

STUDENTS ASSESSING GEOLOGIC HAZARDS USING ONLINE TOOLS

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“The geologist...may consider it good luck if he can glimpse a rock exposure once or twice a day.”

-David Dale Owen (1852)

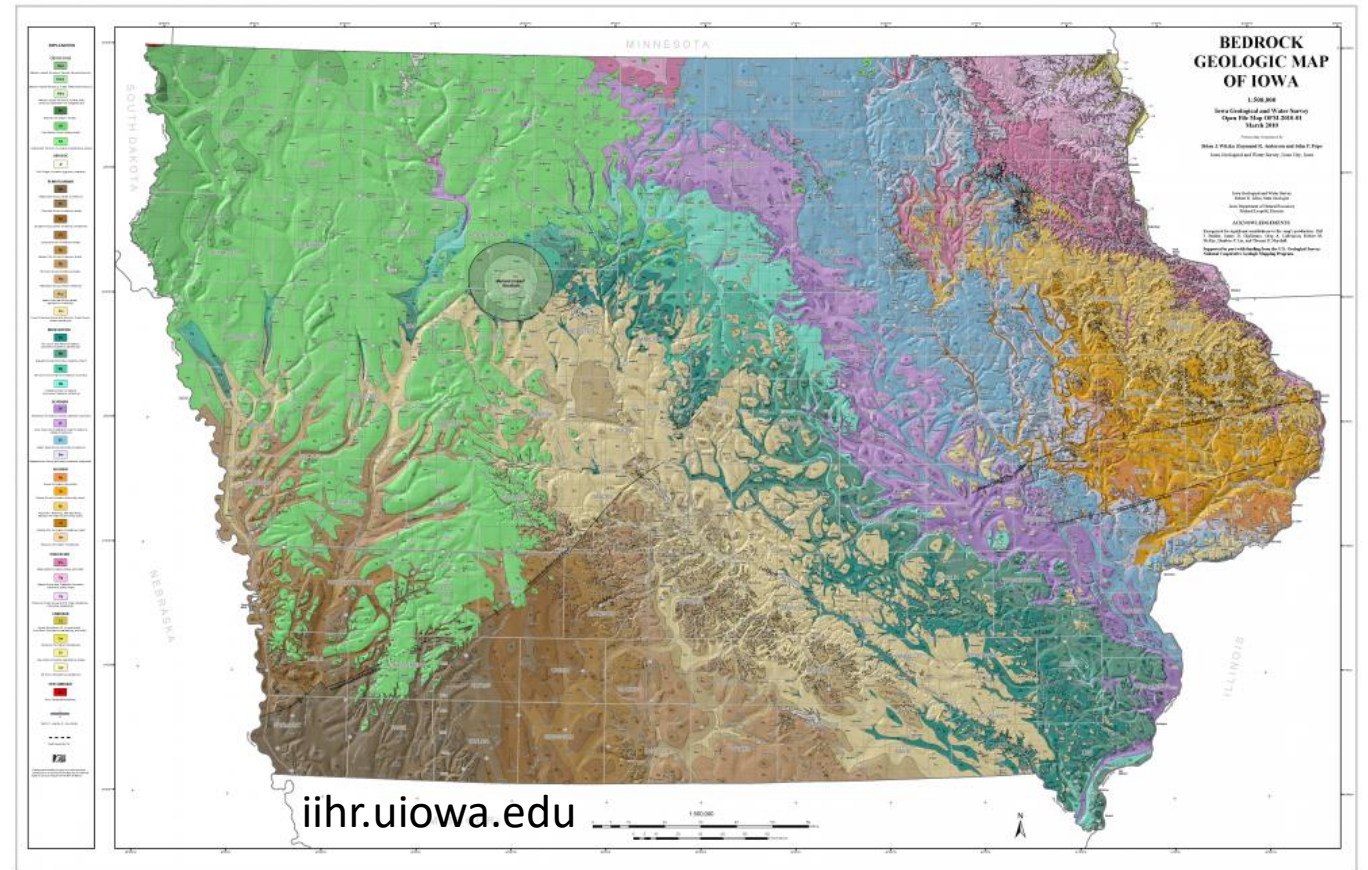
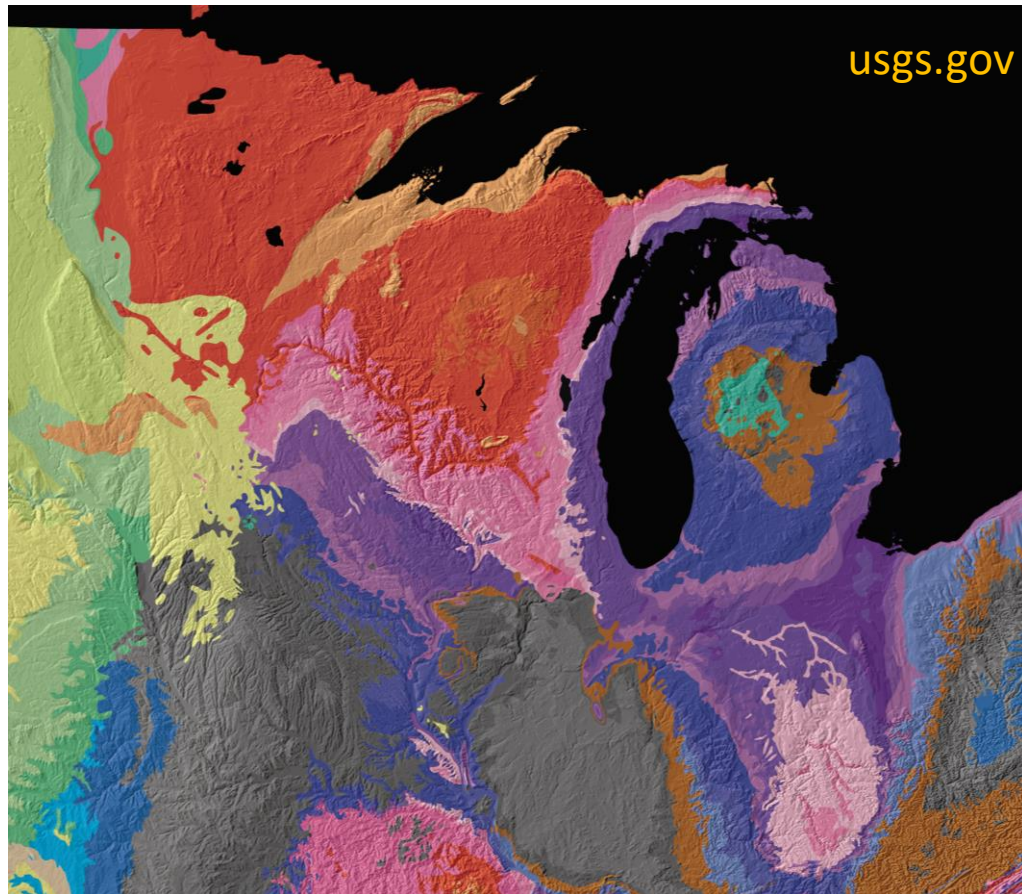
Describing field mapping in Iowa

Challenge Teaching Geology in Midwest



Photo by K. Gray

Challenge Teaching Geology in Midwest



Online Geoscience Resources

Publications and Maps

Geologic Information Portal

Washington Geology App

Washington Geologic Survey
Publications Catalog

GIS Data and Databases

Presentation Archive

Lidar

Story Maps

Geologic Information Portal



The Washington Geologic Information Portal puts complex geologic and hazards information into the hands of everyone, including you. This application allows you to quickly compare and synthesize data of different types to help solve a variety of problems. Enter the Portal by clicking the icon below.

Subscribe to our [blog](#) to receive announcements of new additions to the portal and notification of our publication releases.

Citation information and direct downloads for GIS data layers can be found on our [GIS Data and Databases](#) page. Layer descriptions and citation information can also be found within the interactive map by clicking the context menu icon next to the name of the data layer of interest. If you are unable to locate the citation for a data layer, please contact the [Portal Manager](#).

On a mobile device? Use our new [mobile app](#)!

HELP USING THE INTERACTIVE PORTAL

Visit our [Portal Help](#) for information about portal navigation and tools.

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RELATED LINKS

[GIS Data and Databases](#)
[Portal Fact Sheet](#)

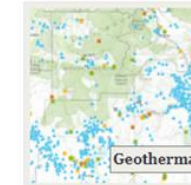
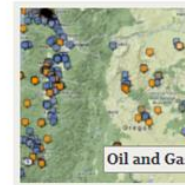
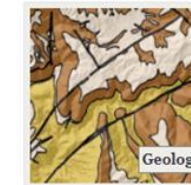
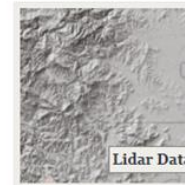
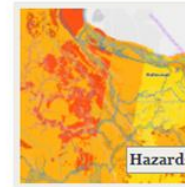
PUBLICATIONS



Interactive Maps & Geospatial Data

DOGAMI's interactive maps, GIS data, and map services help Oregonians better understand our state's geology and geologic hazards.

Interactive Maps



www.dnr.wa.gov/geologyportal

www.oregongeology.org/gis/

Hazards Project – Selected Cities



Hood River, OR



Hazards Project – Assigned Tasks

- 3-4 Students per Group
- Tasks:
 - Describe Geography/Geology
 - Assess all hazards
 - Identify #1 Need
 - Propose a solution
- Products
 - Group oral presentation
 - Individual Papers



Hazards Project – Hazards Assessed

- Bedrock Geology
- Seismic Hazards
 - Shaking
 - Liquefaction
 - Tsunami
 - Public Building Safety
- Volcanic Hazards
- Landslides
- Coastal Erosion (Oregon)
- Floods (FEMA)



Grays Harbor

Population

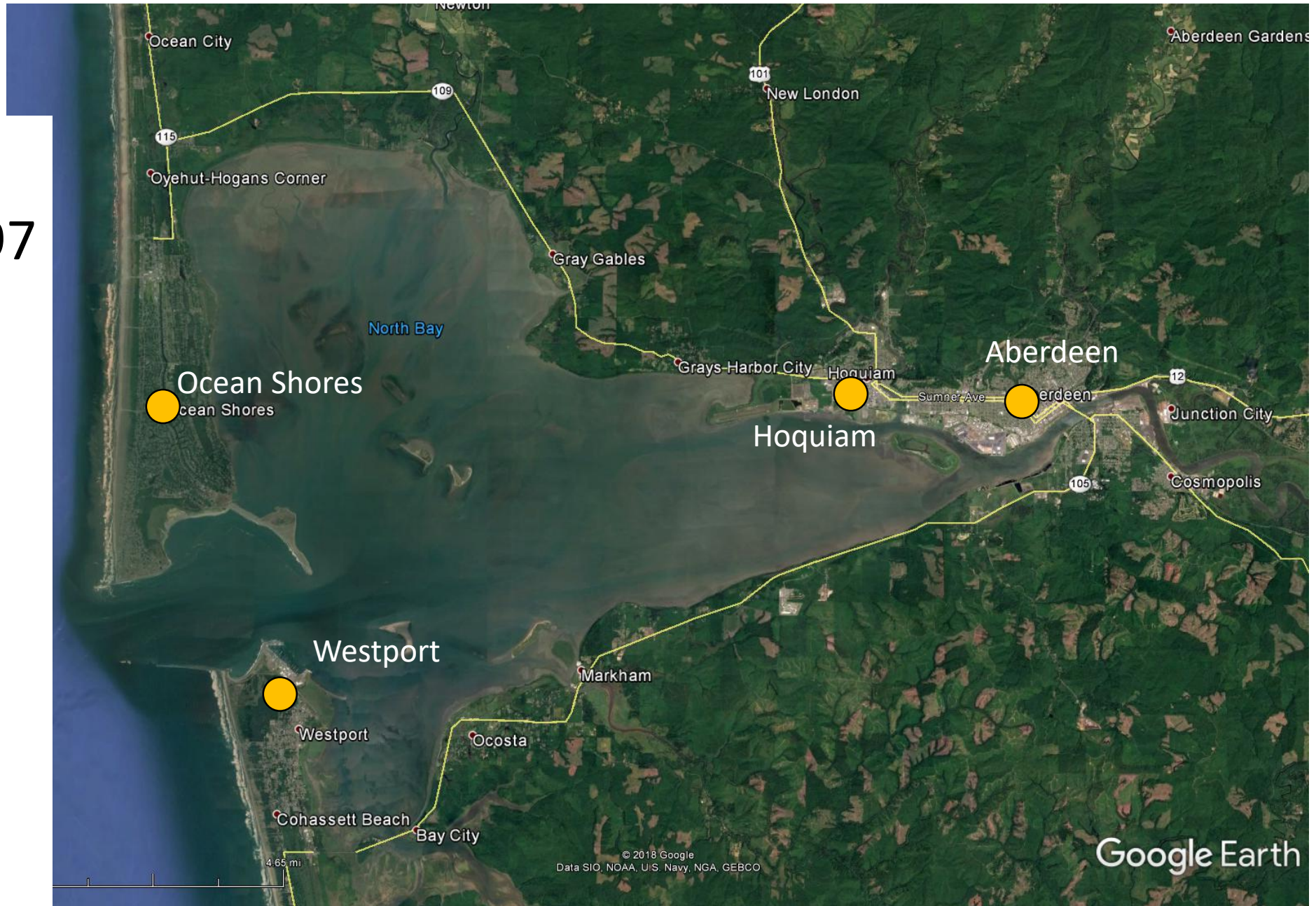
- County = 72,697

1 Hospital

- 140 Beds

13 Fire Stations

22 Schools

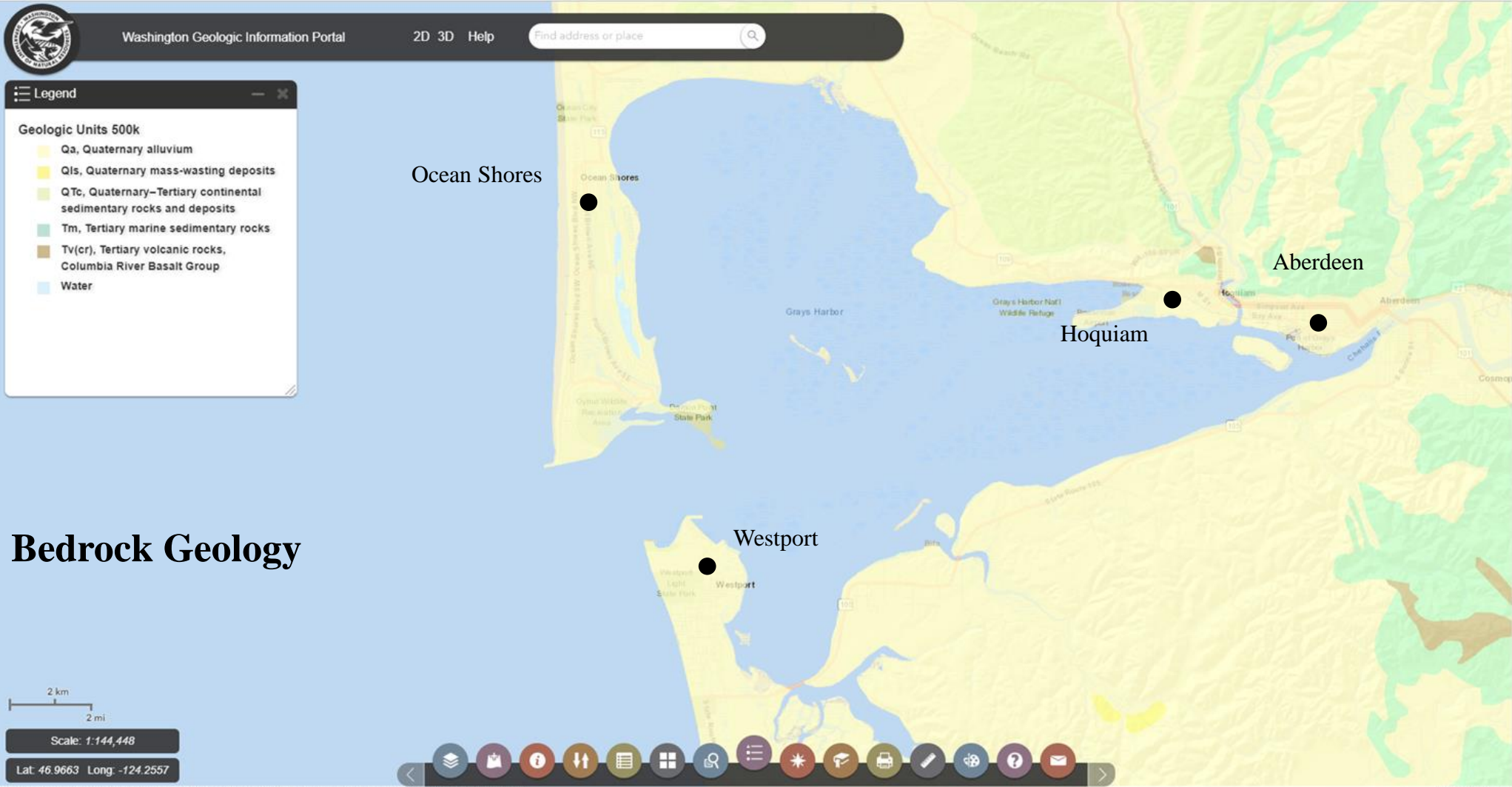


Your Task

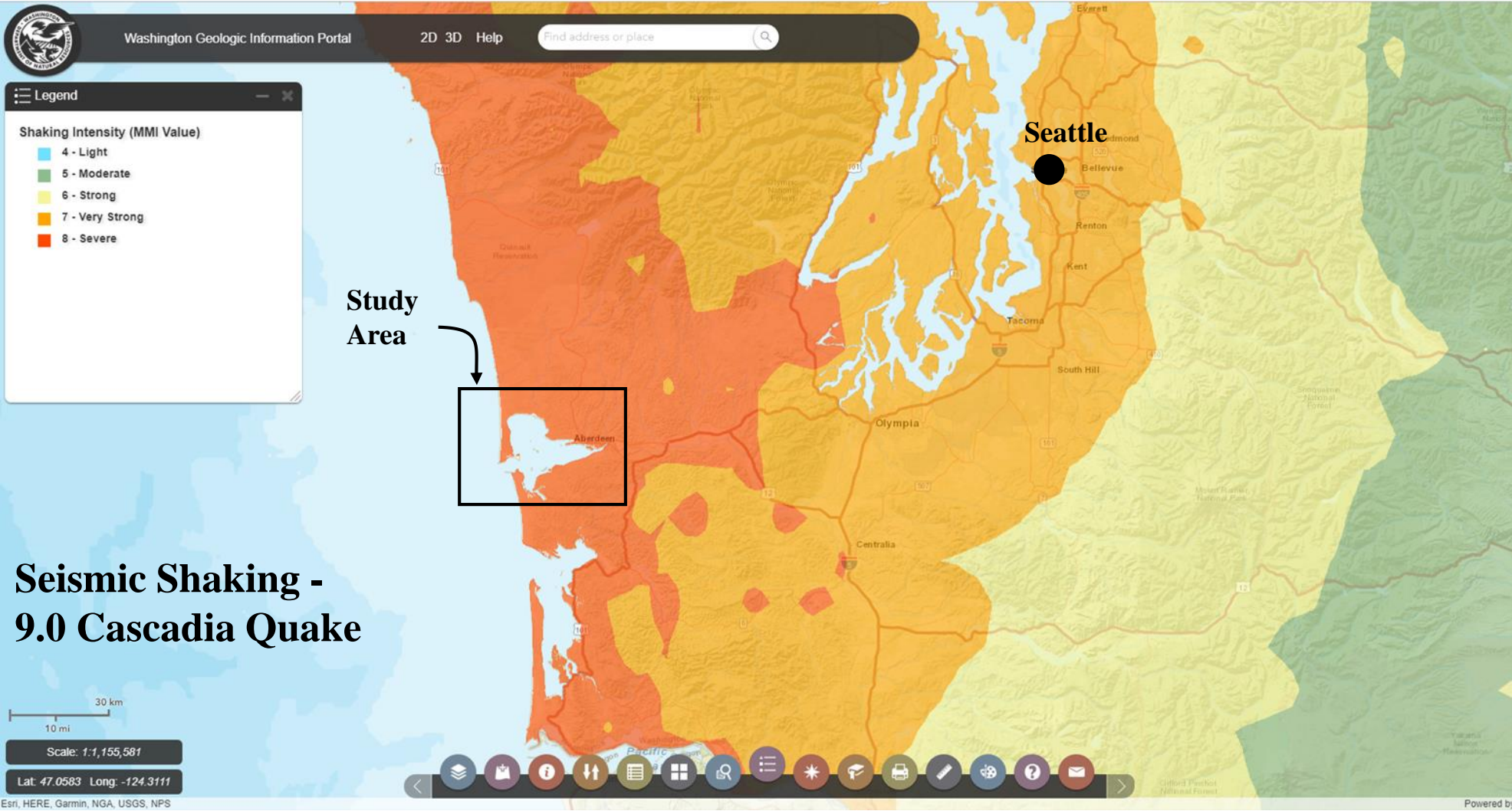
- Review Hazards (Maps)
- Biggest Risk
- 1 Solution



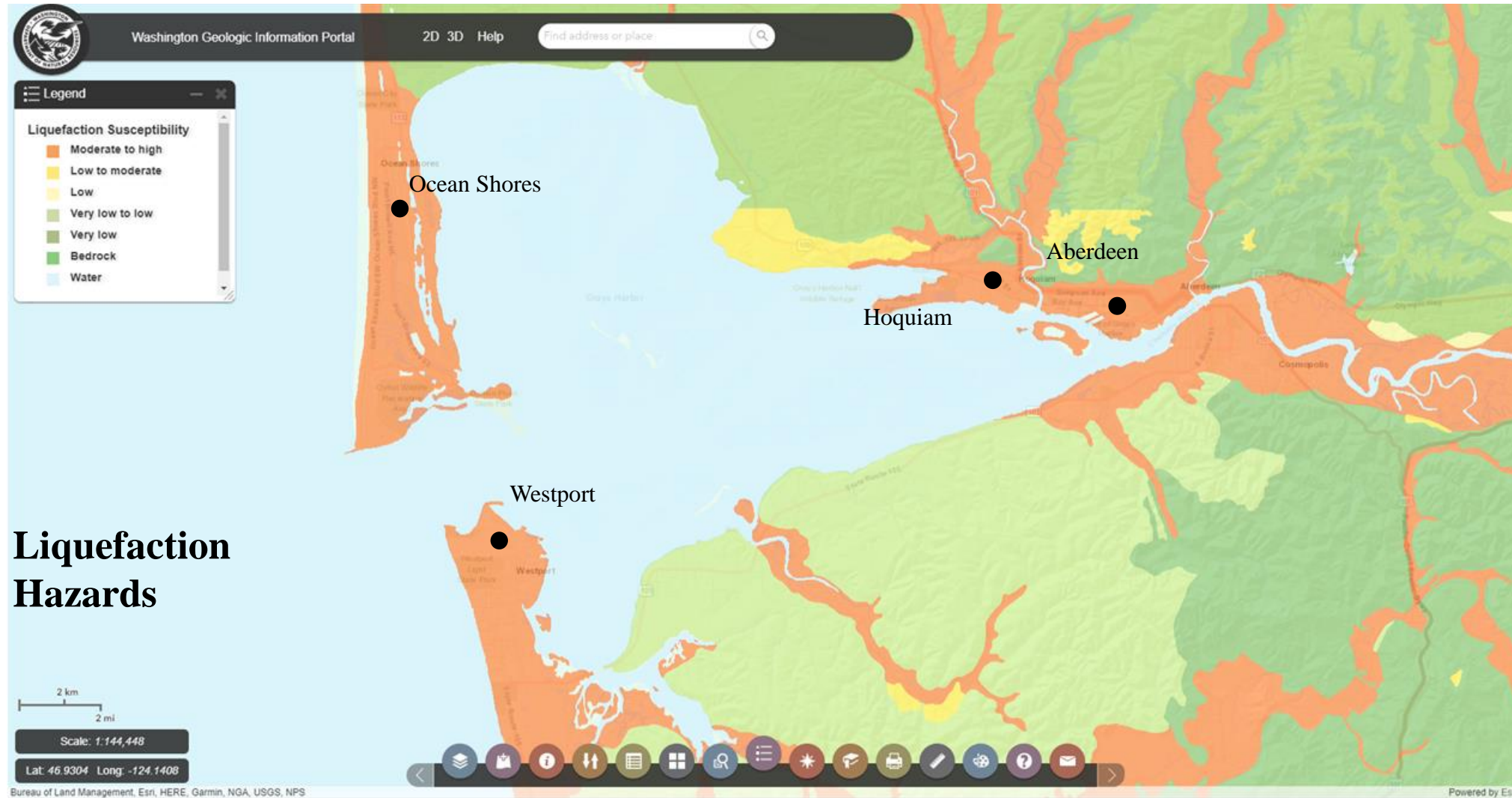
Bedrock Geology



Predicted Shaking - 9.0 Cascadia Quake

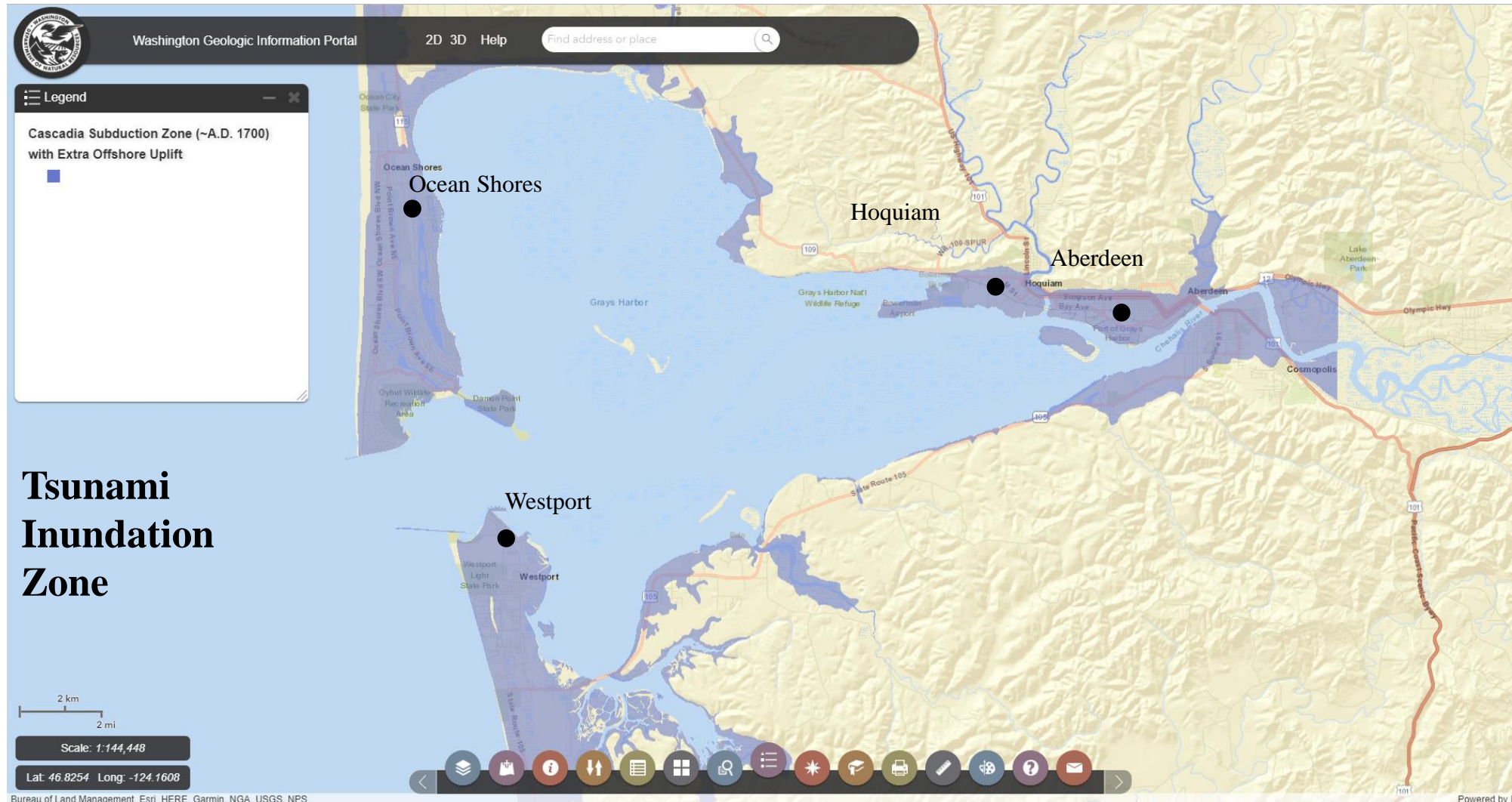


Liquefaction Hazards

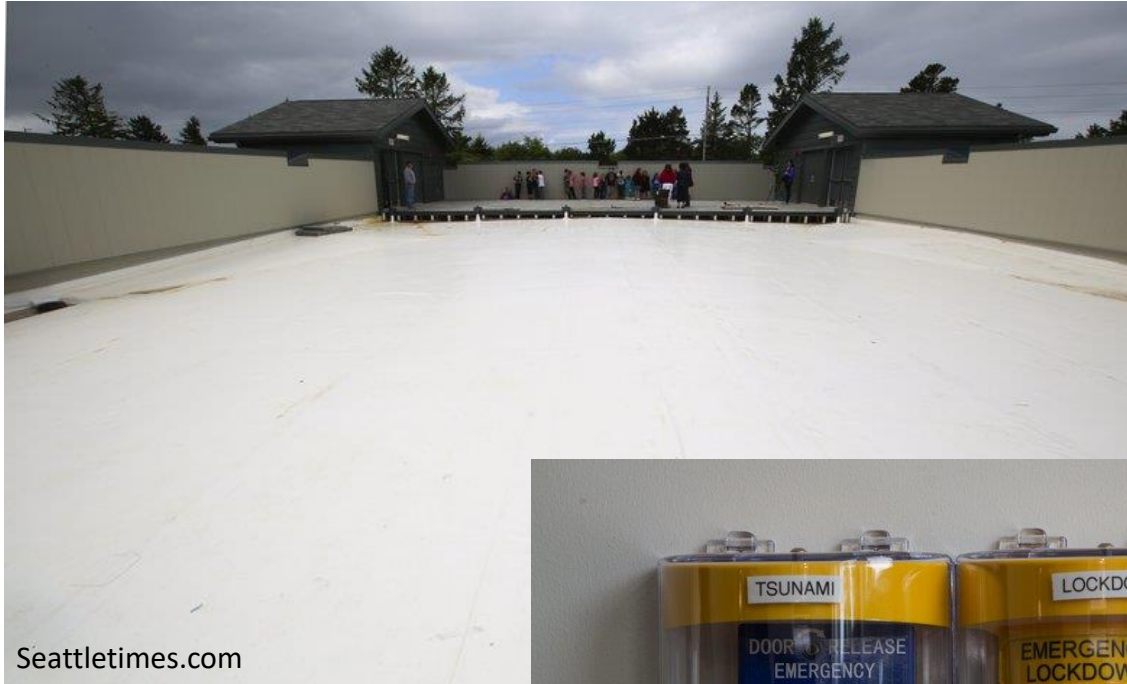


Liquefaction Hazards

Liquefaction Hazards



Ocosta Elementary



Questions?