



NORTHWEST GEOLOGICAL SOCIETY

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

November 2011 Newsletter

Volume 25, Number 7

November 8 Program Speaker

Speaker: Sandy Williamson, USGS (retired)

Title: Hydrology, scientists, and water infrastructure in Pakistan and Afghanistan

Abstract: I have been to Pakistan twice and once to Afghanistan and Nepal for the USGS. I am working on a U.S. State Department funded project to help develop water databases, a data warehouse, and a national data standards committee in Pakistan. I went to Afghanistan to teach part of a water-resources course to about 30 professionals, focusing on data storage, GPS usage, and Google Maps & Earth.

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](#) 

The Hydrology, Science, and Water Resources infrastructure, both physical and organizational in these two countries are quite different from what we are familiar with in the United States. The physiography, land use, and hydrology of Pakistan and Afghanistan are similar to California and Nevada, respectively. Pakistan is the sixth most populous country in the world. Pakistan's largest city is Karachi, with 16 million people living in around the city, making it the world's second largest city proper behind Mumbai, India.. The Indus River system has several reservoirs larger than Lake Roosevelt behind Grand Coulee Dam. The Indus River valley is the largest irrigation system in the world [35 million acres]. The most severe known water-quality problems are high concentrations of bacteria, nutrients, and arsenic. The Pakistan Ministry of Health estimates that 600 children younger than 5 years old die every day due to bacterial contamination and that most of these deaths likely are water-quality related. Many city water systems are not pressurized 24 hours a day and water is not chlorinated; therefore, the public water supply is susceptible to contamination. Pakistan's Water and Power agency employs 150,000 people and delivers power to most citizens in the country.

Scientists in both countries were eager for our help and eager to learn. I am looking forward to future trips there and helping the Pakistanis develop a national water data base for many of their government agencies. 18 government agencies have agreed to share data and a data warehouse we are building.

PROGRAM DINNER RESERVATIONS: NWGS members: **\$35**; Non-members: **\$40**; Full-time students : **\$15**. \$45 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 him at 206-937-5313 or nwgeo@yahoo.com.

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. Ph 206-268-7000. **Directions:** See [on-line 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.

Upcoming Speakers and Field Trips

December 13 Meeting: Peter Selkin, UW Tacoma Environmental Science, From footprint to fingerprint: using soil magnetism and mineralogy to trace smelter contamination in Tacoma.

January 10 Meeting: TBA.

February 14 Meeting: TBA.

Spring, 2012 Field Trip: Steve Reidel, formerly of Battelle, Abandoned channels of the Pleistocene Columbia River, date TBA.

Please see the [NWGS website](#) for detailed announcements.

Contact webmaster [Julie Masura](#) if you have any announcements to post on the website.

Announcements

- Dinner and field trip reservations and payments may now be made on the NWGS [on the NWGS website](#) at www.nwgs.org!
- The 25 year anniversary symposium, “Strikes and dips: Mapping a path for Pacific Northwest Geosciences,” is tentatively scheduled for Sat. Oct. 6, 2012 on the UW campus. Mark your calendar!
- The Society’s application for non-profit 501 -3-C status is still pending.
- There are currently over a dozen advertisements for Geoscience positions in the [Employment section](#) of the NWGS website.
- NWGS Historian [Donn Charnley](#) requests any pre-1980s NWGS information. Contact him at donncharnley@frontier.com or 206.546.3868.
- Next **Board meeting**: Tuesday, November 8, 4:30 p.m., Talaris Conference Center.

YOU would like to be involved!

Photo Spotlight



Aerial view of an alluvial fan west of Kabul, Afghanistan that is typical of the area. Note the agricultural development across much of the fan and the reservoir near the upper left (photo submitted by Sandy Williamson, caption modified by the Editor).

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 geological topics, emphasizing those of the Pacific Northwest of fundamental scientific interest.

YOU would like to be involved!

Program meetings: 2nd Tuesdays, October through May in the Pacific Dining Hall at the [Talaris Conference Center](#) in Seattle (see 1st page). Anyone may attend the speaker program, but a reservation is necessary for those wanting dinner (see 1st 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: \$30; Student: \$5. **To join or pay annual dues:** send a check payable to NWGS to Secretary [Dan Smith](#), 10203 40th Ave SW, Seattle, WA. 98146. 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

Williamson, A.K., and Bell, R.K., 2006, Data delivery and mapping over the web: National water quality assessment data warehouse, USGS FS; 2006-3101, http://pubs.er.usgs.gov/thumbnails/fs_2006-3101.

Williamson, A.K., Grubb, H.F., 2001, Ground-water flow in the Gulf Coast aquifer systems, south-central United States, U.S. Geol. Survey Prof. Paper 1416-F, in Regional aquifer-system analysis—Gulf Coastal Plain, http://pubs.er.usgs.gov/thumbnails/pp_1416f/report.pdf.

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 Secretary [Dan Smith](#) at 206.937.5313. Questions or comments? Contact President [Julie Masura](#).

NWGS Board

President [Julie Masura](#)
Univ. of Washington

President Elect [John Balla](#)
CEM Minerals Ltd

Past President [John Figge](#)
N. Seattle Com. Coll.

Secretary [Dan Smith](#)
King County

Treasurer [Carla Whittington](#)
Highline Com. Coll.

At-Large Board Member [Lars Gilmour](#)
Univ. of Washington

Member [Grace Winer](#)
S. Seattle Com. Coll.

Other Personnel

Field Trip Coordinator [Matthew Von der Ahe](#)
Aspect Consulting

Publications Director [John Figge](#)
N. Seattle Com. Coll.

Poster Competition Co-chairs [Brittany Brand](#)
Univ. of Washington
[Maura O'Brien](#)
Wa. Dept. of Ecology

Webmaster [Julie Masura](#)
Univ. of Washington

Newsletter Editor [Tom Bush](#)
Pierce College