

# NORTHWEST GEOLOGICAL SOCIETY

A regional association of professionals, students & others interested in geology Please browse www.nwgs.org for more about us

# April, 2017 Newsletter Volume 31, Number 4



# April 11 Program Speaker

Speaker: Eric Cheney, UW ESS Department (Emeritus)

Title: The Geology of the Sanpoil Syncline and the Okanogan Metamorphic Core Complex, North-Central Washington

# **Abstract:**

The geology of north-central Washington includes portions

**5:30pm**: No-host social hour 6:30pm: Buffet dinner 7:30pm: Speaker program All are welcome to attend reservations are required if coming for dinner. Reservations here վեղ

of pre-Jurassic North America (Laurentia), the Quesnel terrane, and Cenozoic cover sequences. Eocene antiformal metamorphic core complexes dominate the topography and the structure of the region. The Sanpoil syncline between the Okanogan and Kettle metamorphic core complexes is too often called the "Republic graben". The volcanic and sedimentary strata of regional Eocene unconformity-bounded sequences are preserved in the Sanpoil syncline and other structural lows in the region. The largest epithermal gold producer was the Knob Hill mine (1937 to 1995), which was intimately tied to the history of Republic.

**PROGRAM DINNER RESERVATIONS:** NWGS members: <u>\$40</u>; Non-members: <u>\$45</u>; Full-time students : <u>\$20</u>. Add \$5 for LATE REGISTRATION. Make your reservation and payment on-line at **www.nwgs.org** (or mail your payment to **Northwest** Geological Society, 4616 25th Ave NE #397, Seattle, WA. 98105 (must be received by Thursday prior to meeting). Contact Secretary Beth Tanner with questions about dinner reservations.

If attending the speaker program only, a \$5 voluntary donation to help defray the meeting room cost is requested. Location: Pacific Dining Hall at the Talaris Conference Center, 4000 NE 41st St., Seattle, WA., 98105. Directions: See online directions with map, or: from I-5 northbound or southbound in Seattle, take Exit 168B (NE 45th St.). Drive east on NE 45th St. past UW down the hill and past University Village. Turn south (right) onto Mary Gates Memorial Drive at the 5-way intersection. MGM Drive will curve east (left) and become NE 41st St. Continue several blocks to the Talaris Conference Center entrance on the north (left) side. We meet in the Pacific Dining room on the left (SEE MAP ON P. 3).

# **Upcoming Speakers and Field Trips**

May 9: Don Reichmuth, Geomax PC, Late Pleistocene Sea Level in the Arctic Ocean and Glacial Lake Reichmuth.

Spring Field Trip: Eric Cheney, UW ESS, The Geology of the Sanpoil Syncline and the Okanogan Metamorphic Core Complex, North-Central Washington, May 5-7, 2017 (see next page for registration information). Fall Field Trip: TBA.

If you would like to volunteer to give a talk or lead a field trip for NWGS, please contact President Scott Calhoun.

### Announcements

- The spring field trip, Geology of the Sanpoil Syncline and the Okanogan Metamorphic Core complex, North-Central Washington, led by Eric Cheney, is nearly full. Contact Kathleen Goodman to see about remaining openings.
- The 2018 NWGS Symposium dates have changed: they are now February 16, 17, & 18 for the technical sessions, public sessions, and field trip, respectively.
- David Williams (12/16 speaker) will be speaking at Third Place Bookstore, Lake Forest Park on April 5 at 7pm on his new book, Seattle Walks, which addresses local geology on several walks.
- bring it to show!

#### Next Board of Directors meeting: April 11, 4:30 P.M., Talaris Conference Center.

YOU would like to be involved!

### About NWGS

NWGS, a regional association of professionals, students & other persons interested in geology, provides a forum for the presentation and discussion of a wide range of geolog-Pacific emphasizing those the Northwest ic topics, of of fundamental scientific interest. YOU would like to be involved! Program meetings: 2<sup>nd</sup> Tuesdays, October through May in the Pacific Dining Hall at the Talaris Conference Center in Seattle (see 1<sup>st</sup> page). Anyone may attend the speaker program, but a reservation is necessary for those wanting dinner (see 1<sup>st</sup> page). Field trips (members only): one in late spring/early summer and one in late summer/early fall, usually of 1-3 days in length. Membership is open to anybody with a professional or amateur interest in geology. Annual dues: Professional: \$40; Student: \$5. To join or pay annual dues: send a check payable to NWGS to Secretary Beth Tanner, 4616 25th Ave NE #397, Seattle, WA. 98105. Please include your name, address, home phone, email, and employer/affiliation (if any). Professional dues may now also be paid at www.nwgs.org. YOU would like to be involved!

### **Recommended Readings**

- Cheney, E. S., 2014, The Fundamentals of the geology of north-central Washington: Northwest Geology, v. 43, p. 1-12.
- Cheney, E.S., 2014, Stratigraphy, structure, and mineralization in the Quesnel terrane north of Republic, Washington: Northwest Geology, v.43, p. 177-188.
- Cheney, E.S., and Rasmussen, M.G., 1996, Regional geology of the Republic area: Washington Geology, v. 24, no. 2, p. 3-7.
- Morell, K. D., Regalla, Christine, Leonard, L. J., Amos, Colin, and Levson, Vic, 2017, Quaternary rupture of a crustal fault beneath Victoria, British Columbia, Canada, GSA Today, v. 27, no. 3-4, doi 10.1130/GSATG291A.1.

Please send your reading recommendations to Newsletter Editor Tom Bush.

To report a change of email or postal address or request to be removed from mailings, notify Membership Chair George Bennett . Questions or comments? Contact President Scott Calhoun.

### **Photo Spotlight** W Ε REPUBLIC "GRABEN" OKAN. **KETTLE MCC** QUES MCC Tkm RX M2P2 Ti TERTIARY TERTIARY SYNCLINE ANTICLINE

• If you have an unusual rock, please Schematic diagram of the Sanpoil Syncline bounded by Okanogan and Kettle metamorphic core complex (MMC) detachment faults. Submitted by Eric Cheney.

#### **NWGS Board**

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