (OP)	890
Exclusion Certificate (EC)	144
Exploration Permit (XP)	28
Gas Well	75
Geothermal Well	25







Find address

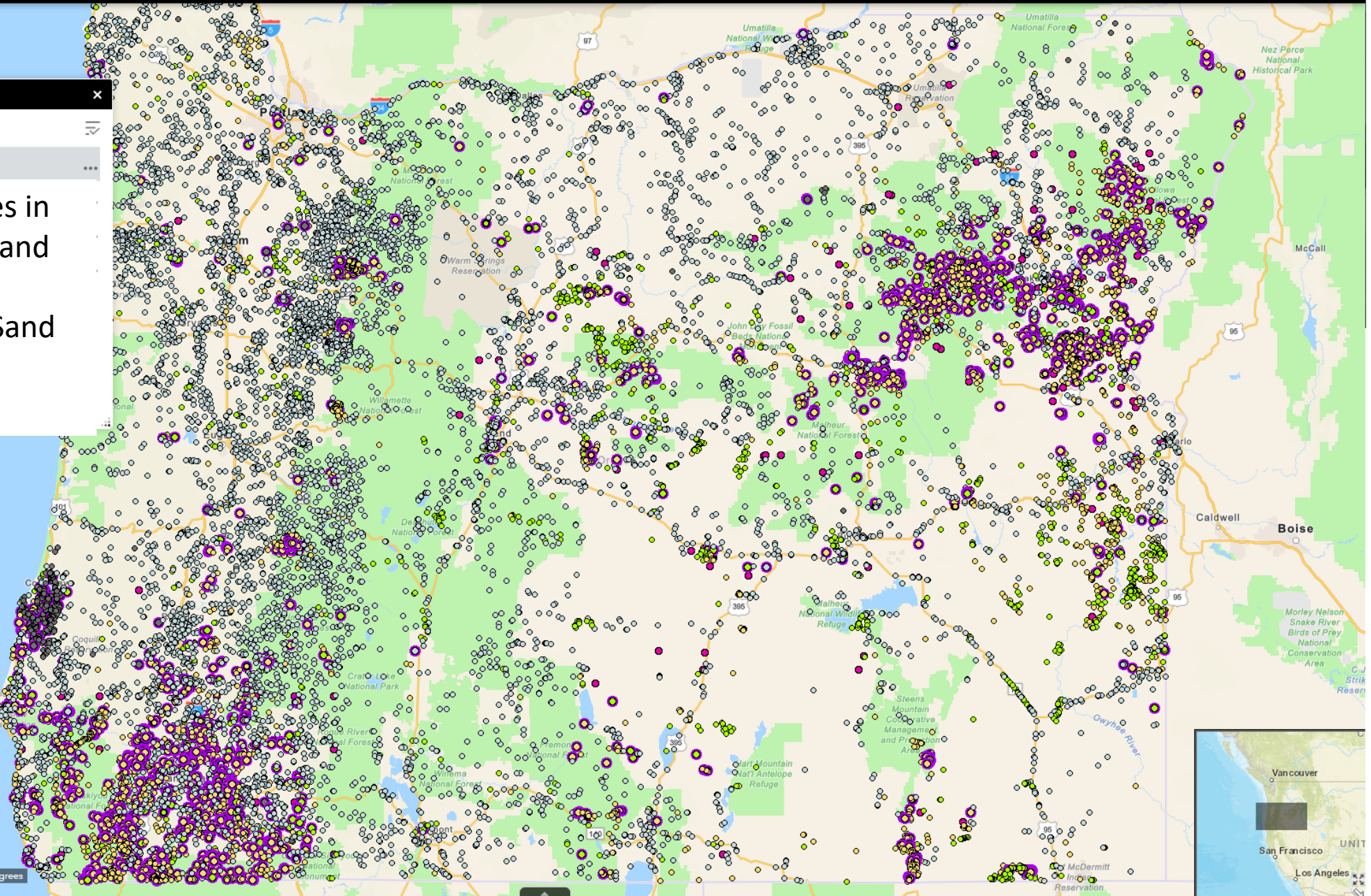


Layers Currently Shown

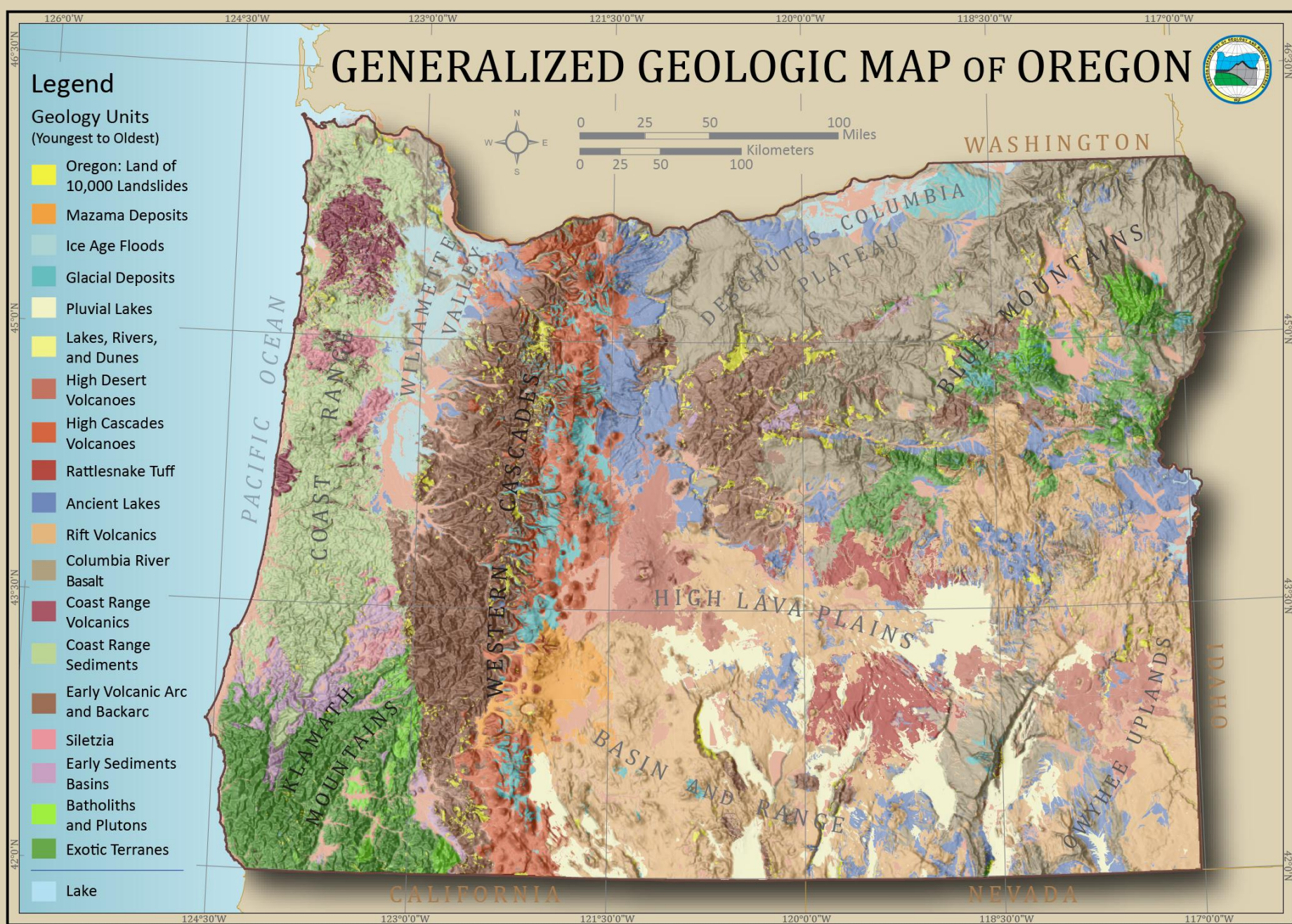
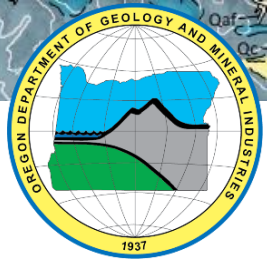
- Layers
- MILO Release 3

All known mines in Oregon, active and historic

- Aggregate, Sand & Gravel
- Metals

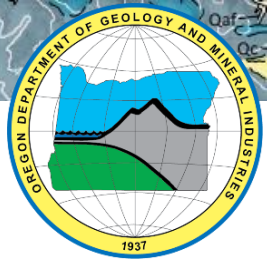






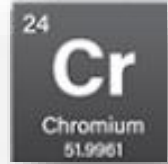
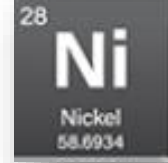
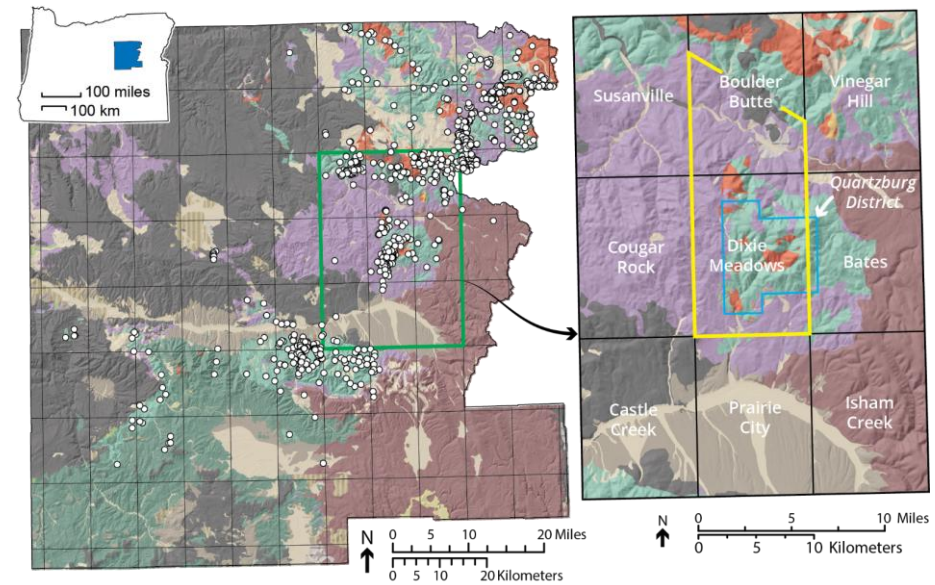
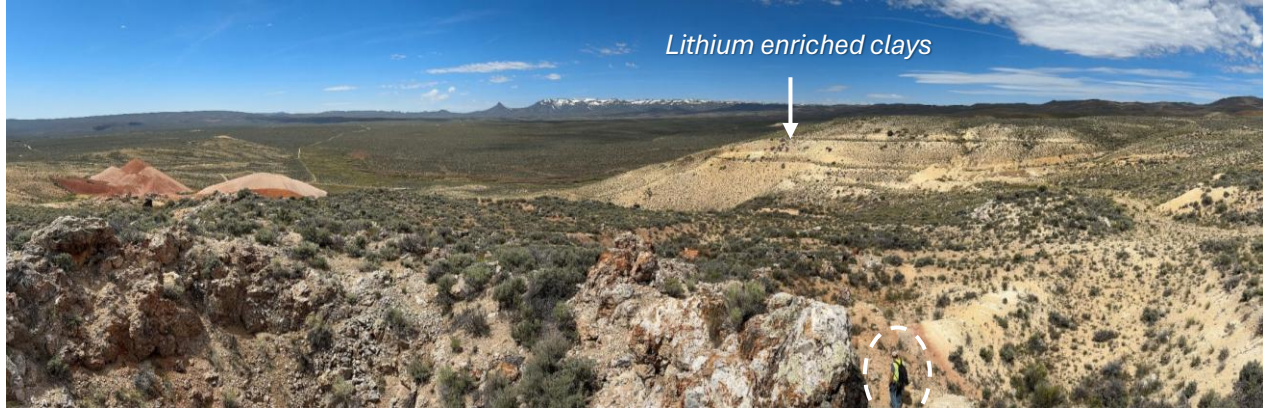
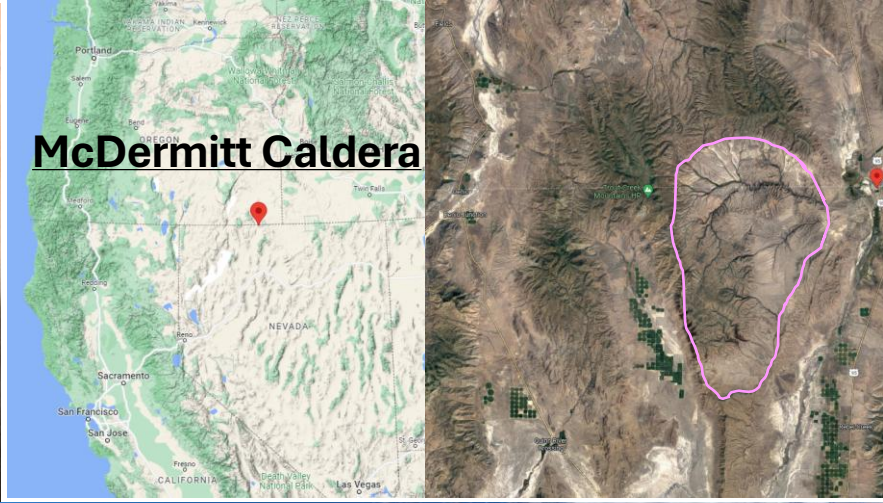
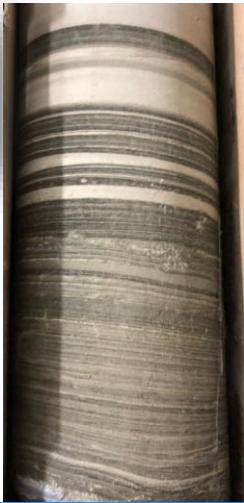
Data from: Oregon Geologic Data Compilation, OGDC-8 Darin and others, 2024





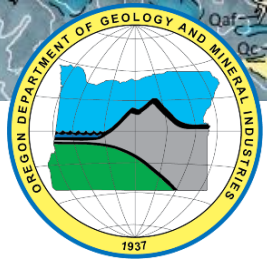
# Critical Mineral (CM) projects in Oregon

**Malheur County**  
*Earth MRI (USGS) CORE-CM*  
*(US DOE) CMI Hub (US DOE)*

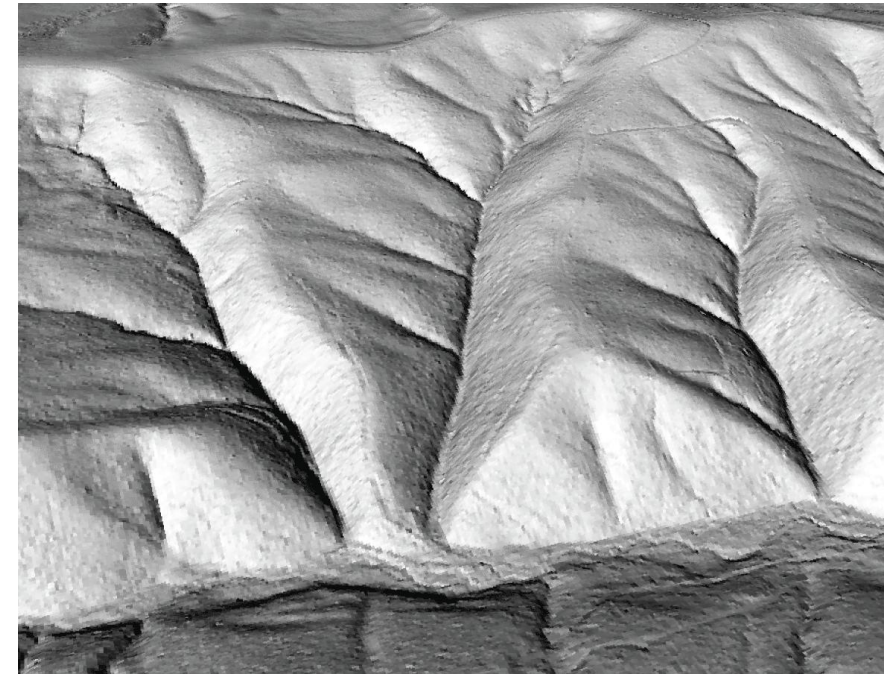


**Grant County**  
*Earth MRI geol. mapping (USGS)*  
*Earth MRI mine waste (USGS)*  
**CORE-CM (US DOE)**



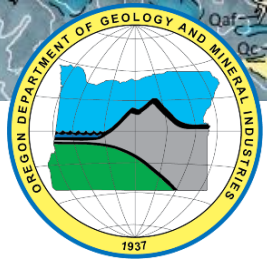


# Post-Fire Landslides in Oregon



Post-fire debris flows are extremely destructive and can be fatal. DOGAMI is collaborating with federal agencies, state agencies, university researcher, and Oregon communities to understand and reduce post-fire debris flow risk.





# Newport Field Office Est. 2000

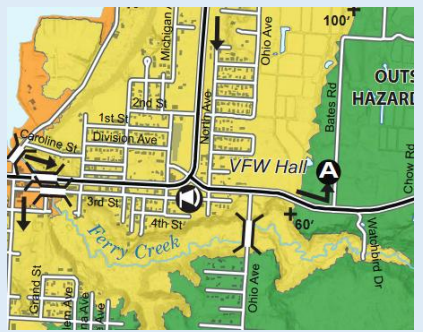
*Assist coastal communities with land-use decisions and personal safety by helping them understand the processes and hazards that shape our coastline*



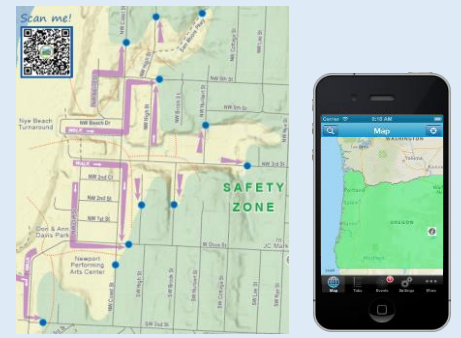
## Tsunami Hazards



## Coastal Change

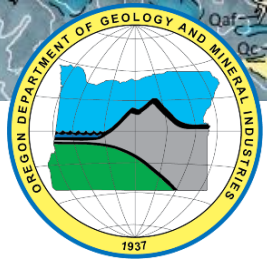


- Tsunami inundation modeling & mapping
- Maritime modeling & guidance
- Evacuation modeling
- Risk & exposure analyses
- Evacuation tools



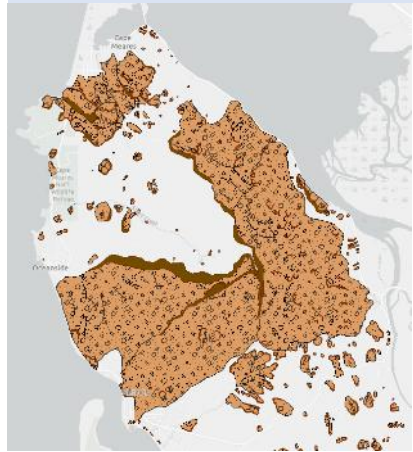
- Over two decades of Coastal monitoring
- Erosion hazard maps
- Landslide studies
- Coastal flood modeling for FEMA
- Coastal engineering studies



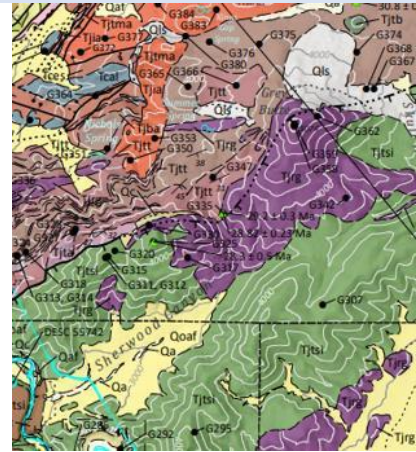


# Agency Key Performance Measures (KPMS)

## Geological Survey & Services



Natural Hazards



Earth Science

## MLRR



Resource Management

## All Agency



Outreach & Education



Governance & Operations

Focus Areas

Key Performance Measures

KPM#5: Customer Service

KPM#1: Hazard Assessment

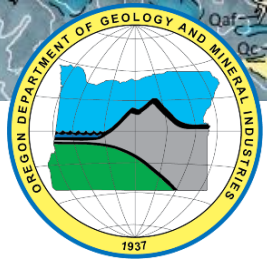
KPM#2: Geologic Mapping Completion

KPM#3: Lidar Coverage

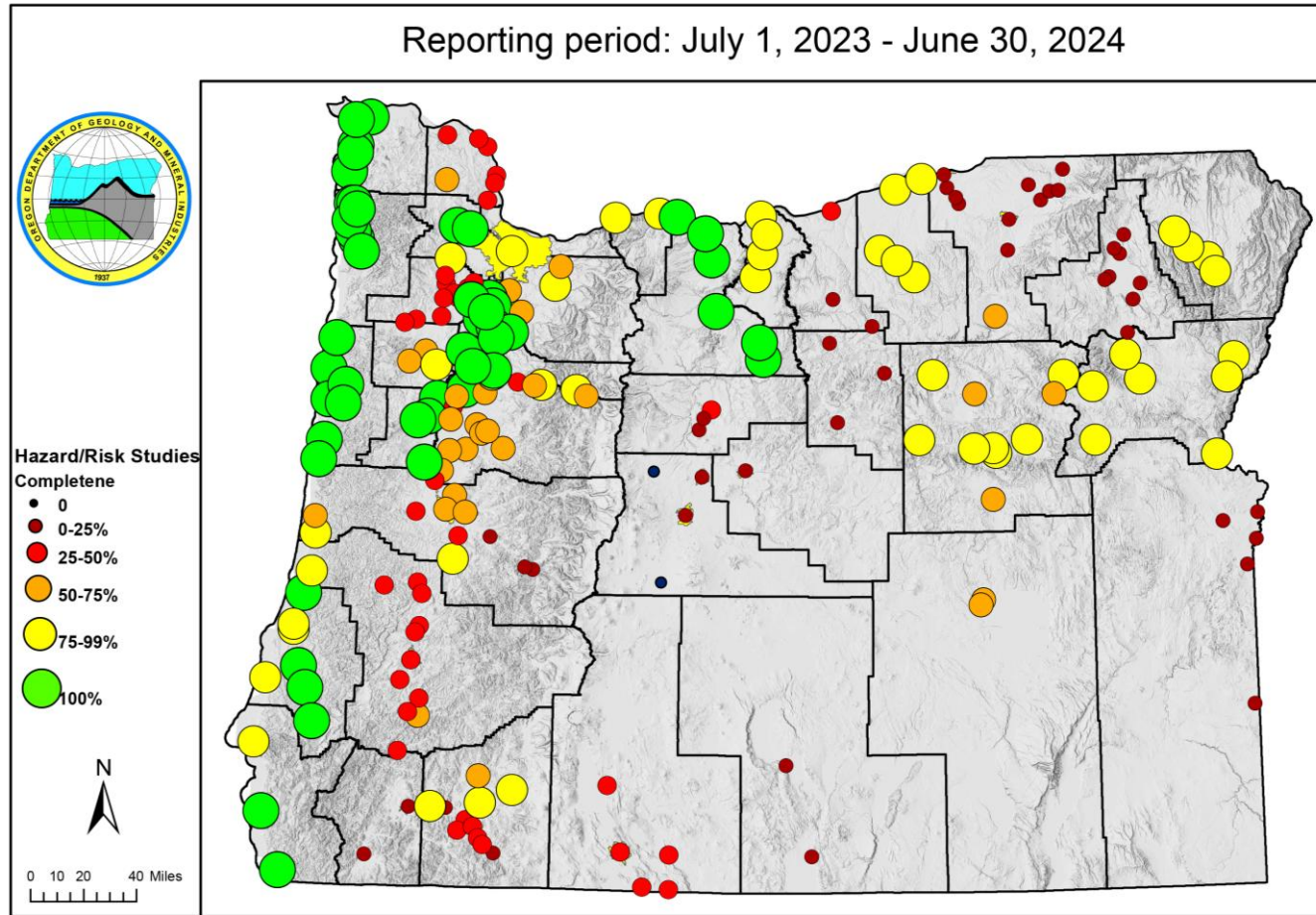
KPM#4: Percent of Active Mine Sites Inspected

KPM#6: Governance





# KPM 1: Geologic Hazard and Risk Assessment Completion

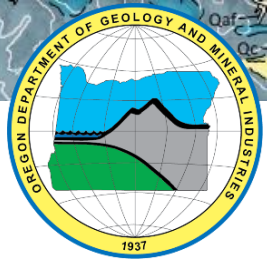


Prepared By: M. C. Williams 9-8-2023

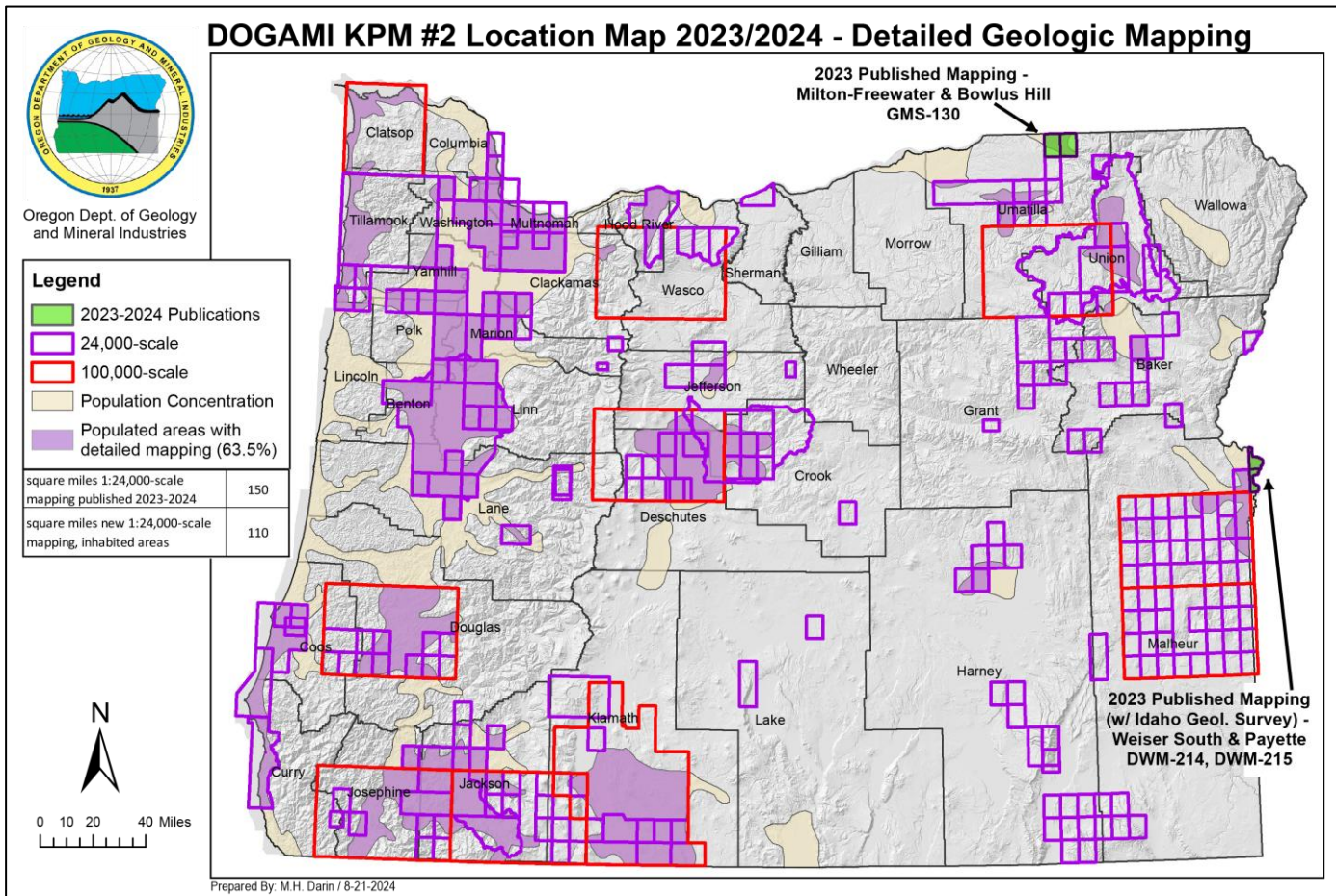
The map represents the percent of population residing in Oregon Urban Growth Boundary Areas (UGBs) that have completed geologic hazard and risk assessments.

<u>Report Year</u>	<u>2023</u>	<u>2024</u>
<u>Target</u>	67%	67%
<u>Actual</u>	70.4%	72.4%





# KPM 2: Detailed Geologic Map Completion



The map represents the percent of Oregon (inhabited) where geologic data in the form of high-resolution maps have been completed to be used for local problem solving.

<u>Report Year</u>	<u>2023</u>	<u>2024</u>
<u>Target</u>	67%	67%
<u>Actual</u>	62.8%	63.5%

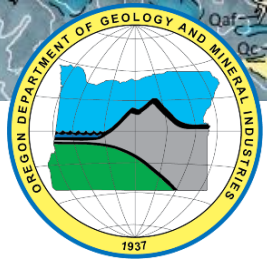
**KPM**

<u>Year/Scale</u>	<u>2023</u>	<u>2024</u>
<u>1:100k</u>	31.6%	31.8%
<u>1:24k</u>	22.2%	22.3%

**Statewide**

Reporting Period FY 2024: July 2023- June 2024





# KPM 3: Lidar Data Completion

Reporting period: July 1, 2023 - June 30, 2024

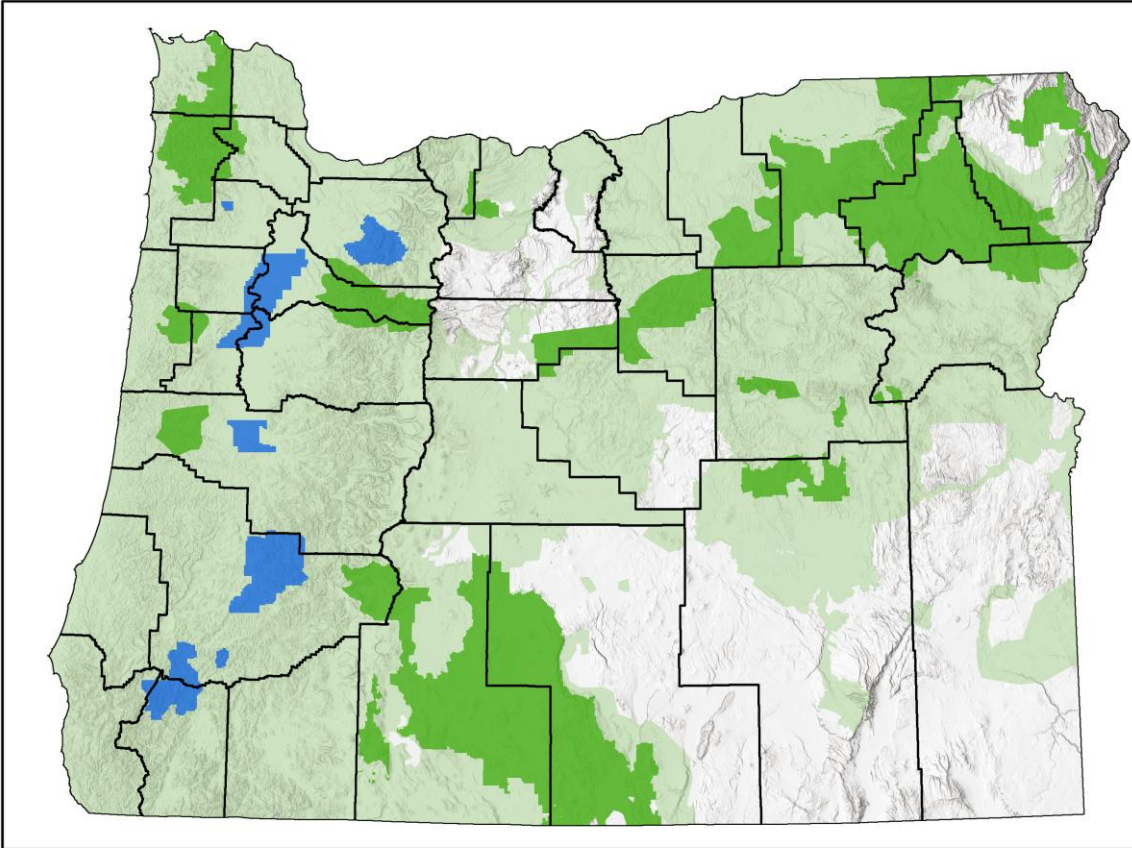


- Legend**
- DOGAMI FY24 Projects
  - Other new projects
  - Pre-FY 24 lidar coverage



0 10 20 40 Miles

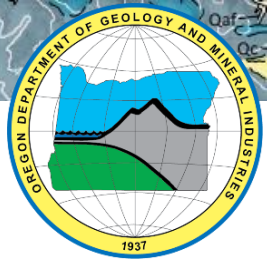
Prepared By: R. Burgette 8/28/2024



The map represents the percent of Oregon (in square miles) with Lidar data at USGS quality level 2 or better.

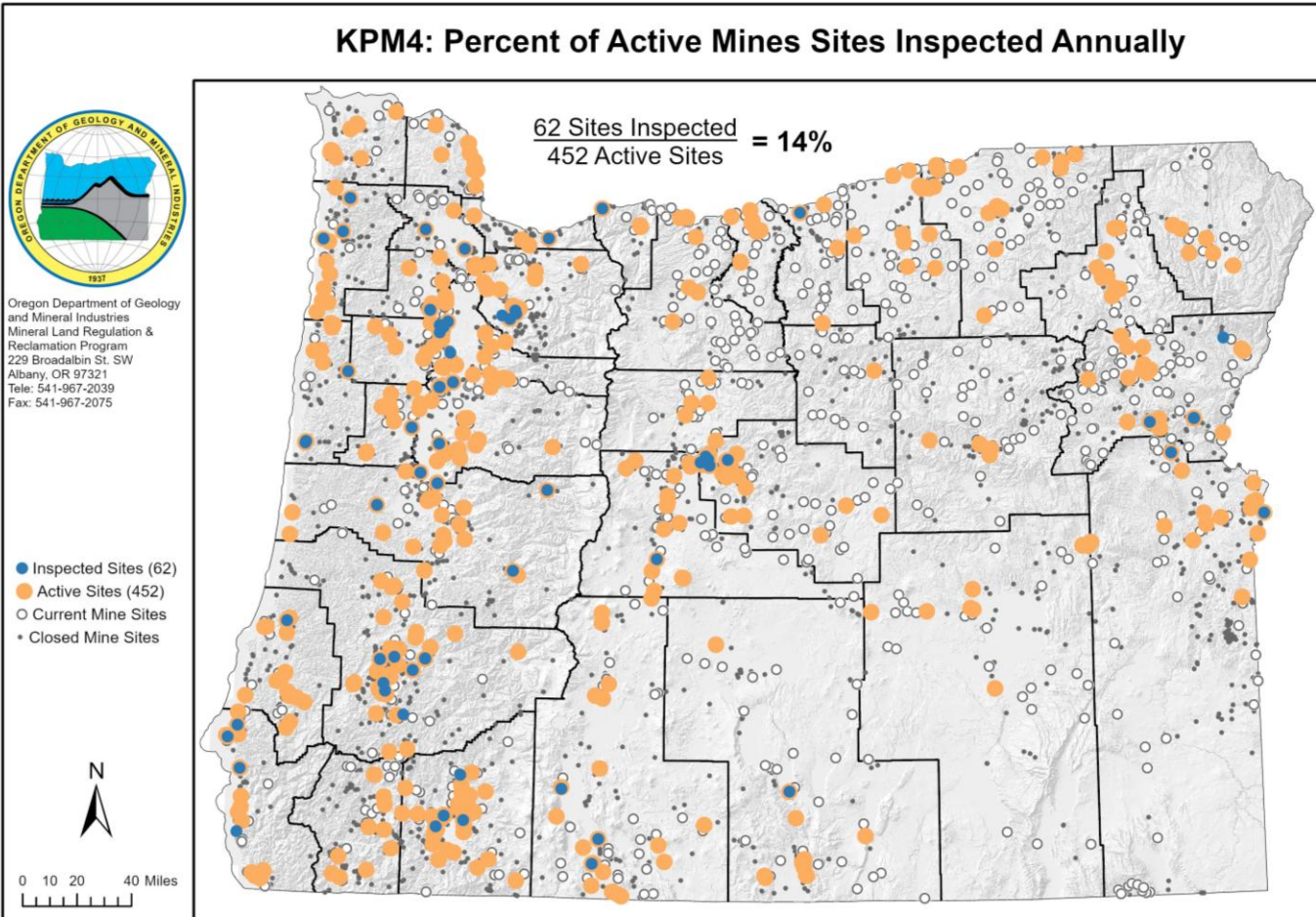
<u>Report Year</u>	<u>2023</u>	<u>2024</u>
<u>Target</u>	58%	58%
<u>Actual</u>	66.7%	76.3%





# KPM 4: Surface Mine Inspections

**KPM4: Percent of Active Mines Sites Inspected Annually**



Oregon Department of Geology and Mineral Industries  
Mineral Land Regulation & Reclamation Program  
229 Broadalbin St. SW  
Albany, OR 97321  
Tele: 541-967-2039  
Fax: 541-967-2075

Prepared By: E. Buchner / 8-16-2024

The map represents the percent of active mine sites inspected.

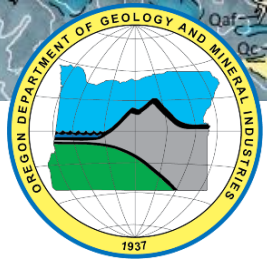
**Active sites: 452**

**Unique Inspections: 62**

<u>Report Year</u>	<u>2023</u>	<u>2024</u>
<u>Target</u>	Old KPM	20%
<u>Actual</u>	Old KPM	14%

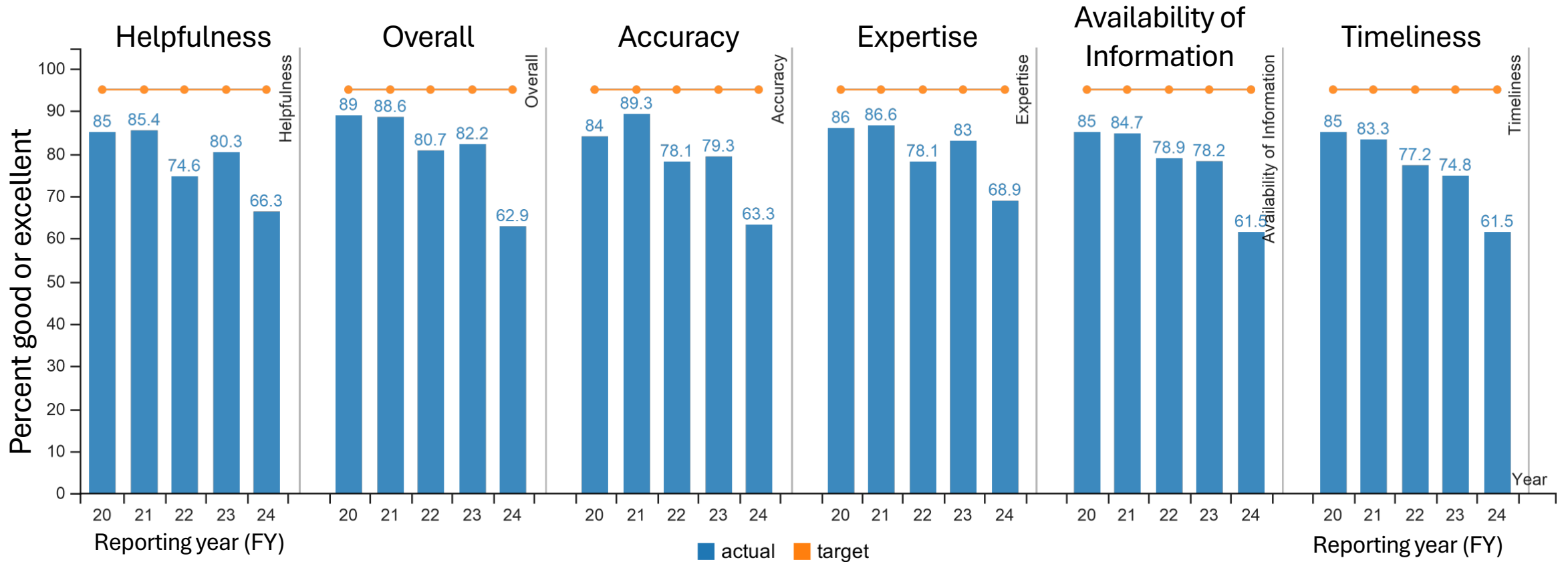
Reporting Period FY 2024: July 2023- June 2024



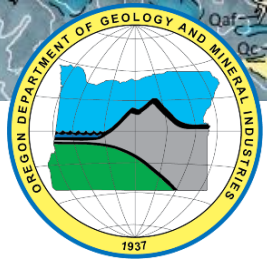


# KPM 5: Customer Service

These graphs represent the percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent" in six categories.







# KPM 6: Governance

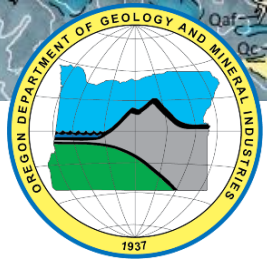
## Board Evaluation Criteria

- 1) Executive Director's performance expectations are current
- 2) Executive Director receives annual performance feedback
- 3) The agency's mission and high-level goals are current and applicable
- 4) The Board reviews the Annual Performance Progress Report
- 5) The Board is appropriately involved in review of the agency's key communications
- 6) The Board is appropriately involved in policy-making activities
- 7) The agency's policy option packages are aligned with their mission and goals
- 8) The Board reviews all proposed budgets
- 9) The Board periodically reviews key financial information and audit findings
- 10) The Board is appropriately accounting for resources
- 11) The agency adheres to accounting rules and other relevant financial controls
- 12) The Board members act in accordance with their roles as public representatives
- 13) The Board coordinates with others where responsibilities and interests overlap
- 14) The Board members identify and attend appropriate training sessions
- 15) The Board reviews its management practices to ensure best practices are utilized

The percent of 'yes' responses by Governing Board members to the set of best practices on the left

<u>Report Year</u>	<u>2023</u>	<u>2024</u>
<u>Target</u>	100%	100%
<u>Actual</u>	100%	100%





# DOGAMI 2023-25 LAB Across Fund Types

## General Fund

- Agency Administration, Business Operations, and Science Staff Salary as match for federal funds
- Drawn down to zero each biennium

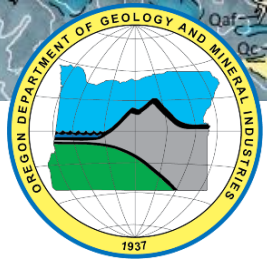
## Fee Revenue to Regulatory Program (MLRR) Other Funds

- Revenues from permit applications, annual permit renewals and cost-recovery.
- A 6-month operating balance carries over from year-to-year.

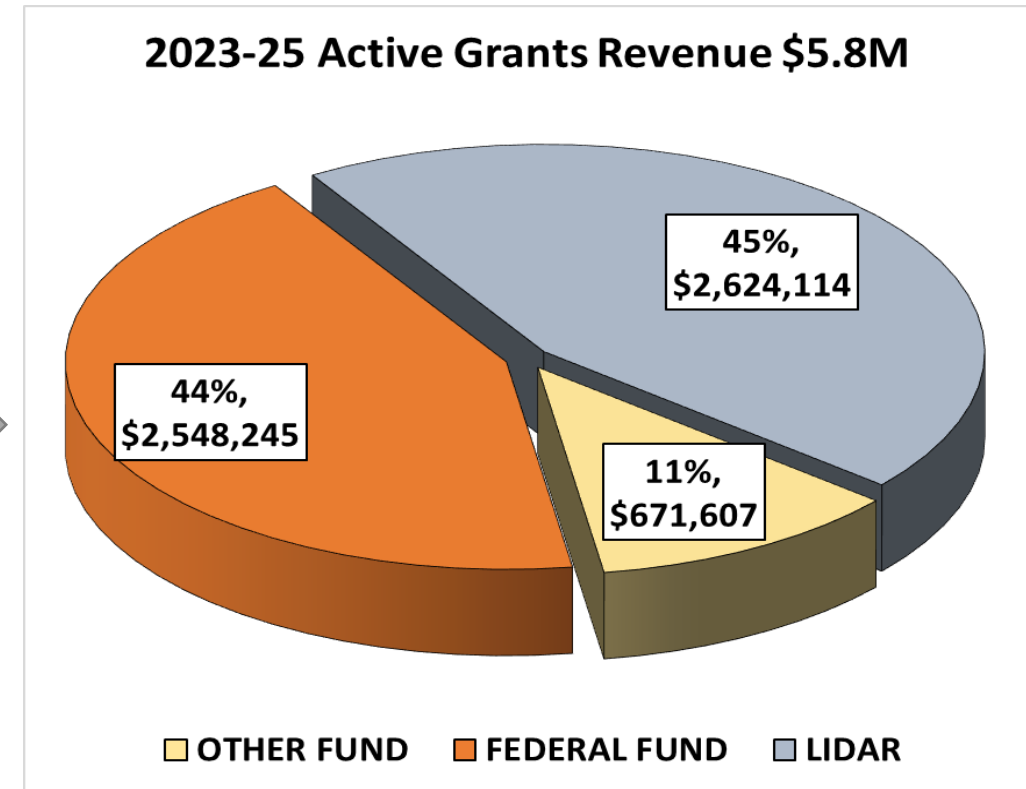
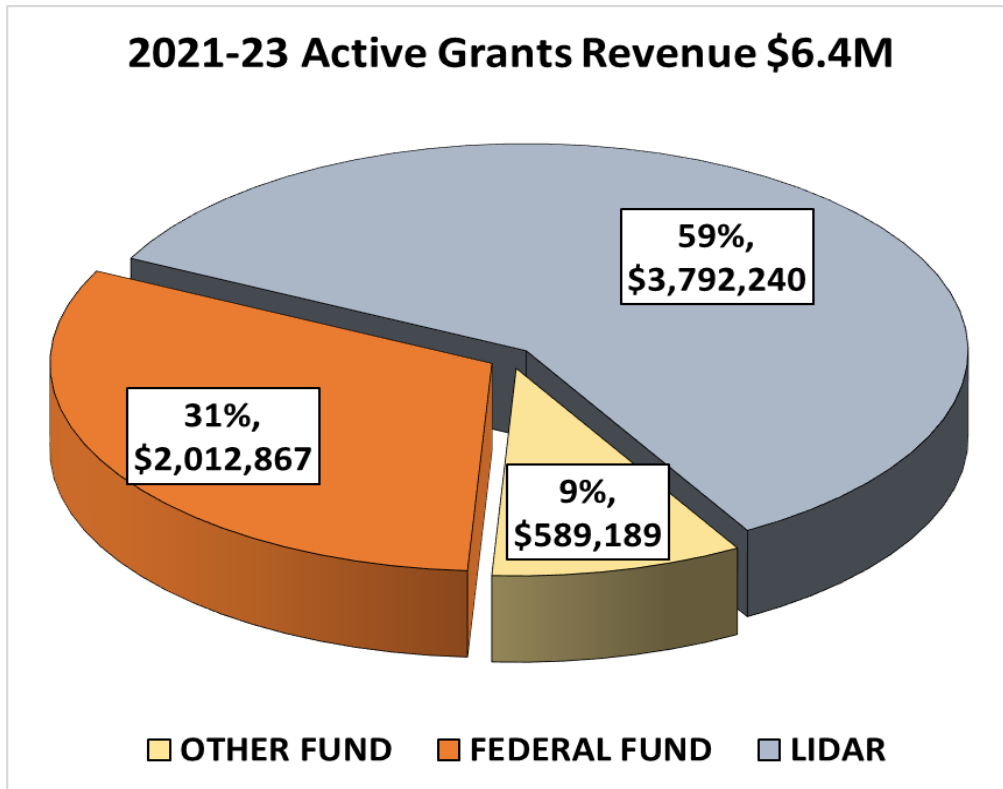
## Grant Funding to Geological Survey (GS&S) Federal Funds and Other Funds

- Grant awards provide staff salary and research funds
- New grants added each year as existing grants are drawn down.
- Grant award periods may cover several years.



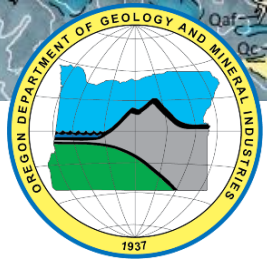


# GS&S Grants Revenue - Funding Mix Trend

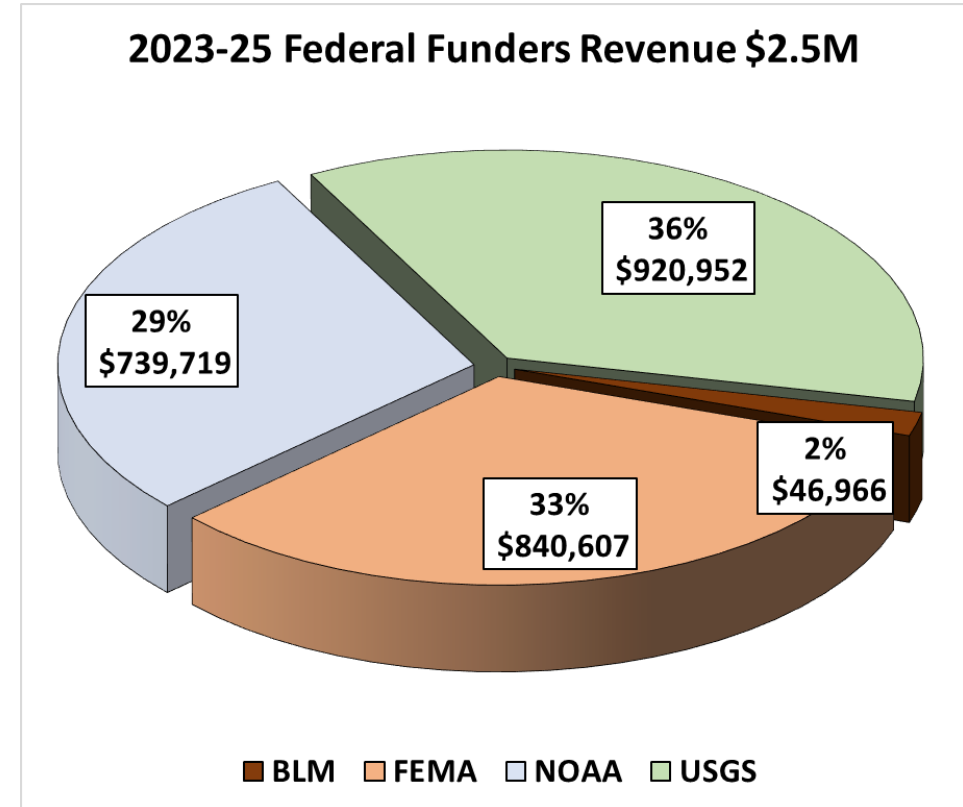
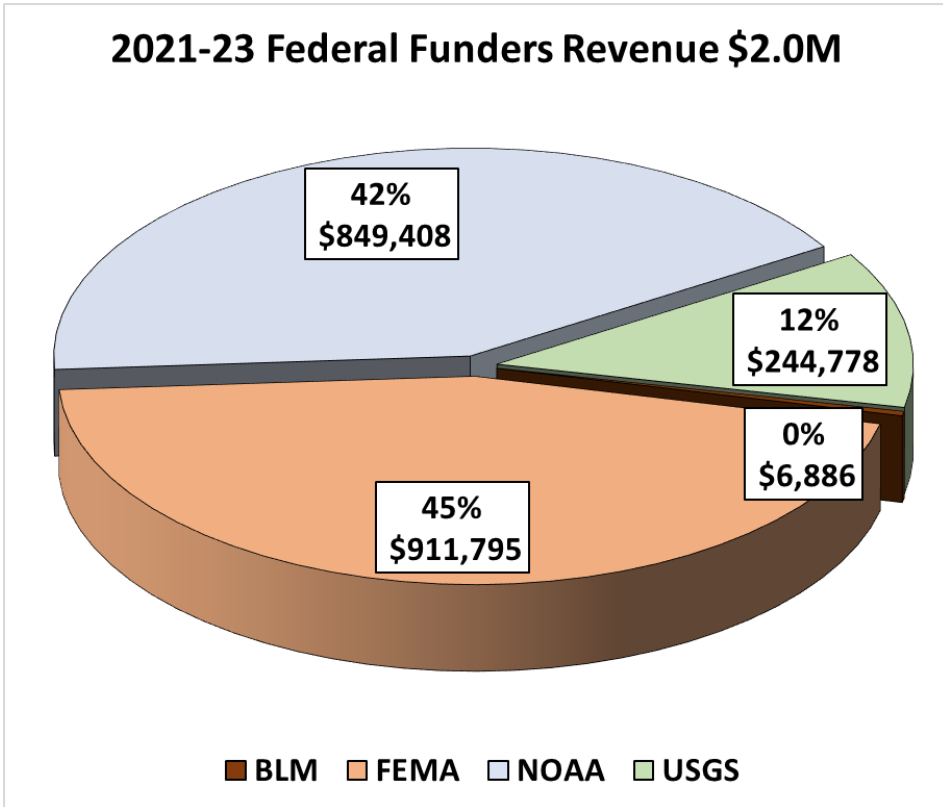


These are the 2023-25 projections.

Actuals include December 2024,  
and forecast the remainder.



# GS&S Non-Lidar Federal Fund Revenue - Funders Mix Trend



Major Grant Proposals (pending)

- \$108k USGS Geologic Data Preservation (FY25)
- \$640k USGS STATEMAP Geologic Mapping (FY25)
- \$100k USGS Landslide Hazard Reduction (FY25)
- **\$1800k US DOE Minerals (FY25-28)\***
- **\$350k US DOE Minerals (FY25-27)\***
- \$300k NOAA/NWS and NTHMP\*\*
- \$850k – FEMA CTP RiskMap Program\*\*

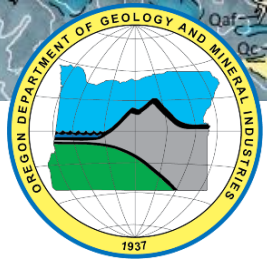
Actuals to December 2024, projection to biennium end

[Project Selections for FOA 3077: Regional Scale Collaboration to Facilitate a Domestic Critical Minerals Future: Carbon Ore, Rare Earth, and Critical Minerals \(CORE-CM\) Initiative – Round 1 | Department of Energy](#)

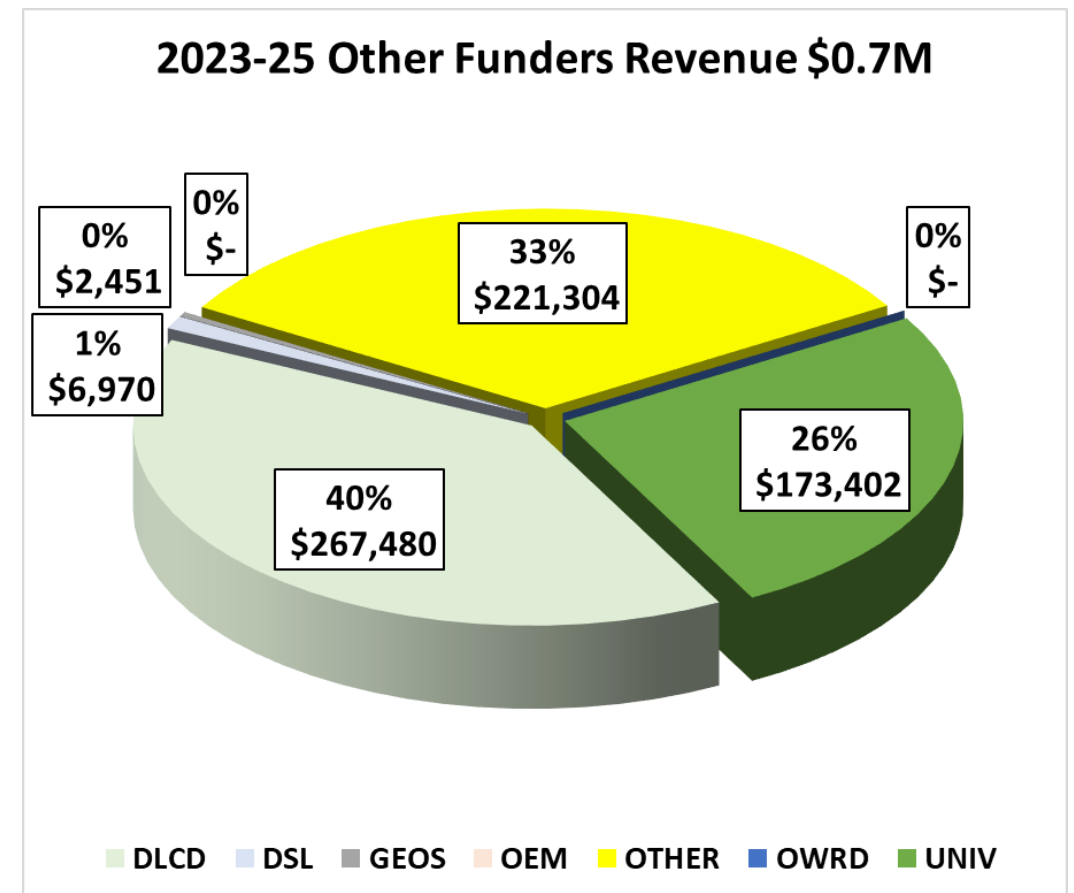
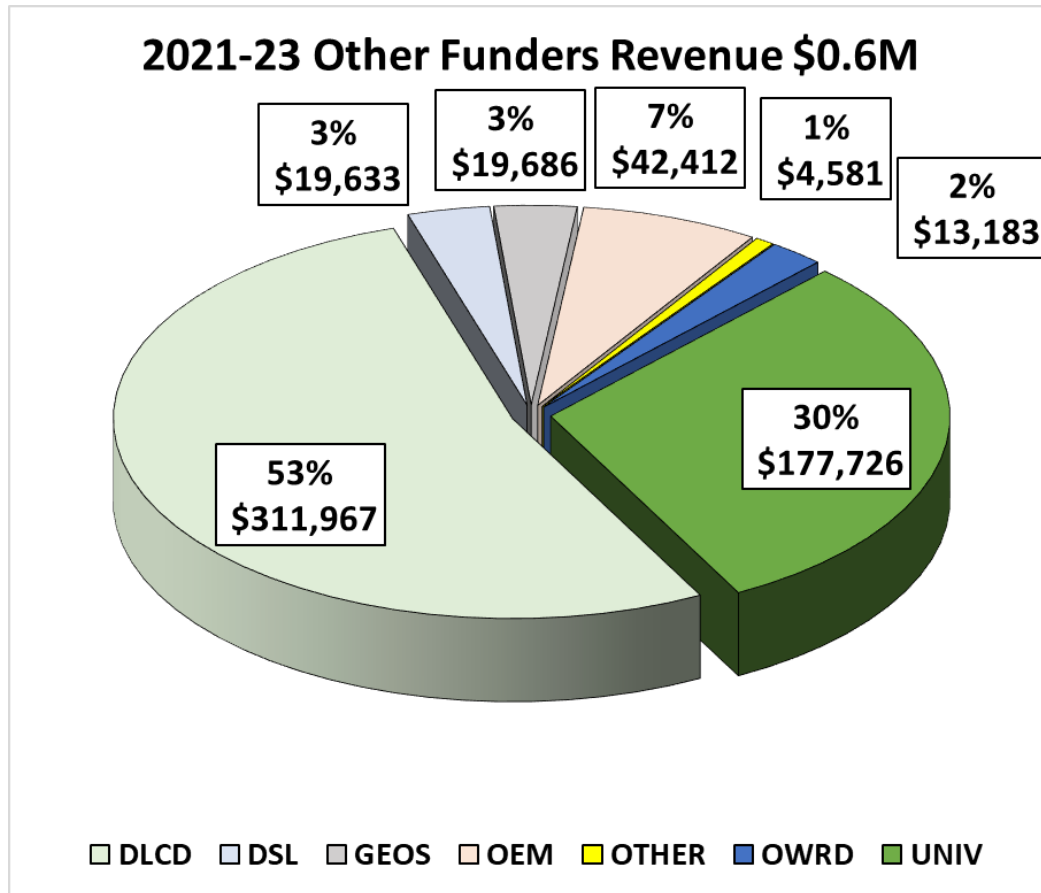
[DOE Announces Over \\$32 Million to Increase Efficiency of U.S. Critical Minerals Production Through the Co-Manufacture of Value-Added Products](#)

\* - In Award Negotiation; \*\* - estimated amount, grant proposal in process

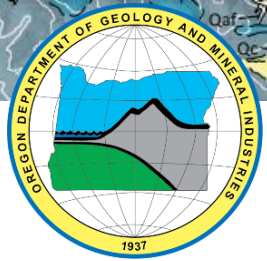




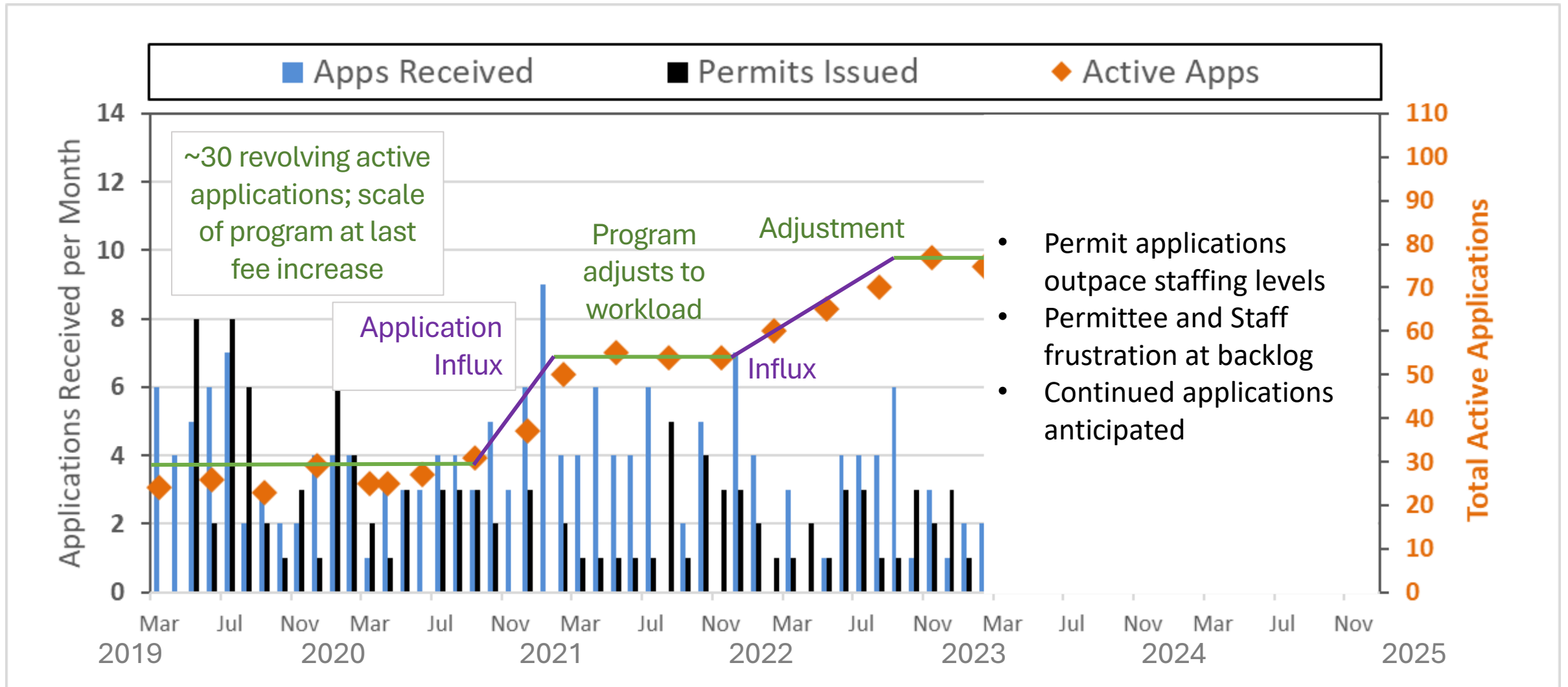
# GS&S Non-Lidar Other Fund Revenue - Funders Mix Trend



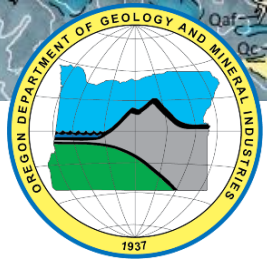
Break out of "Other" includes:  
Ames National Lab, DEQ, Oregon DOE, ODF, OPRD



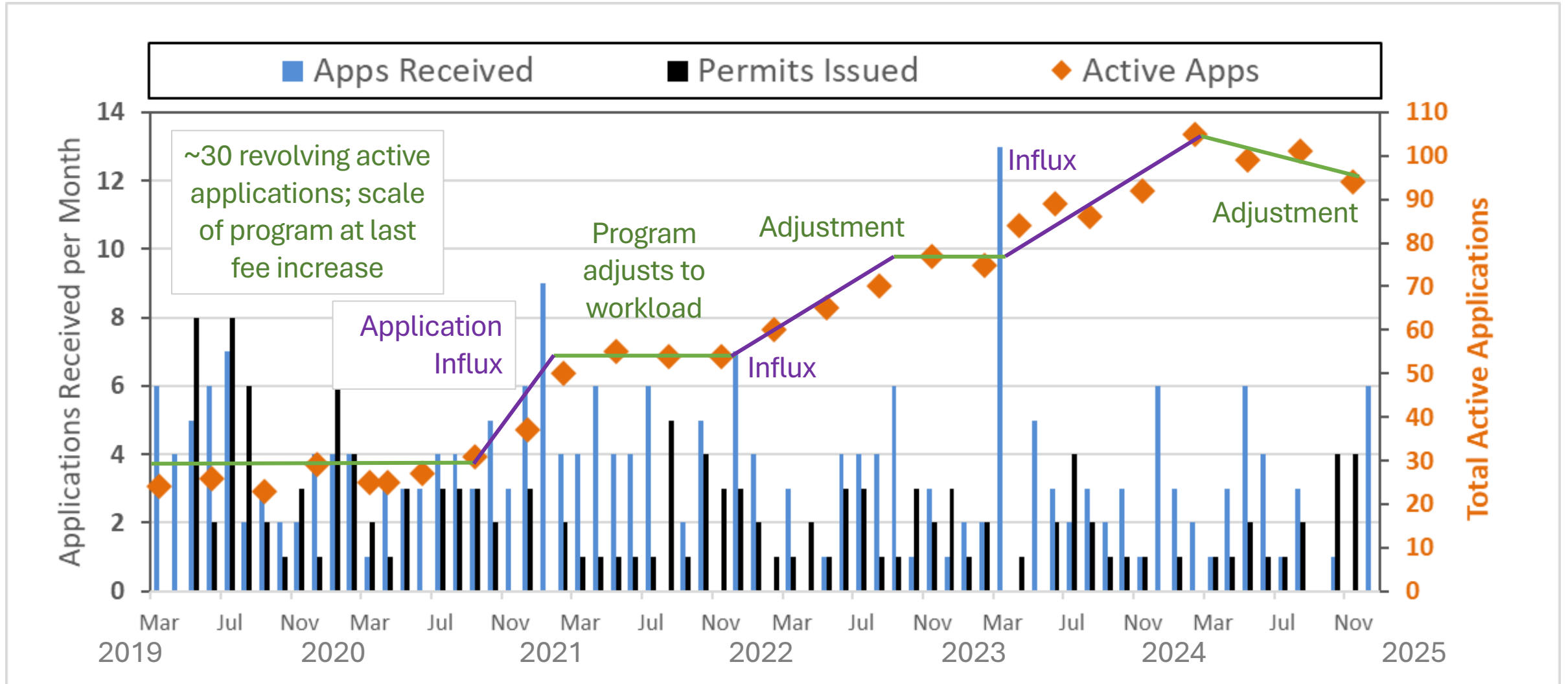
# Application Processing Exceeds Regulatory Timelines

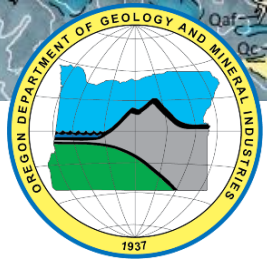




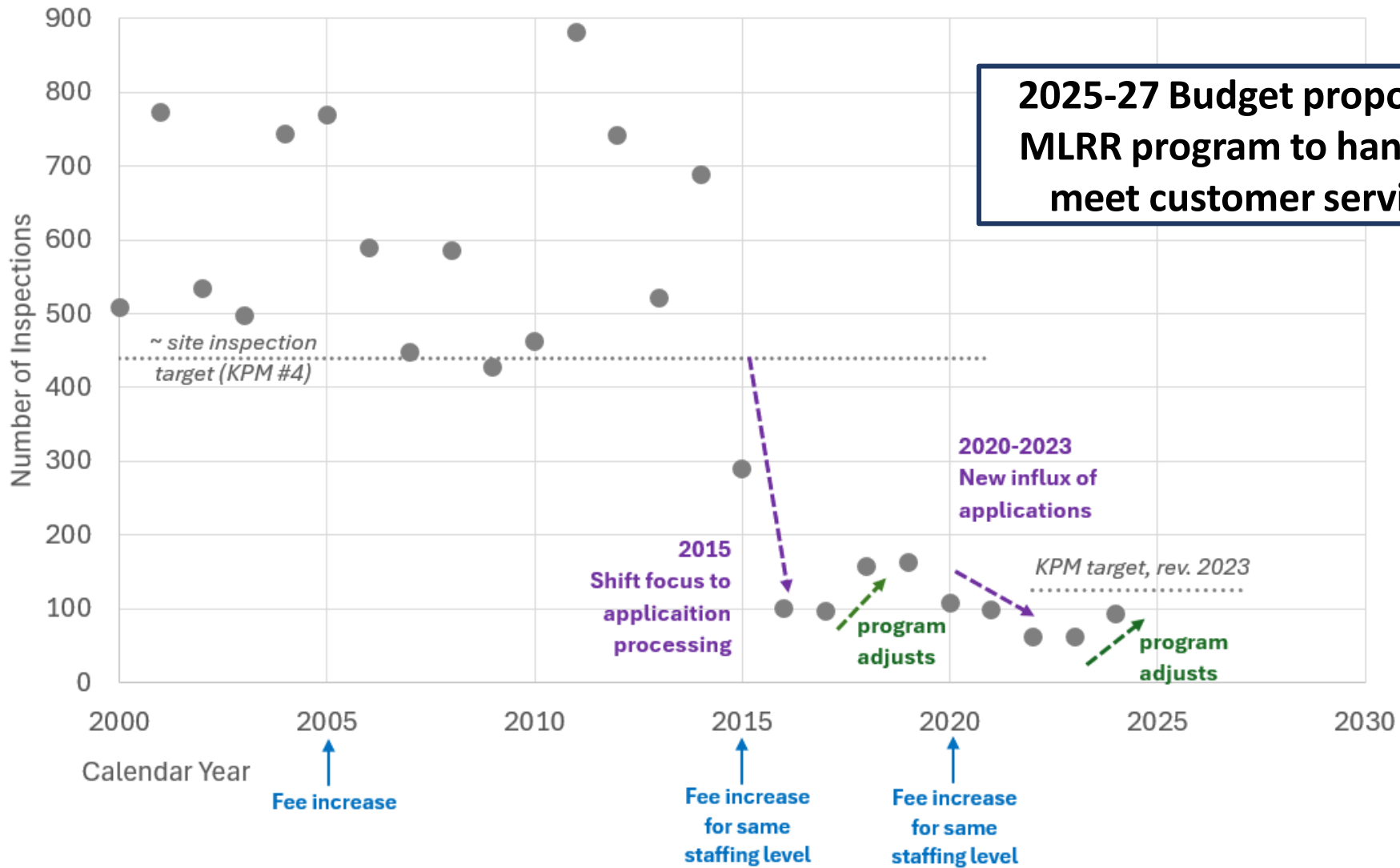


# Application Processing Exceeds Regulatory Timelines



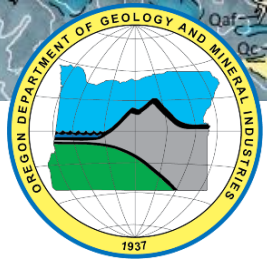


# Site Inspections Fall Short of KPM 4

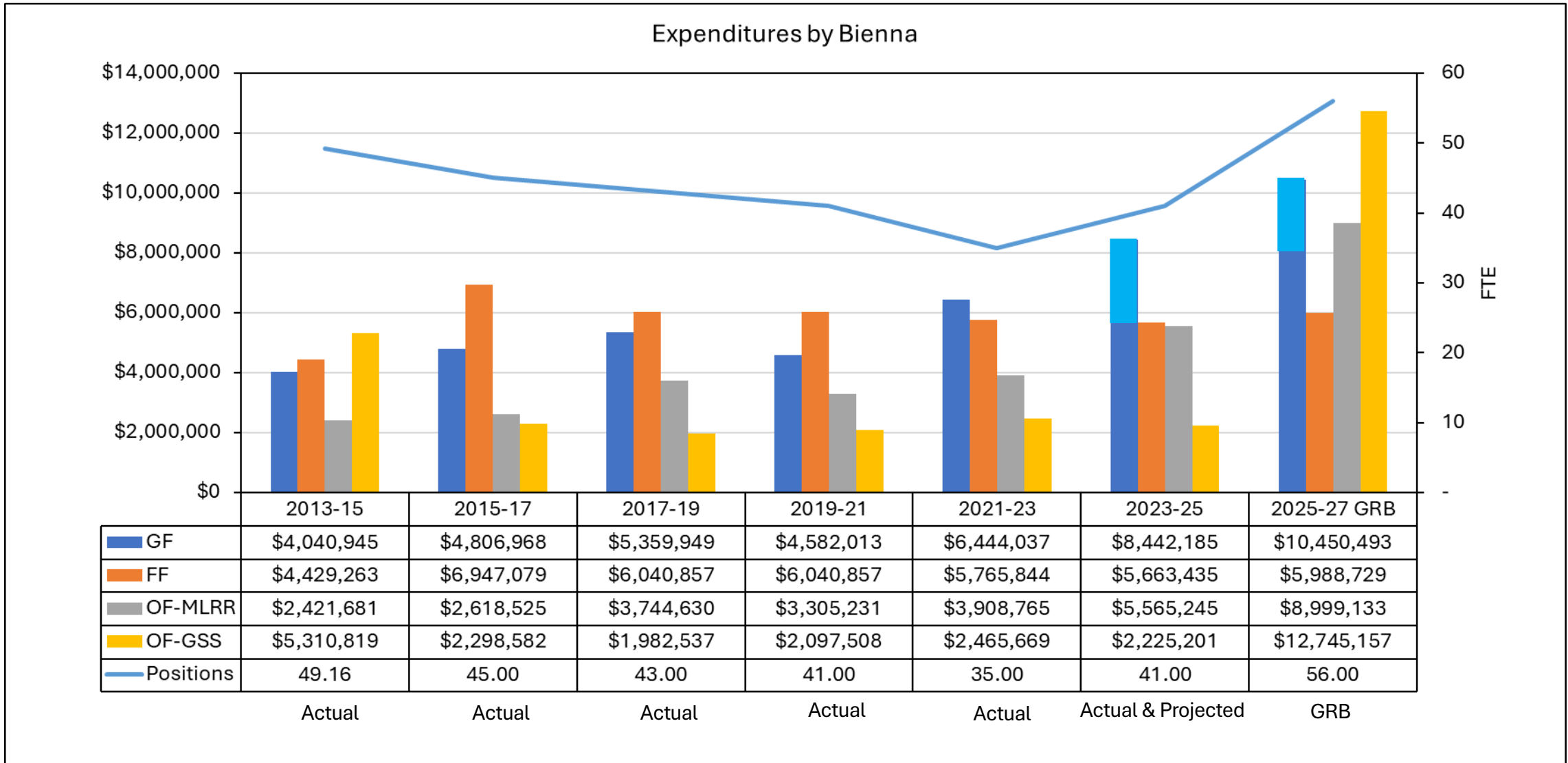


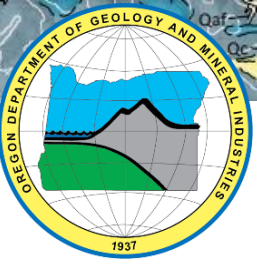
**2025-27 Budget proposes right-sizing of MLRR program to handle workload and meet customer service expectations**





# Biennial Agency Expenditures and Staffing (FTE) History





# Budget Drivers, Risks & Information Technology

## Information Technology

- ePermitting, modernize customer interface and improve customer service

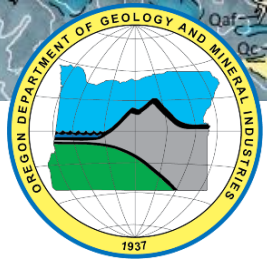
## Budget Drivers

- Advance Geological Carbon Sequestration in partnership with Department of State Lands (DSL) and Department of Environmental Quality (DEQ)
- Correctly size the Mineral Land Regulation & Reclamation Program
- Build and Implement ePermitting
- Match Federal Funds
- Grow the Geologic Mapping Program focused on Water and Mineral Resources

## Risks

- Complete uncertainty in Federal Appropriations

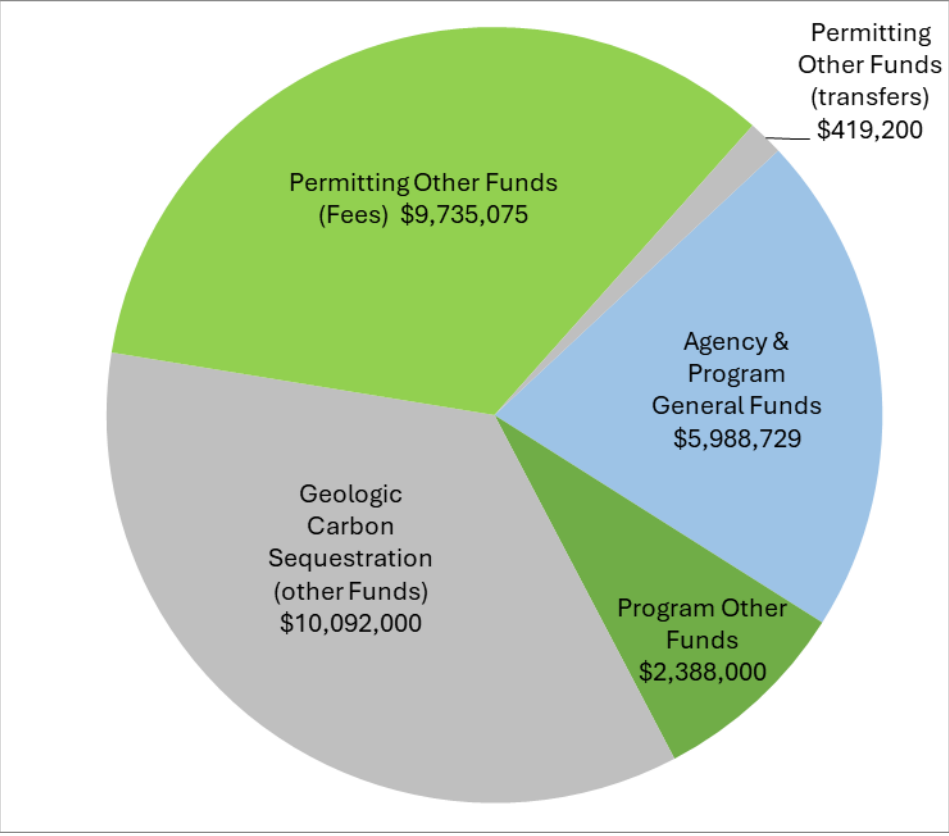
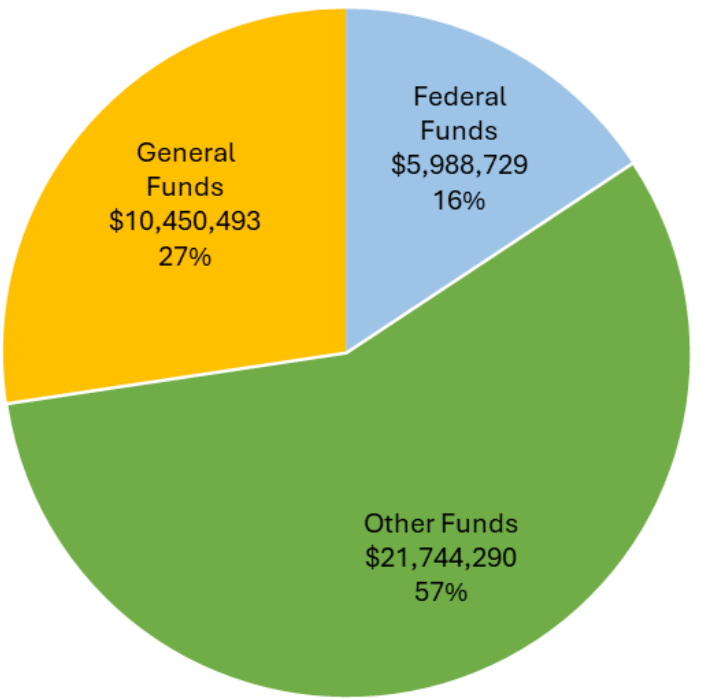




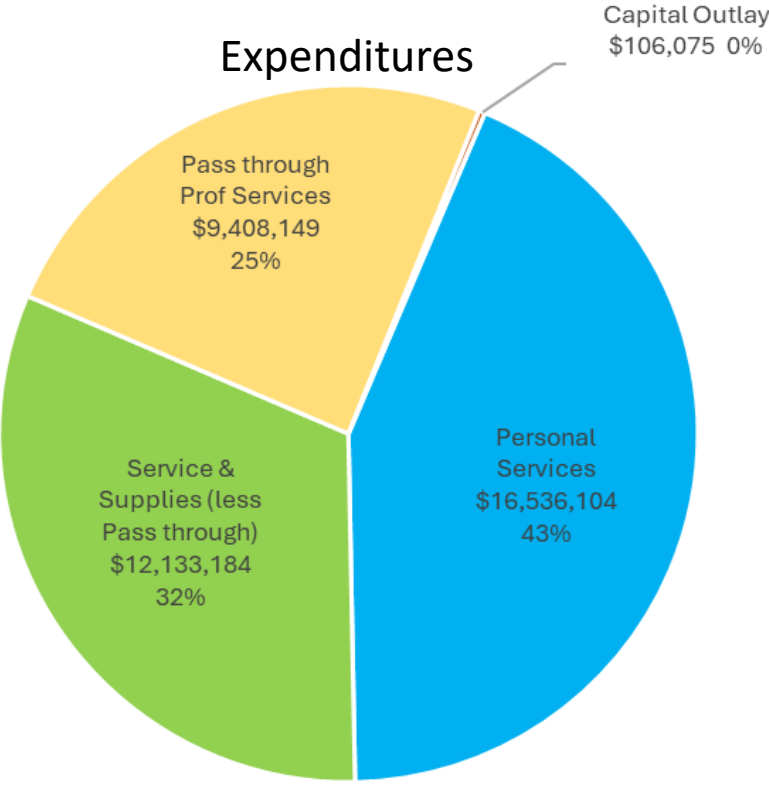
# Governor's Recommended Budget 2025-2027

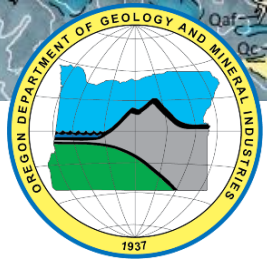
## Federal and Other Fund Revenue Detail

### Revenue by Fund Type



### Expenditures





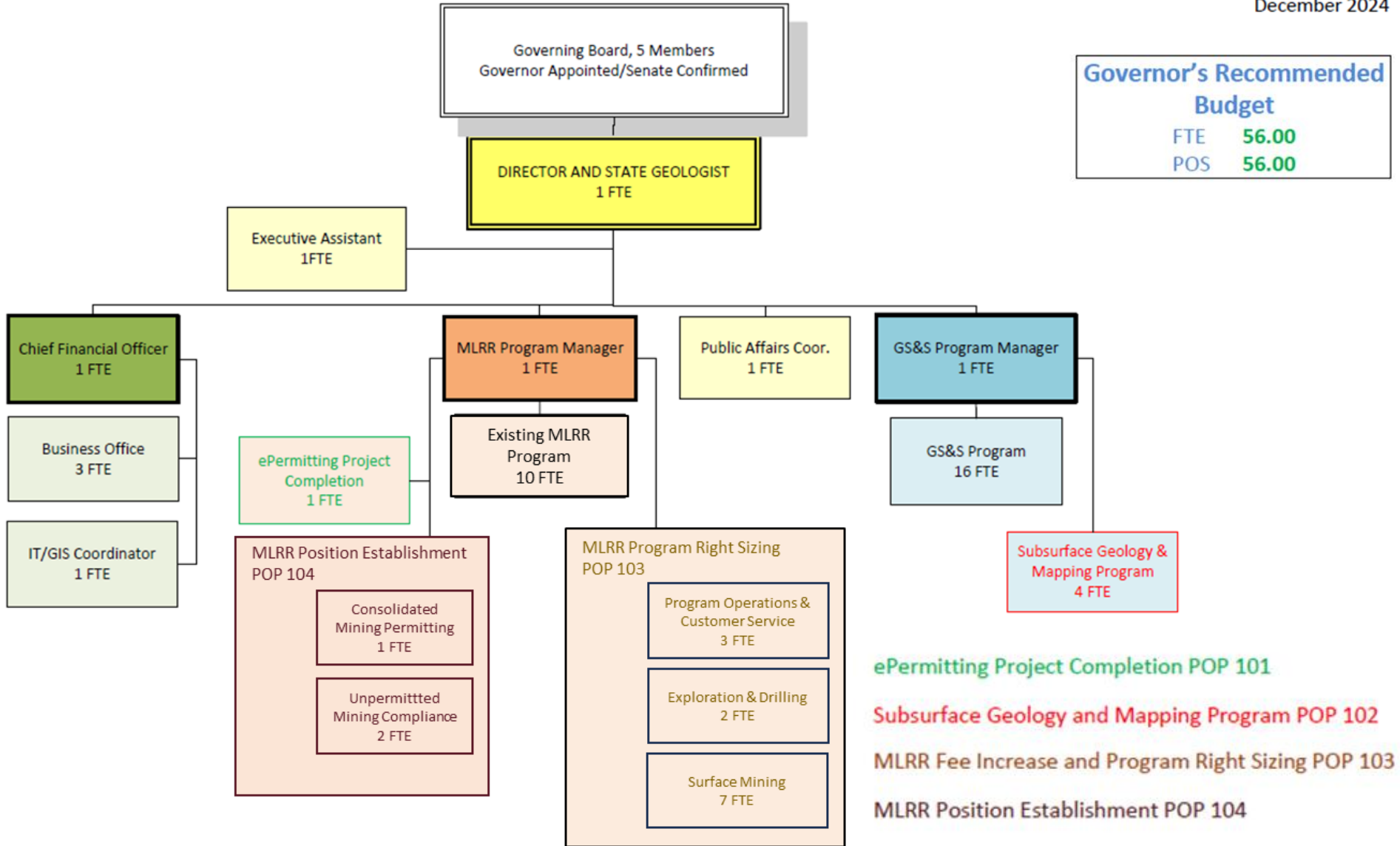
# OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

## PROPOSED

AY 25-27

December 2024

Governor's Recommended Budget	
FTE	56.00
POS	56.00



ePermitting Project Completion POP 101

Subsurface Geology and Mapping Program POP 102

MLRR Fee Increase and Program Right Sizing POP 103

MLRR Position Establishment POP 104







# MLRR Position Establishment: POP 104

**Goal:** Meet existing and anticipated workload by making limited duration positions permanent in key areas:

**Consolidated Permitting:** DOGAMI is coordinating a complex multi-agency Consolidated Application for Chemical Process Mining. For the first time, an application has reached the permit drafting phase.

- 1.0 FTE (existing LD), Consolidated Mining Permit Lead (NRS 4), make permanent

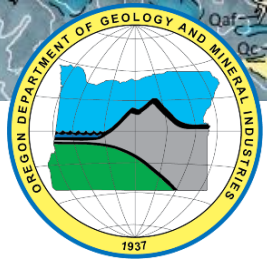
**Mining Compliance:** DOGAMI works with permittees toward voluntary compliance prior to formal enforcement

- 1.0 FTE (existing LD), Mining Compliance Coordinator (NRS 3), make permanent
- 1.0 FTE (existing LD), Permit Specialist (NRS 2), make permanent

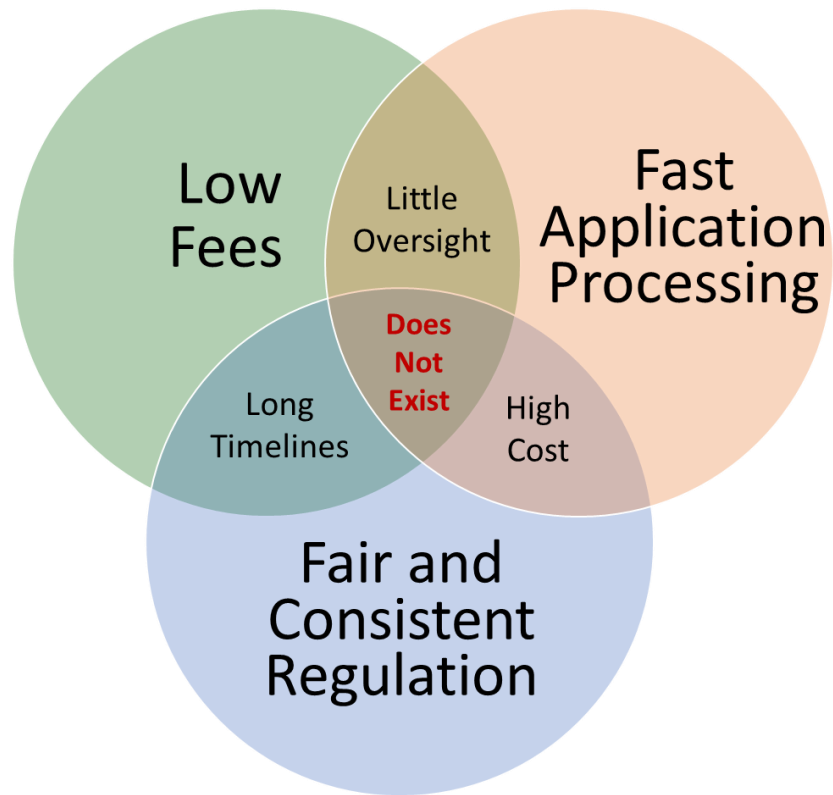
**Revenue Sources:** Other Fund: \$923,682 (existing fees and cost-recovery)

**Results:** This work will support KPMs 4 and 5: increasing the percent of mine sites inspected and ensuring good customer service from the agency.





# MLRR Program Right-Sizing: POP 103



**Goal:** Administer a regulatory program that balances environmental management with economic development, allowing the state to meet its infrastructure and housing goals.

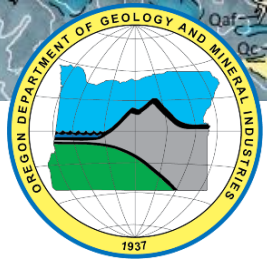
**Structure:** 12 positions, including field inspection staff, technical experts, customer service specialists and supervisory staff to fully support identified priorities for drilling, exploration and surface mining permits.

## Revenue Sources:

- Other Fund: \$3,313,507 (Fee-Increase SB 836)

A strategic expansion of the MLRR program is needed to meet regulatory and customer service needs.

**Results:** This work will support KPMs 4 and 5: increasing the percent of mine sites inspected and ensuring good customer service from the agency.



# MLRR Program Right-Sizing: POP 103

## Dedicated Drilling Program – 2 FTE (Oil & Gas, Geothermal, and Exploration Well Permits)

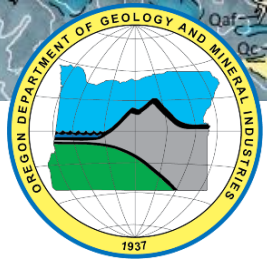
## Improved Surface Mining Outcomes – 7 FTE (Operating Permits & Exclusion Certificates)

- **4 Field Inspectors/Permit Specialists** will meet site inspection target (20%) in 2026 and exceed KPM target in 2027. A revised target will be proposed for 2027-29.
- **3 Reclamationists** will add technical expertise and reduce individual application workload to meet regulatory timelines for permit application processing by 2028.

## Operational Efficiency and Timely Customer Service - 3 FTE (Program-wide)

- **Decrease agency response time** to public and permittee general inquiries
- **Improve** training and outreach materials for **permittees and the public**
- Facilitate program-wide **alignment of regulations and practices**, last reviewed in 2009
- Additional supervisory position promotes staff retention and **improves operational functionality**, including oversight of ePermitting.





# Geologic Carbon Sequestration Pilot Project: POP 102

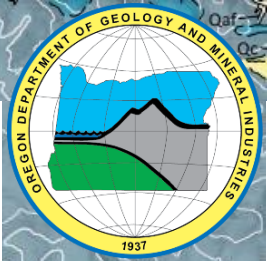
**Goal:** Volcanic rock in eastern Oregon, the Willamette Valley and the Columbia Basin provide an opportunity to investigate if geologic carbon sequestration is viable for Oregon as we encourage private-sector investments to meet 2050 climate goals.

The Governor, with the support of the State Land Board, is recommending in her budget a pilot investment for the state to explore if underground carbon capture and storage is right for Oregon.

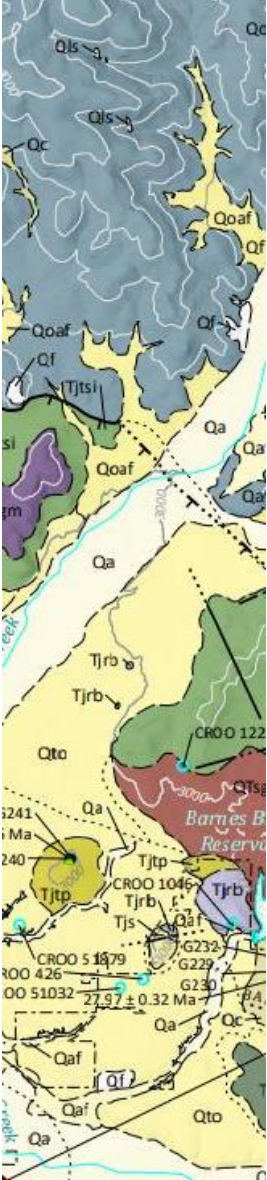
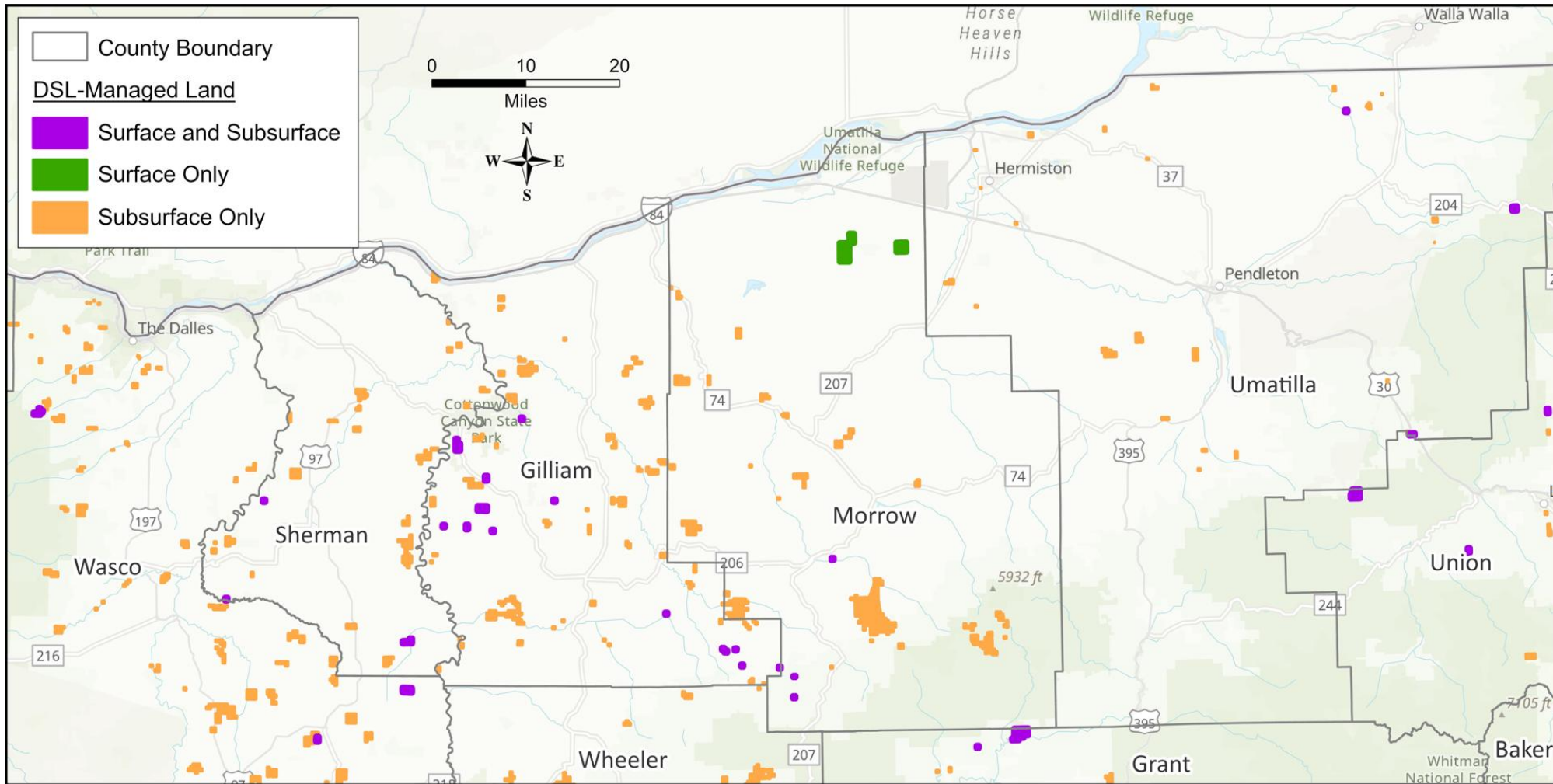
- 4 FTE to manage project, well drilling, permitting.
- Majority of other funds to drilling costs, data acquisition.

**Revenue Sources:** Other Fund: Up to \$10M (See DSL POP 217)

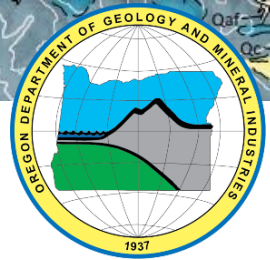
# Geologic Carbon Sequestration Pilot Project: POP 102



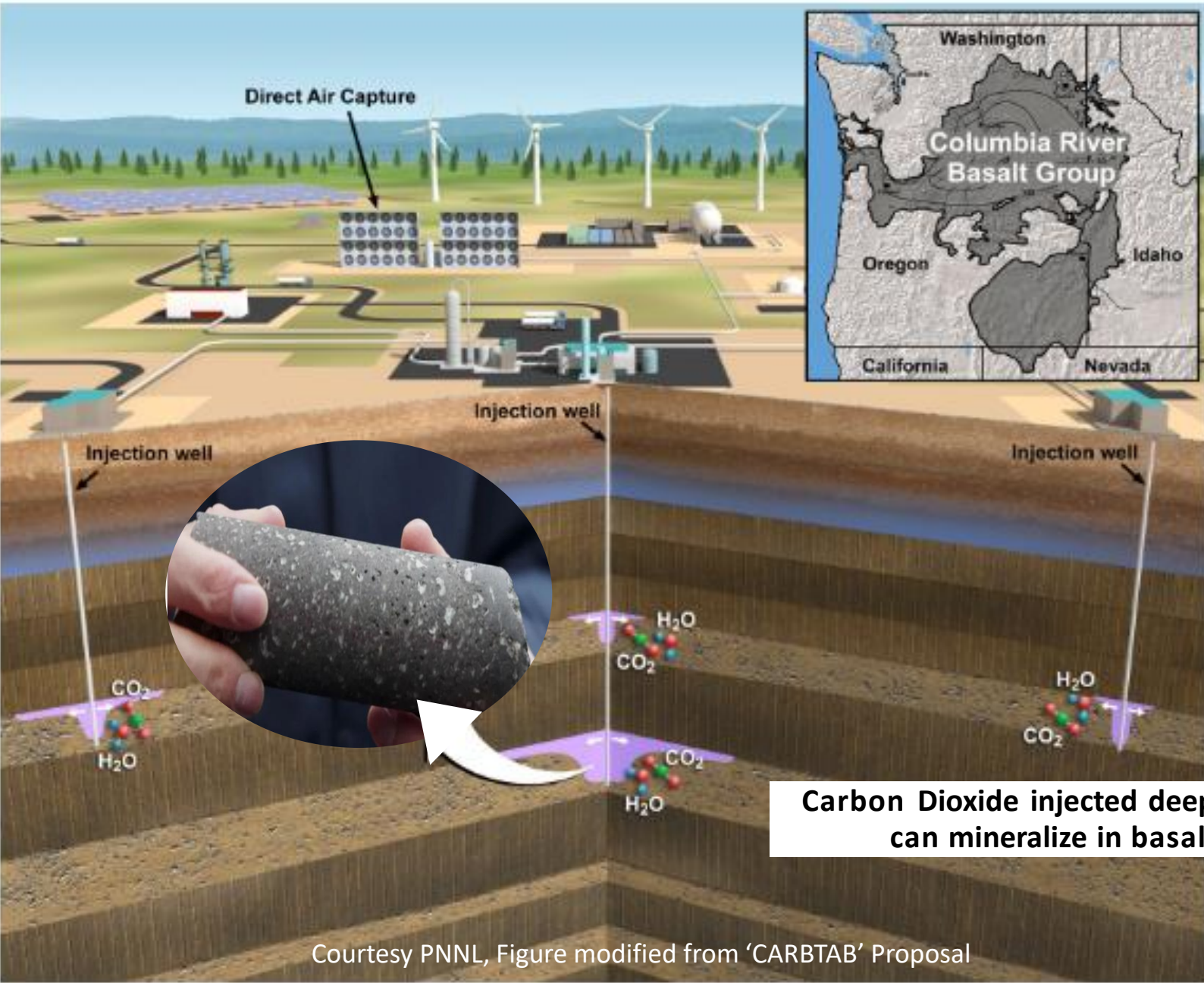
State Lands in NE Oregon







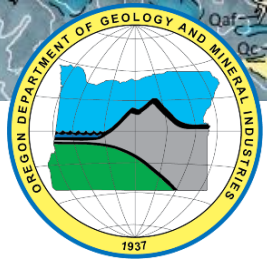
# CO<sub>2</sub> Storage in Columbia River Basalt



**Carbon Dioxide injected deep underground can mineralize in basalt rocks.**

Courtesy PNNL, Figure modified from 'CARBTAB' Proposal

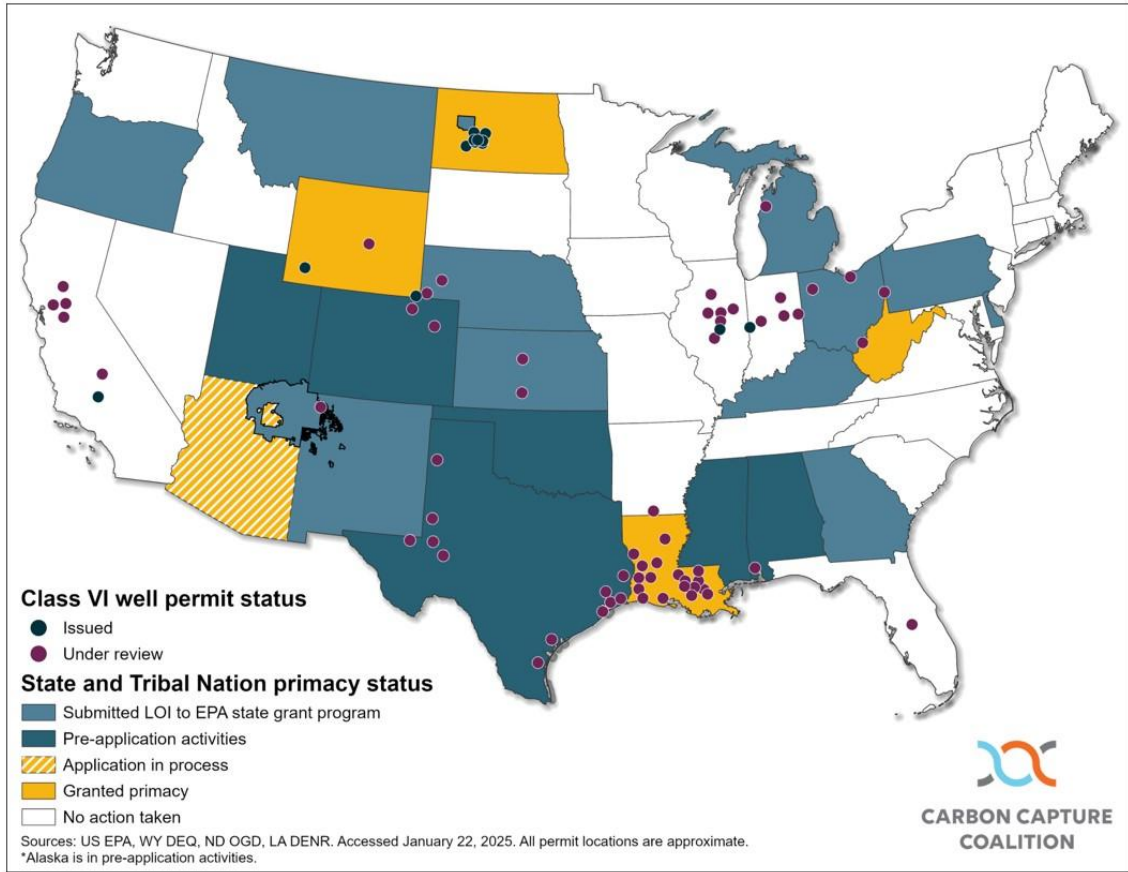




# Regulatory Pathway for Underground Injection Control



Regulated by US EPA Underground Injection Control (UIC) Well Class VI

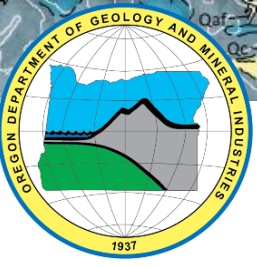


EPA allotted \$48m to States who expressed interest in exploring **Class VI** primacy

Oregon is eligible for \$1.93 million from an EPA grant **to develop a regulatory framework.**

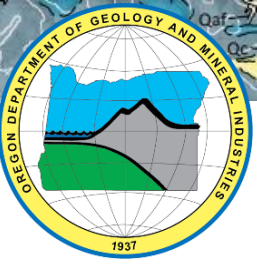
DOGAMI and DEQ are coordinating around potential regulatory pathways for proposed projects in Oregon.





# 2025-27 Governor's Recommended Budget

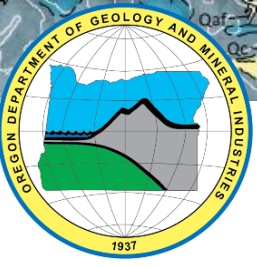
Bill #	BILL SUMMARY
<b><u>HB5010</u></b>	<b>Relating to the financial administration of the State Department of Geology and Mineral Industries; declaring an emergency.</b> Appropriates moneys from General Fund to State Department of Geology and Mineral Industries for biennial expenses.
<b><u>SB836</u></b>	<b>Relating to fees imposed by the State Department of Geology and Mineral Industries.</b> Establishes fees for permit applications and renewals in the Mineral Land Regulation & Reclamation Program.



# Long-Term Vacancies

- DOGAMI has no positions that qualify for long-term vacancy status.
- 2023-24 was an exceptionally successful period in hiring for vacant positions. **Why?** Legislative action and workload necessitated hiring.
- **Result?** An increase in the number of Staff with Registered Geologist Licenses in Oregon and/or an advanced degrees.





# Budget Summary

2025-27 Governor's Recommended Budget:

- Minimal General Fund increase.
- Advance Geologic Carbon Sequestration research.
- Adjust Mineral Land Regulation & Reclamation (MLRR) Program to meet Stakeholder needs.
- Build IT infrastructure to enhance customer service and agency transparency.
- Maintain the agency strength in geological mapping and hazard mitigation.



