Presenters



Alexander Lopez III, RG



Megan Schettler, RG



Paul Edison-Lahm

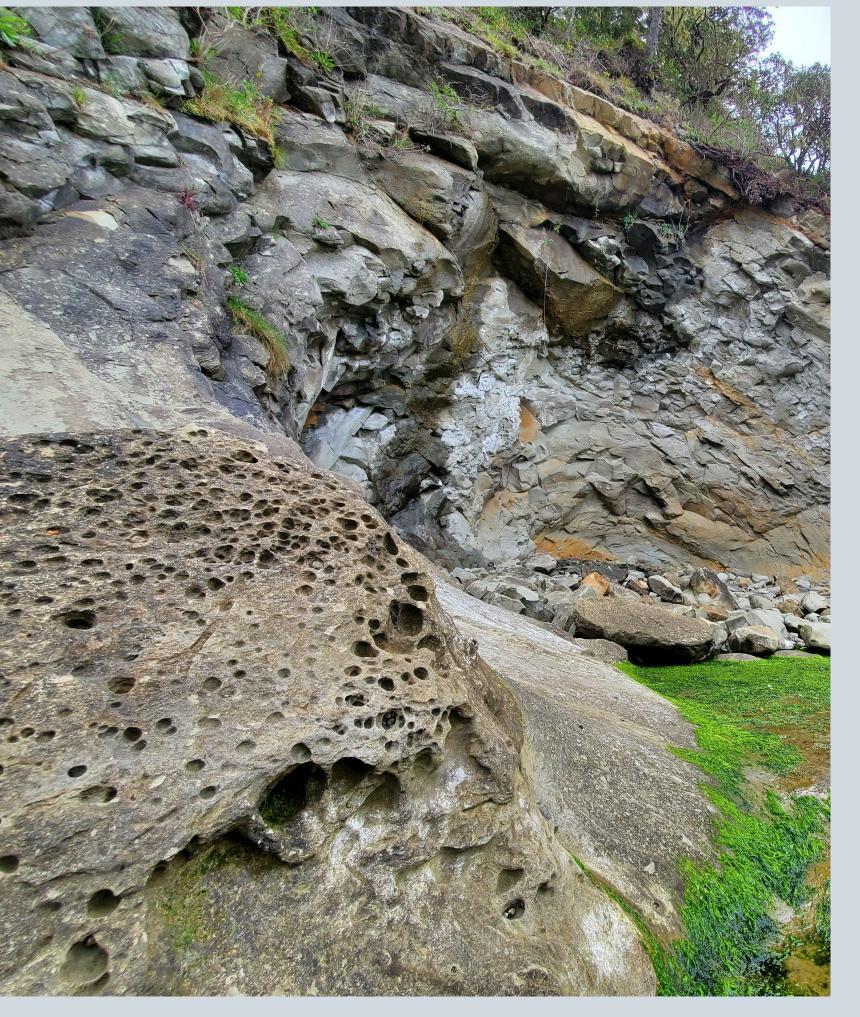


Christine Valentine



Geology Moment

WHAT ROCK AM I?







Sandstone

HONEYCOMB WEATHERING FROM SALT WEATHERING AND BIOFILMS
CONCRETIONS FROM GROUNDWATER-DEPOSITED CALCIUM CARBONATE

Shore Acres State Park

Coos Bay, Oregon





Licensing for Geology Careers in Oregon





Oregon State Board of Geologist Examiners Professionals in Service to Oregonians Since 1977

What do we have to offer today?

- ✓ Introduction to the Oregon State Board of Geologist Examiners (OSBGE)
- √ Why does registration (i.e., licensure) exist?
- ✓ What can registration do for you?
- ✓ What is the pathway to registration?

- 1 OSBGE
- 2 History and Importance of Licensure
- Registration Types
- Benefits of Licensure
- How to Become Licensed



OSBGE Purpose

Assuring the safety, health, and welfare of Oregonians with regard to the public practice of geology



OSBGE Function

- ✓ Register
- ✓ Promote ethics
- Respond to complaints
- ✓ Perform outreach
- ✓ Provide education
- Cooperate with related boards



OSBGE Members and Staff



Ericka Koss, RG, CEG, PE Chair



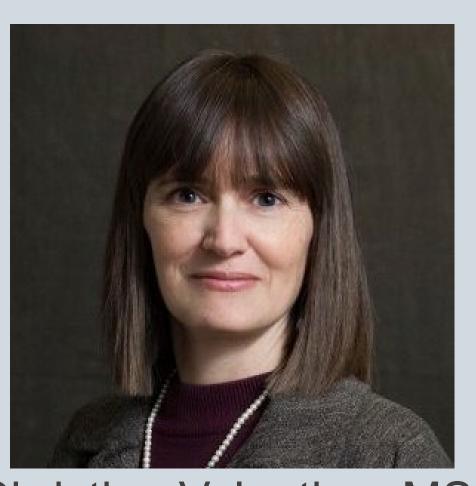
Megan Schettler, RG Vice Chair



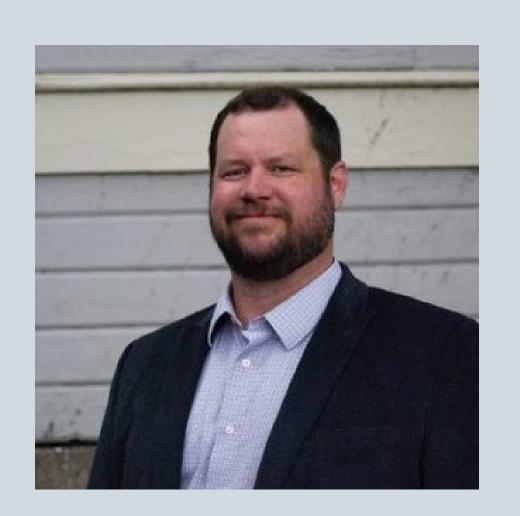
Ruarri Day-Stirrat, PhD Ex Officio Member



Cindy Bartlett, RG Registrant Member



Christine Valentine, MS Staff Administrator



Adam Reese, RG, CEG Registrant Member



Marilou Arrobang, BS Staff Registration Specialist



Paul Edison-Lahm, Public Member

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Laws governing practice of geology in Oregon enacted 1977

- ✓ Establish minimum standards of competency
- ✓ Create legal

 responsibility for work

 performed
- ✓ In order to protect the health, safety, property, and welfare of the public

Oregon Administrative Rules <u>Chapter 809</u>
Oregon Revised Statutes <u>672.505 to 672.991</u>

Public Practice in Oregon

Who must be registered?

Those who perform geological service or work related to public welfare or safeguarding of life, health, property, and environment

Who is exempted?

- ✓ Federal or tribal employees
- ✓ University professors
- ✓ Subordinates to RGs and CEGs
- Private citizens providing testimony at public hearings

How to Establish Competence?

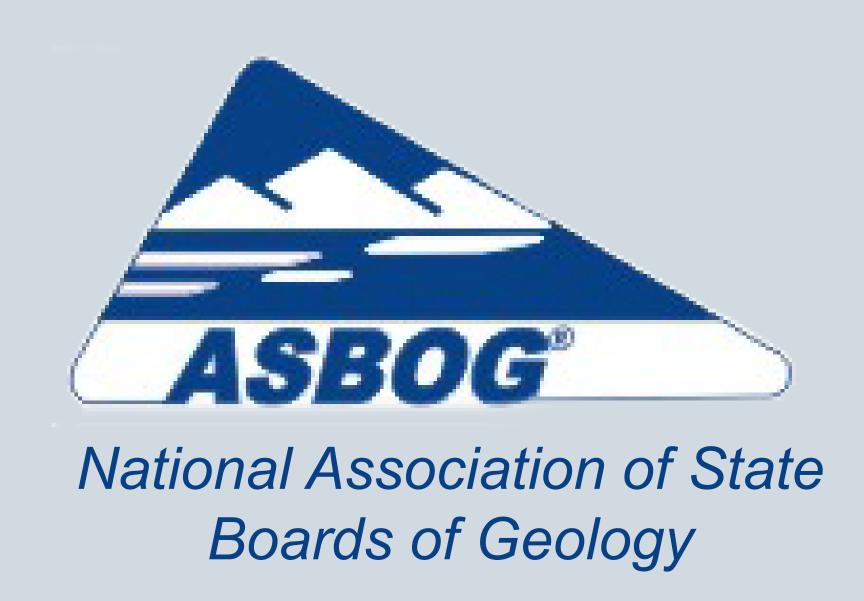
Each state board makes their own requirements. Generally:

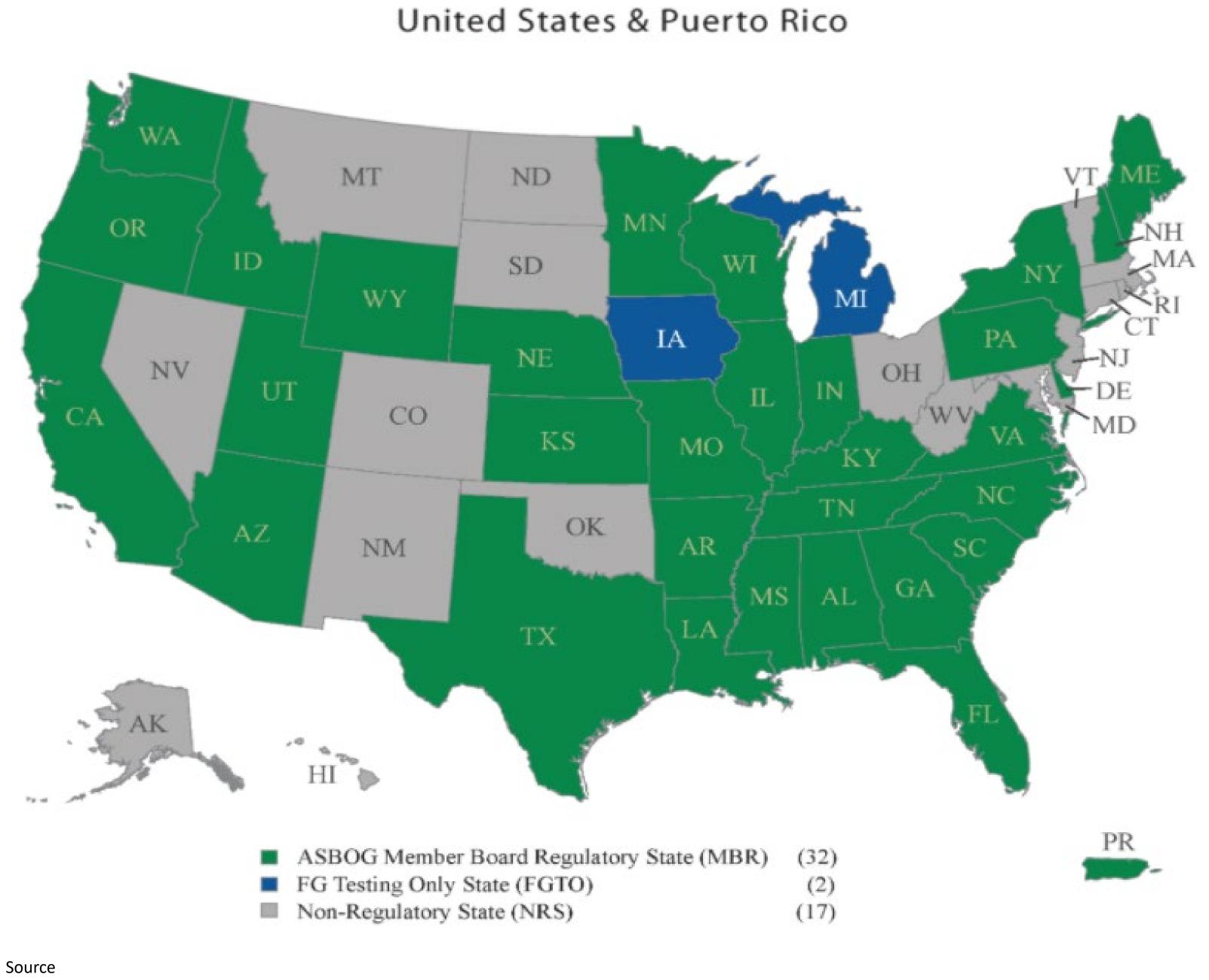
- ✓ Post-secondary education
- ✓ Experience
- ✓ Pass two national exams
- ✓ Additional exam for specialty licenses



National Association of State Boards of Geology (ASBOG)

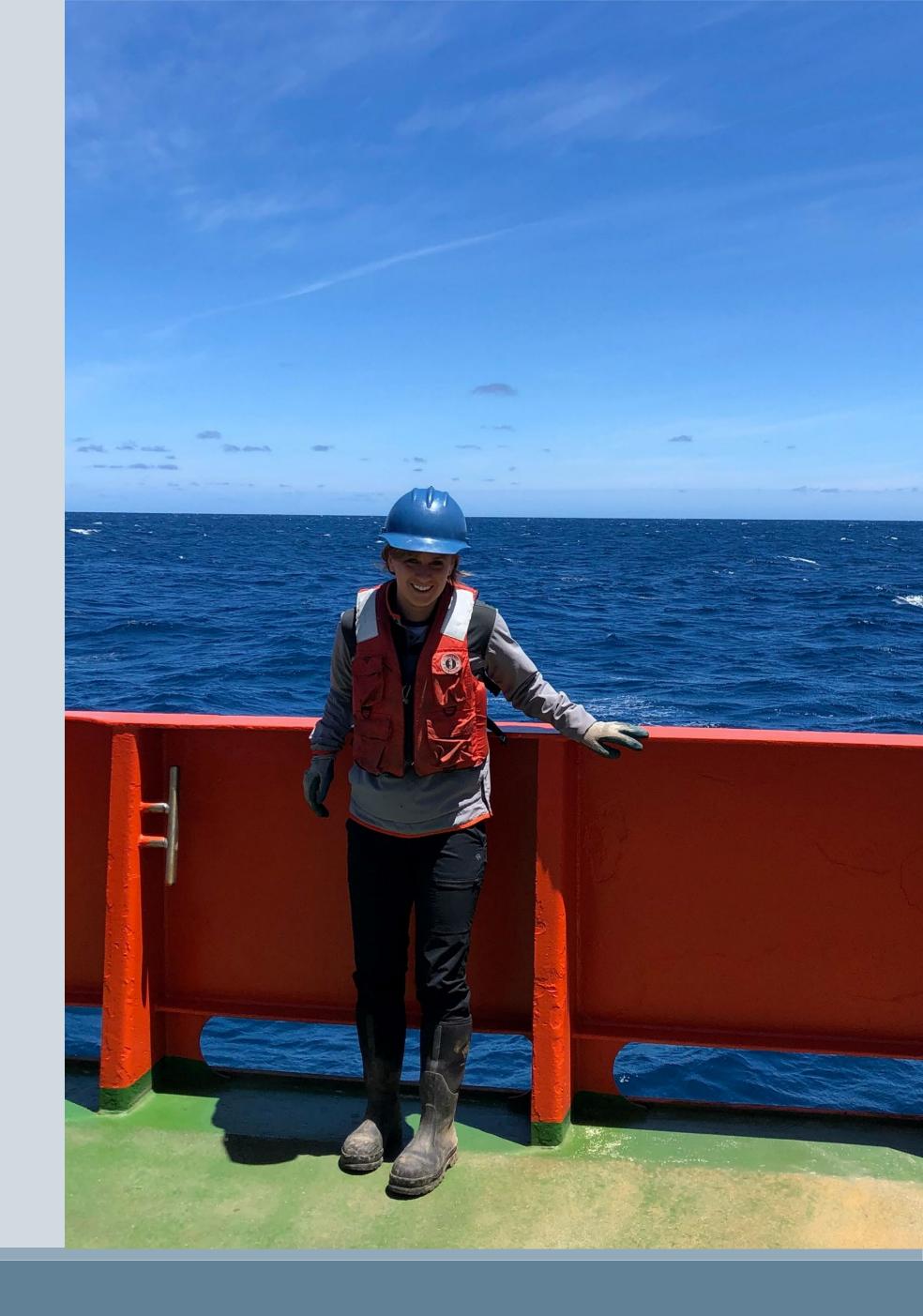
- ✓ A separate entity from the Board
- ✓ ASBOG does not grant licenses; they are an examination body
- ✓ ASBOG Council of Examiners meets twice per year to review exam sections
- ✓ Two exams:
 - Fundamentals of Geology (FG)
 - Practice of Geology (PG)





Required in 32 member states & Puerto Rico. Oregon has been a member since 1990.

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Registration Types in Oregon

Geologist-in-Training (GIT)

Registered Geologist (RG)

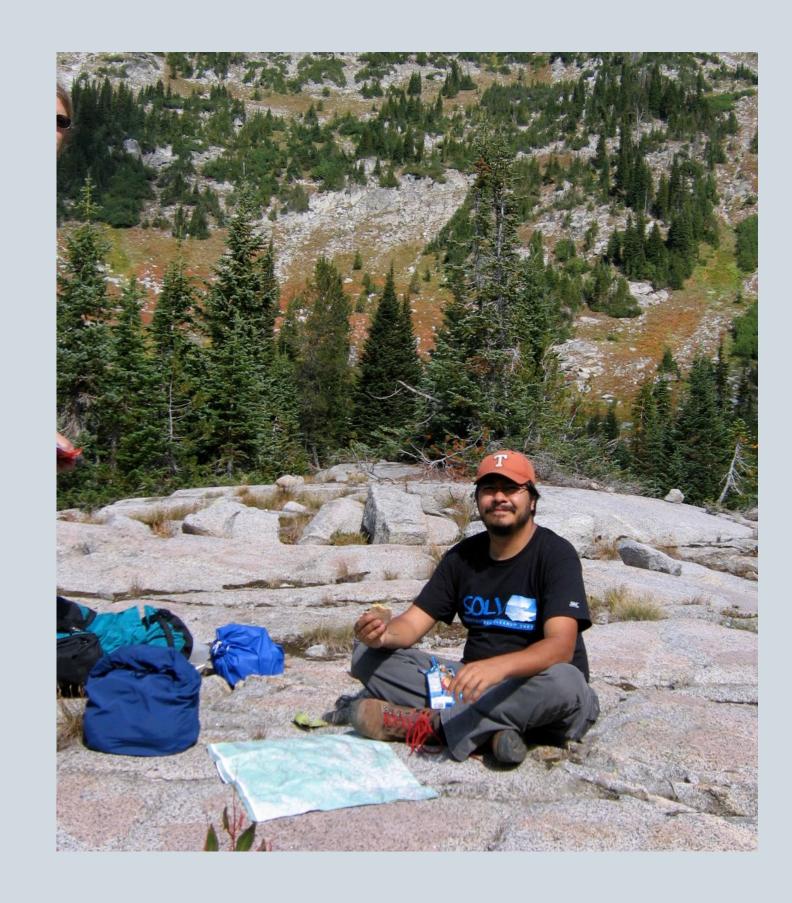
Certified Engineering Geologist (CEG)

Specialty License



Geologist-in-Training (GIT)

- ✓ Education + pass the FG
- ✓ Optional; title use registration
- ✓ Not a practice registration (i.e., must work under supervision of RG or CEG)
- Subject to code of professional conduct
- Stepping-stone to RG license



Geologist-in-Training (GIT)

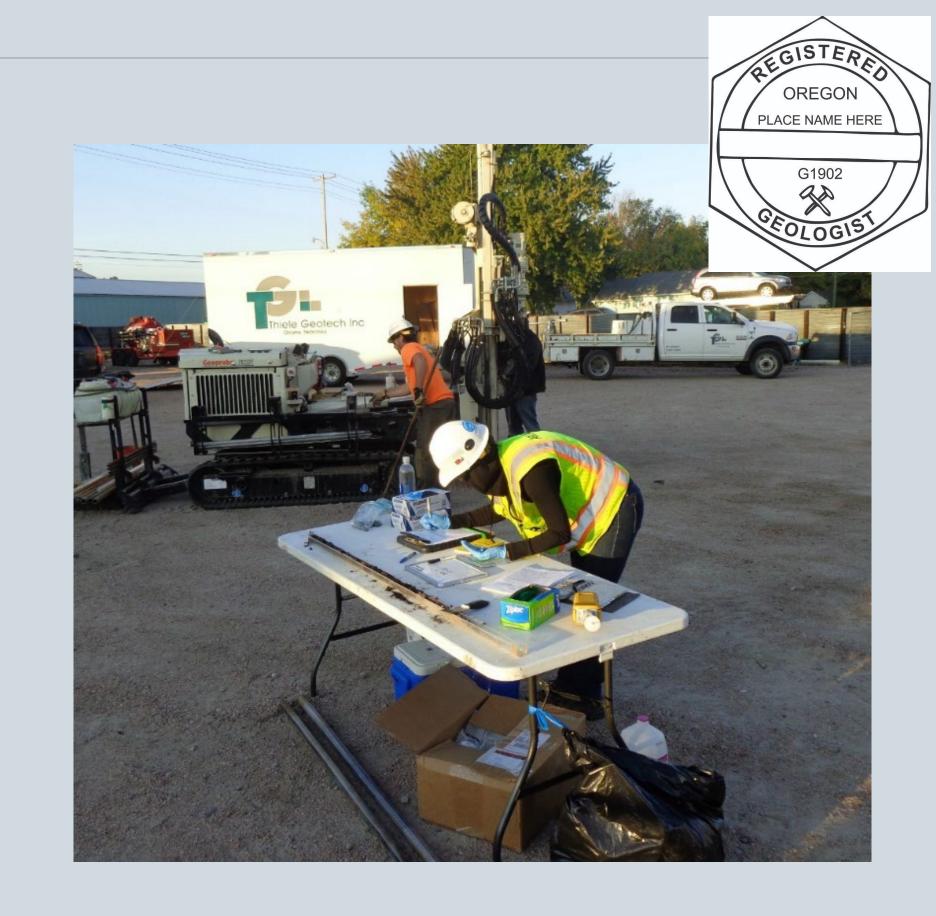
So... what's the point?

- ✓ Show intent
- ✓ Build technical competence
- ✓ Understand regulations
- ✓ Spread out 8 hours of exams
- ✓ Prepares you for format of next exam



Registered Geologist (RG)

- ✓ Education + experience + pass the FG + PG
- ✓ Independent public practice in responsible charge
- ✓ Can stamp, sign, and date reports
- Can advertise that they are registered geologists



Certified Engineering Geologist (CEG)

- ✓ Pass FG + RG + specialty exam
- ✓ CEGs must be RGs first
- ✓ Additional authorization to develop,
 supervise and stamp work that falls under
 the definition of engineering geology
- Bridge foundation, landslide repair, residential dwellings



Oregon Statistics:

103 GITs

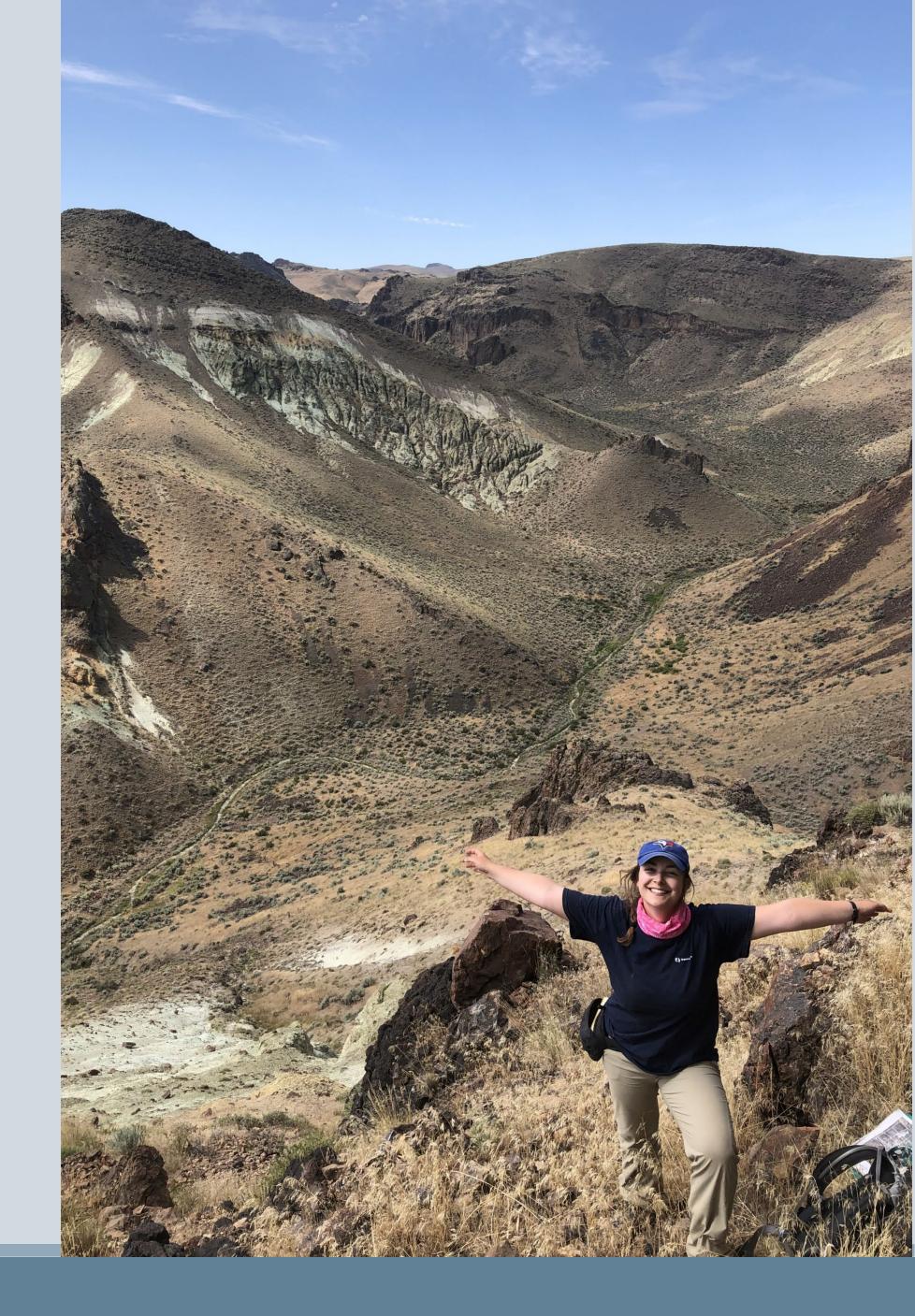
982 RGs

206 CEGs

~50% of RGs and CEGs are out of state



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What can licensure do for me?

- ✓ Required in the majority of U.S. states
- ✓ Increases career opportunities and independence
- Demonstrates professional responsibility and increases credibility
- √ Financial incentive

Preferred Qualifications:

- Master's Degree in Hydrogeology, Geochemistry, Geology, Environmental Science, or related field
- · Geologist-In-Training (GIT) or Registered Geologist (RG) license
- 2-4 years of environmental consulting experience
- Quantitative data analysis experience, including flow and transport models, statistical analysis, GIS, or scientific coding (R or Python)
- Current OSHA HAZWOPER 40 hr / 8 hr training

· Desired:

• + Prior project experience in the Pacific Northwest is highly desired.+ A Master's Degree in environmental science/hydrogeology, geology, geosciences, or similar field.+ Strong computer skills, including Microsoft Excel, Word, PowerPoint, Access, ArcGIS, MODFLOW, R, Python, etc.+ Strong project management experience of multi-disciplinary teams.+ Experience with environmental statistics and site closure strategies is highly desired.+ Professional Engineer (PE) and/or Professional Geologist (PG) and/or Licensed Hydrogeologist (LHg) and/or Certified Water Rights Examiner (CWRE).+

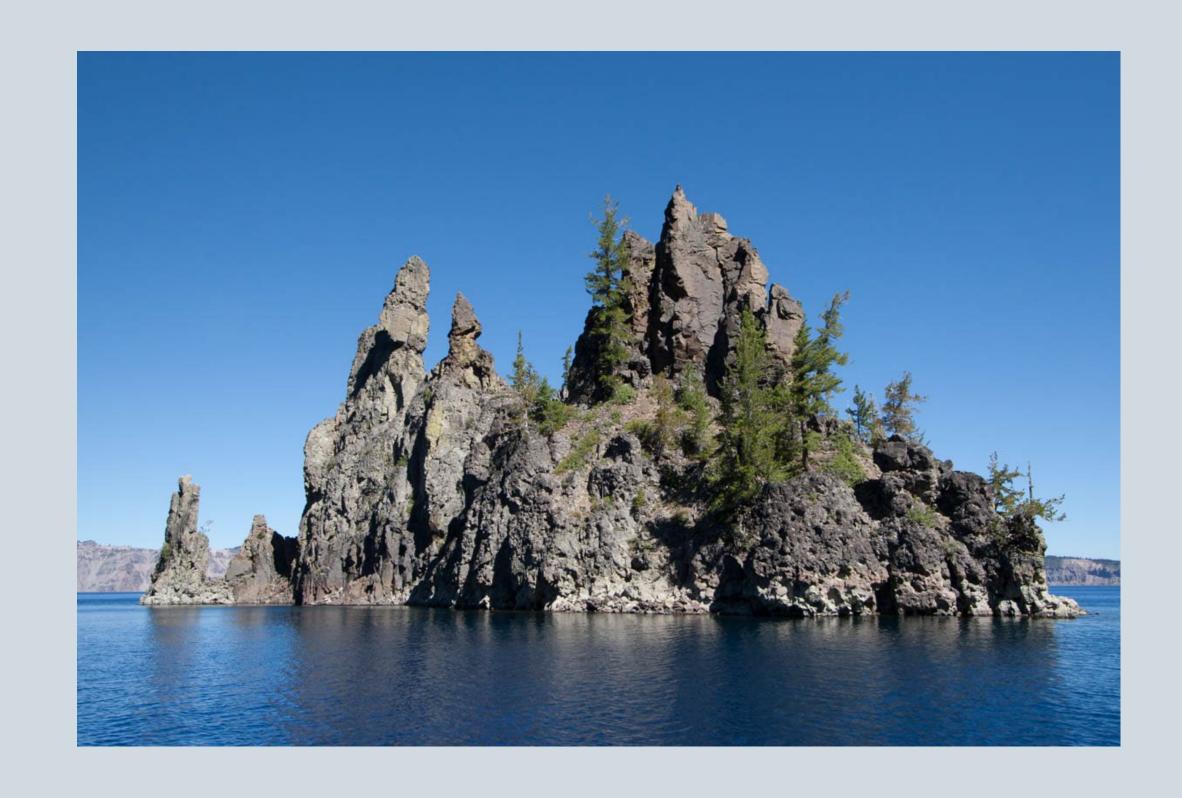
Other reasons people get licensed:

✓ I started on the academia track and decided to work in industry instead of finishing my PhD. Once here, I wanted to achieve the highest professional certification in our field: the RG.

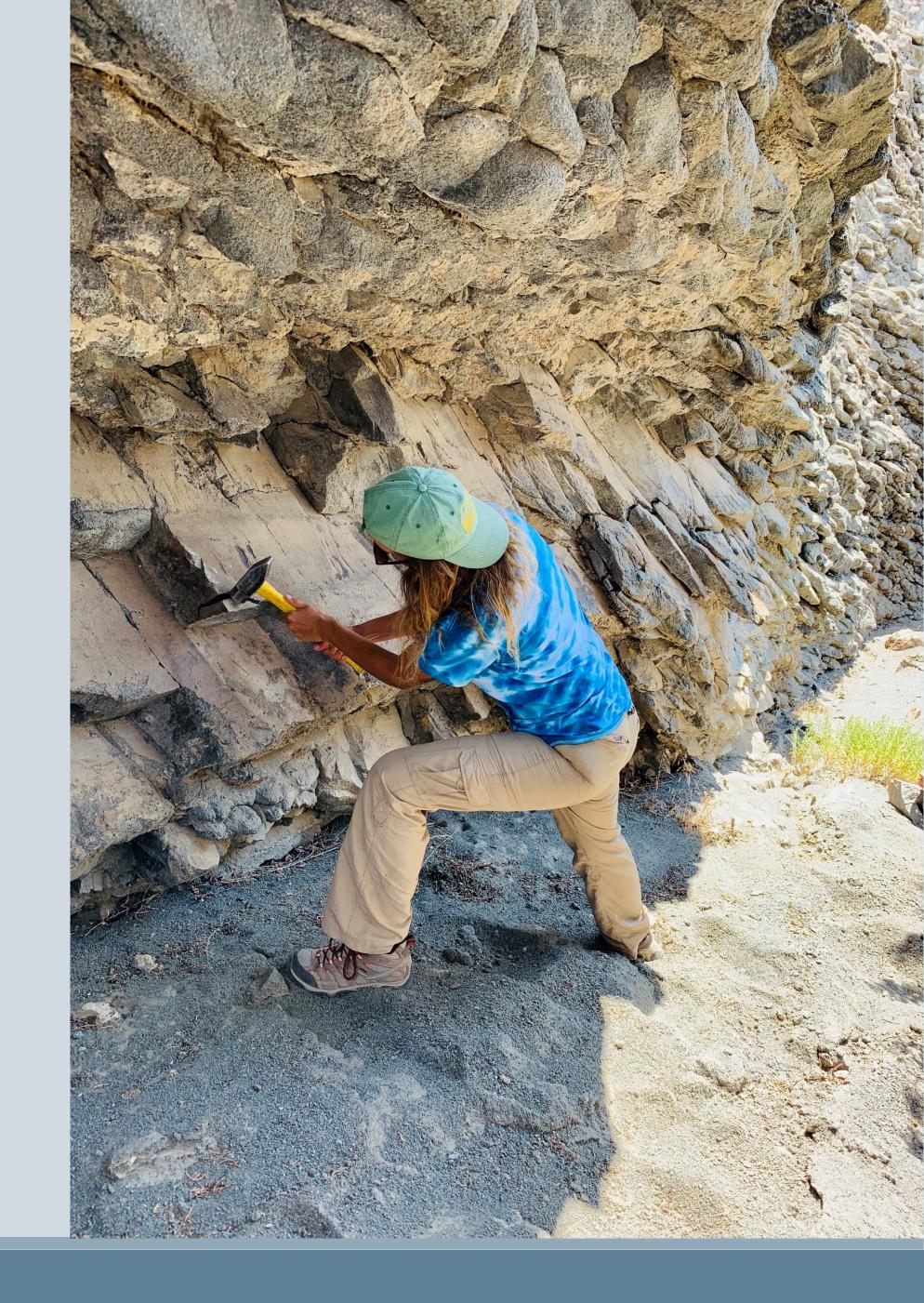


Other reasons people get licensed:

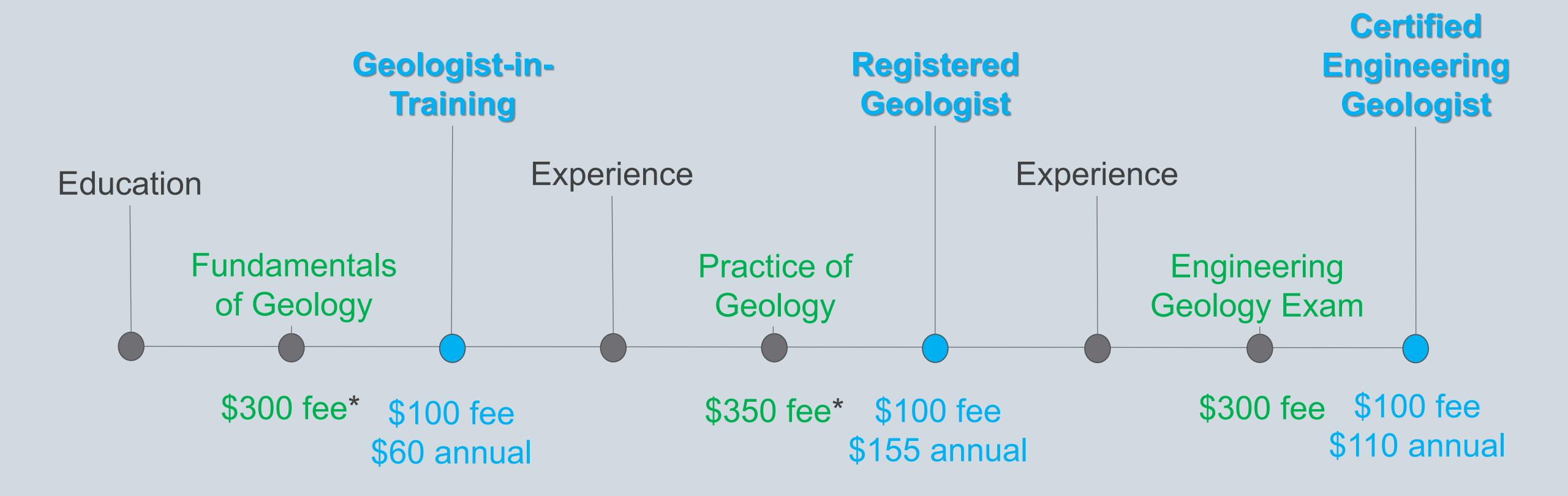
- ✓ I wanted extra credibility. I also needed to be able to stamp applications for well installations, so the RG expanded my job functions.
- ✓ I became licensed to make myself more marketable. I'm on a technical career track, and at a certain point I felt that wouldn't look good I weren't a licensed professional.



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Pathway to Registration in Oregon



Geoscience Coursework

45 quarter hours (36 upper division); 30 semester hours (24 upper division)

Climate change science

Coastal processes

Economic geology

Engineering geology

Environmental geology

Geochemistry or Hydrogeochemistry

Geographic Information Systems (GIS)

Geology field camp

Geology field methods

Geomorphology

Geophysics

Geostatistics

Glacial geology

Groundwater hydrology

Groundwater modelling

Historical geology

Hydrogeology

Lithology

Marine geology

Mineral exploration

Mineralogy, Optical mineralogy, or Clay

mineralogy

Paleopedology/Paleosols

Petrography

Petroleum geology

Petrology

Planetology

Remote sensing

Rock mechanics

Sedimentology

Seismology

Soil Science

Stratigraphy

Structural geology

Tectonics

Volcanology



Fundamentals Exam

- √ 4-hour exam
- ✓ 140 multiple choice questions
- ✓ Undergraduate knowledge and skills
- Can take immediately aftercompleting coursework OR...
- √ Pass FG → apply for GIT

Practice of Geology Exam

- √ 4-hour exam
- √ 110 multiple choice questions
- Knowledge and skills gained from practice
- After completing education + work experience
- ✓ Pass FG + PG → apply for RG

- √ Visit oregon.gov/osbge for application
- √ Visit asbog.org for exam information



Exams Offered Twice per Year

2022 Spring March 18 • 2022 Fall October 7

Applications due 100 days prior to exam¹

2023 Spring March 17 • 2023 Fall October 6

2024 Spring March 15 • 2024 Fall October 4 Computer Based Testing

Resources

ASBOG Candidate Handbook

- ✓ Only official guidance
- ✓ Provided with registration
- ✓ 2019 version available and free at asbog.org/candidate/candidates.html
- ✓ Breakdown of subjects by percent and sample questions

National Association of State Boards of Geology (ASBOG*)

PROFESSIONAL GEOLOGISTS CANDIDATE HANDBOOK



ASBOG® is not affiliated with, nor does it provide information for/to, or endorse, any examination preparation course(s), study guide/manuals/aid (i.e., flash cards), or publication other than its own "Professional Geologists Candidate Handbook". This Candidate Handbook is designed to help you prepare for the ASBOG® National Geology Examinations. ASBOG® has not authorized use of its name by any commercial enterprise.



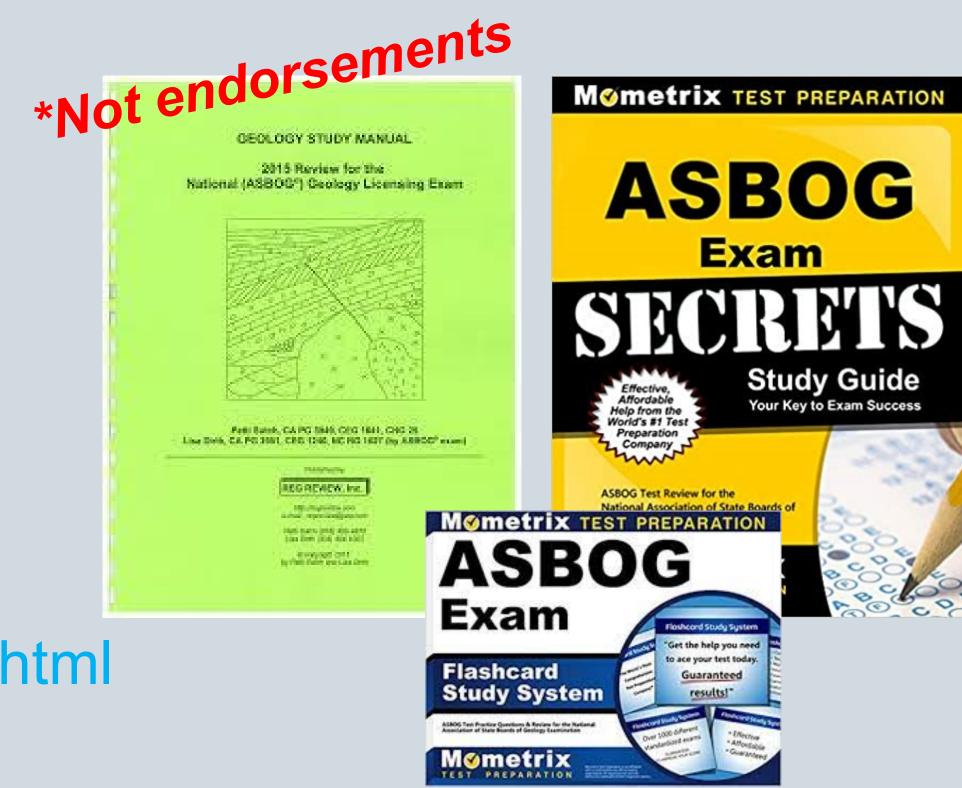
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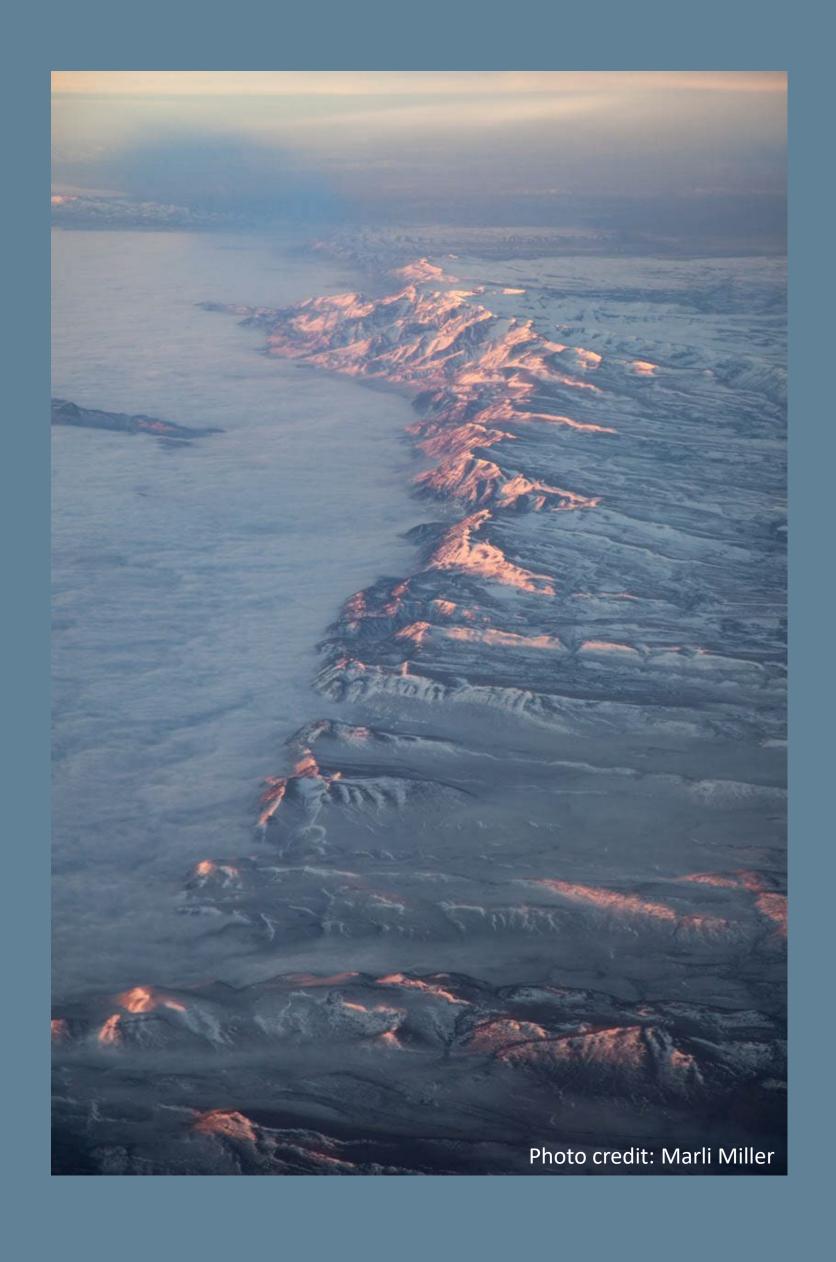
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Resources

Other

- ✓ Private market, like REG Review*
- ✓ MIT open courses
- ✓ College textbooks
- ✓ Study blue flashcards
- ✓ List at asbog.org/candidate/candidates.html



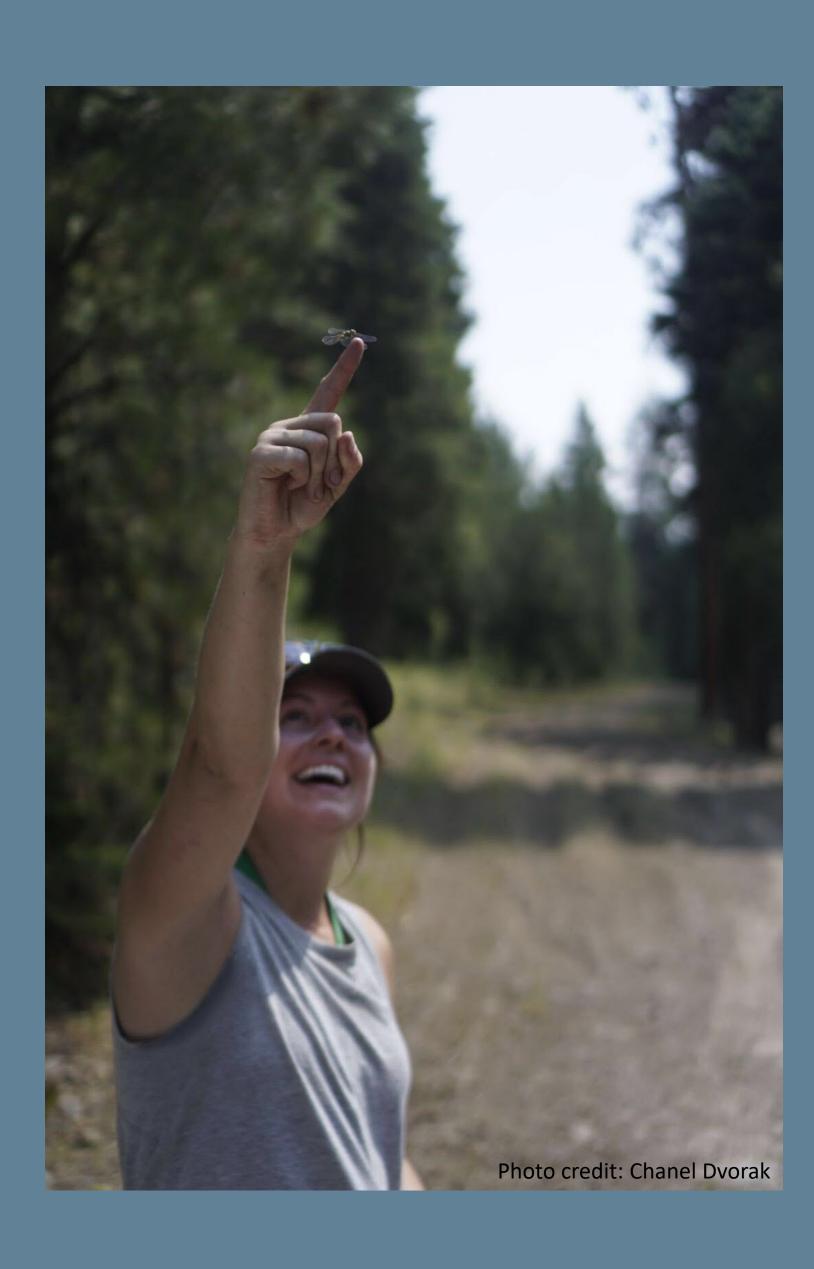


visit: oregon.gov/osbge

call: 503.566.2837

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visit: asbog.org



Questions?