

AIPG Minnesota Section

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## Highlights from the AIPG National Meeting

ICYMI (in case you missed it)

President Elect Shanna Schmidt attended the National AIPG meeting in Alaska and reported on the business meeting. Each Section has at least one representative that reports on the Section and makes suggestions for the association. Common suggestions were the following: Sections offer WebEx meetings in large states; Sections share speaker/topic ideas; National offer some free. online. continuing education courses; and National help host/maintain Section websites.

Other Sections are having Joint meetings with other professional organizations; judging at state science fairs; having an annual lunch meetings with the state geologist; presenting workshops/ courses on Geologist-In-Training and Professional Geologist licensure; presenting drilling demos, landfill tours, and mine tours; having quarterly meetings around their states; partnering with State Agencies for technical workshops; doing a Lottery/ Auction for "super" field trips. The Wisconsin Section did a presentation on "How to Get a Job in Geology".

The AIPG National Resource Page is found at the following link: <u>http://www.aipg.org/Sections/re</u> <u>sources.htm</u>. It includes brochures, fact sheets, presentations, general information and resources for speaking to students, etc.

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### In Memoriam

### **Rudolph Hoagberg**

Rudy Hoagberg, Age 85, died Sept. 12, 2015. Rudy was an early member of AIPG. He worked for the Minnesota Geological Survey, Ernie Lehmann and Associates, and his own firm.

#### Herbert E. Wright, Jr

Herb Wright, age 98, died Nov. 12 at home in St. Anthony Park. Herb was a Regents' Professor of Geology, Ecology, and Botany and founder of the Limnological Research Center at the University of Minnesota. He will be remembered bv many students and colleagues as a mentor and intrepid leader of field trips.

# Upcoming Events

**Next Monthly Luncheon** April 5, 2016

Annual joint AIPG/AWG (Association for Women Geoscientists) meeting.

Radisson Hotel Roseville 2540 N Cleveland Ave Roseville MN 55113 Register online at www.aipgmn.org

AIPG 8<sup>th</sup> Annual Golf Scramble Fundraiser August 2, 2016 Prestwick Gold Club & David's Chophouse Woodbury

Joint AIPG SME Conference October 4, 2016 Program & Venue TBD

### Geology in the News

## Earth's groundwater mapped, quantified

The groundwater map is based on 40,000 groundwater models comprising data from nearly a million watersheds.

VICTORIA, British Columbia, Nov. 17 (UPI) -- An international team of hydrologists have published the first data-driven analysis of the world's groundwater reserves.

Their findings, published in the journal Nature Geoscience, suggest the planet holds 23 million cubic kilometers of total groundwater -- roughly 5.5 million cubic miles. Only six percent of that water will be replenished over the next fifty years.

As the dramatic pressures put on water reserves by changing climate and growing world populations become more apparent, scientists have called for a more accurate accounting of the world's freshwater resources. The latest study offers a clearer picture.

"This has never been known before," researcher Tom Gleeson, a hydrologist at the University of Victoria, said in a press release. "We already know that water levels in lots of aquifers are dropping. We're using our groundwater resources too fast --faster than they're being renewed."

Gleeson and his colleagues arrived at their totals after building a groundwater map based on the data from 40,000 groundwater models, comprising data from nearly a million watersheds.

"Intuitively, we expect drier areas to have less modern groundwater and more humid areas to have more, but before this study, all we had was intuition," explained Kevin Befus, former University of Texas doctoral student, now a post-doctoral fellow at the United States Geological Survey. "Now, we have a quantitative estimate that we compared to geochemical observations."

Mapping revealed the largest groundwater deposits among the Amazon Basin, the Congo, Indonesia, and in North and Central America along the Rockies. The researchers' work made an effort to differentiate between old groundwater and newer groundwater.

Older groundwater is typically found deeper in the Earth; it is more likely to be salty and nonrenewable. Younger groundwater is more likely to be refreshed by natural processes, but there is less of it and it is more susceptible to climate change and contamination from human activities.

The largest concentrations of modern groundwater are found in the tropics and around mountains.

The next step, researchers say, is tallying the rate at which humans are depleting sources of old and young groundwater.

"Since we now know how much groundwater is being depleted and how much there is, we will be able to estimate how long until we run out," said Gleeson.

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Attention Women GRAD Students: The AWG Chrysalis Scholarship provides degreecompletion funding (up to \$2000) for women geoscience graduate students whose education has been significantly interrupted by life circumstances. Applications are due March 31st. Awarded funds are intended to cover costs. associated with completion of her thesis/dissertation, beyond what is traditionally covered by primary research funding. Costs may include drafting expenses, childcare, defense travel, late-stage research and analyses, or anything necessary to assist a candidate during those critical, final days.

http://awg.org/images/awards/Ch rysalis.pdf